

## SIG 17

## Tutorial

# Speech-Language Pathology and Audiology Professions in Asia: Past History and Current Status

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## ABSTRACT

**Purpose:** In collaboration with members of the Asia Pacific Society of Speech, Language and Hearing (APSSLH), the purpose of this tutorial was to outline a brief history and the current status of the speech-language pathology and audiology professions in Asian countries that are affiliated with the APSSLH.

**Method:** Relevant literature and websites on the speech-language pathology and audiology professions in each country are reviewed and summarized. Information was also obtained via personal interviews.

**Results:** A brief history, educational programs, licensure systems, and professional organizations of each country are addressed.

**Discussion:** The developmental status of speech-language pathology and audiology professions in Asian countries varies from emerging to fully established. Several issues among countries in development are discussed, and recommendations for future development are addressed.

**Conclusion:** This tutorial will improve awareness of speech-language pathology and audiology status in Asian countries and may facilitate ASHA and APSSLH members participation in and contributions to international relations and affairs.

There is a growing interest in international speech-language pathology and audiology affairs among members of the American Speech-Language-Hearing Association (ASHA). ASHA members interested in international relations and affairs have participated in various international activities. In particular, many individual and organizational attempts have been made to assist countries where speech-language pathology and audiology professions still require

significant development. These actions are consistent with ASHA's strategic objective to enhance international engagement and Special Interest Group (SIG) 17: Global Issues in Communication Sciences and Related Disorders, which promotes engagement in international relations among SIG 17 members.

To increase ASHA members' awareness and facilitate participation in and contributions to international relations and affairs, it is helpful to understand the past history and current status of the speech-language pathology and audiology professions in international settings. The current tutorial aims to address these topics in relation to Asian countries. Although the developmental status of the speech-language pathology and audiology

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professions in these countries varies from emerging to well established, the status of these professions is not fully described, even in countries where the professions are well established. More importantly, some available articles addressing speech-language pathology or audiology professions in Asian countries are outdated. For example, it was found that six articles address the speech-language pathology profession in Vietnam (Atherton et al., 2013, 2017, 2020a, 2020b; Dung et al., 2016; S. A. S. Lee, 2021); two articles for India (Hegde, 1992; Manchaiah et al., 2016), China (Hao et al., 2015; McCreary & McNeilly, 2015), Malaysia (Chu et al., 2019; Lian & Abdullah, 2001), and Cambodia (Randazzo & Garcia, 2018; Salter & Yeoh, 2016); and one article for Korea (Sung & Kim, 2014) and the Philippines (Roseberry-McKibbin, 1997). Although some articles were published relatively recently, the rapid economic development of Asian countries makes it crucial to provide ASHA members with up-to-date and accurate information identifying the needs of individual Asian countries. To develop a more comprehensive understanding of the speech-language pathology and audiology professions in Asia, a collective article addressing essential details on each Asian country could serve as a resource for ASHA members interested in offering their professional knowledge and skills to local practitioners and patients in need in Asia.

The Asia Pacific Society of Speech, Language and Hearing (APSSLH) plays an important role in continuing the development of the speech-language pathology and audiology professions in Asia. Established in 1990, the APSSLH aims to connect researchers, students, and practitioners serving individuals with communication disorders in Asia. The main goal of the APSSLH is to provide professional support to researchers and practitioners in Asian countries where the speech-language pathology and audiology professions are underdeveloped by creating a professional network of researchers and practitioners worldwide. Members affiliated with the APSSLH are from the United States, Canada, Australia, South Korea, Japan, Taiwan, Indonesia, Singapore, China/Hong Kong, India, Malaysia, Thailand, the Philippines, Vietnam, and Cambodia. The current tutorial is based on a collaborative effort of APSSLH country liaisons and individual members.

Following the introduction, four aspects of each country are addressed: a brief history, overviews of the educational and licensure systems, and professional organizations. The presentation order of each country is determined by the approximate time when the speech-language pathology profession was introduced and speech-language pathology education was formalized. Finally, a summary of current issues and recommendations for future development concludes the narrative in the Discussion section. It should be noted that the terminologies used to refer to the

professions of speech-language pathology and audiology are different in each country. The respective terms used by each country are maintained throughout the tutorial. Table 1 summarizes the major features of speech-language pathology and audiology professions in each country.

## India

### *Beginnings*

The journey of speech and hearing specialization in India was started in the 1960s by two founding fathers of the speech and hearing profession. Dr. Natesh Ratna received master's and doctorate degrees in the United States and established the first speech clinic in the country at Bai Yamunabai Laxman (BYL) Nair Hospital in Mumbai in 1962 (Hegde, 1992). Ramesh K. Oza started the Diploma in Audiology and Speech program at BYL Nair Hospital in Bombay in June 1966 after receiving a master's degree from the United States. It was the first training program in India as well as in Asia.

The first government-approved institute for speech and hearing education was in Mysore with a fortuitous mixture of support, including a donor (the maharaja of Mysore), initiatives from the government of India, and the support of Dr. Martin F. Palmer, a renowned speech-language pathologist (SLP) from the United States. The institute headed by Dr. Natesh Ratna was originally named "Institute of Logopedics" and later became known as the All India Institute of Speech and Hearing (AIISH; Hegde, 1992). AIISH was established in 1966 as an autonomous institution fully funded by the Ministry of Health and Family Welfare, Government of India. AIISH began by providing clinical services and facilitating professional educational programs. Initially, a 2-year master's program was created that admitted graduates from related fields such as psychology and linguistics. A 3-year undergraduate program was subsequently established between 1966 and 1969. The profession began as a combination of speech and hearing education at the undergraduate and graduate levels. In 1983, a second government institution known as the "Ali Yavar Jung National Institute of Speech and Hearing Disabilities" was established in Mumbai, offering undergraduate and graduate programs in speech and hearing. This was an autonomous organization under the Department of Empowerment of Persons with Disabilities, Government of India.

### *Education*

Currently, students enrolled in undergraduate programs study both speech-language pathology and audiology. A Bachelor in Audiology and Speech-Language

**Table 1.** Speech-language pathology and audiology profession in Asia countries.

Country	Profession name	Entry: level	Licensure examination	License system	License issued by	Professional associations
India	Speech-language pathologist, audiologist	Bachelor	No	Yes	Rehabilitation Council of India	Indian Speech and Hearing Association
Japan	Speech-language-hearing therapist	Bachelor	Yes	Yes	Ministry of Health, Labor and Welfare	Japanese Association of Speech-Language-Hearing Therapists, The Japan Society of Logopedics and Phoniatrics, The Japanese Association of Communication Disorders
South Korea	Speech-language pathologist, audiologist	Bachelor or master	Yes	Yes	Ministry of Health and Welfare	Korean Academy of Speech-Language Pathology and Audiology, The Korean Speech-Language and Hearing Association, Korean Academy of Audiology, The Korean Association of Speech-Language Pathologists
Taiwan	Speech therapist, hearing specialist	Bachelor or master	Yes	Yes	Ministry of Health and Welfare	Taiwan Speech-Language-Hearing Association, Taiwan Speech-Language Pathologist Union, Taiwan Audiologist Association
China/Hong Kong	Speech therapist, audiologist	Bachelor or master	No	No		Hong Kong Association of Speech Therapists, Hong Kong Society of Audiology
Malaysia	Speech-language therapist, audiologist	Bachelor	No	Yes	Malaysian Allied Health Professions Council	Malaysian Association of Speech and Hearing, Malaysian Speech-Language Therapists Association, Malaysian National Society of Audiologists
Singapore	Speech-language therapist, audiologist	Bachelor	No	Yes	Allied Health Professions Council	Speech and Language Therapy Singapore, Society for Audiology Professionals Singapore
Thailand	Speech-language pathologist, audiologist	Bachelor	Yes	Yes	Ministry of Health	Thai Speech-Language and Hearing Association
Philippines	Speech-language pathologist, audiologist	Bachelor for speech-language pathologist, master for audiologist	Yes for speech-language pathologist, no for audiologist	Yes for speech-language pathologist, no for audiologist	Professional Regulation Commission of the Republic of the Philippines	Philippine Association of Speech Pathologists, Association of Clinical Audiologists of the Philippines
Indonesia	Speech therapist, audiologist	Bachelor	Yes	Yes	Ministry of Health	Indonesian Speech Therapists Association
Mainland China	Speech therapist, audiologist	Bachelor	No	No		National Alliance for Speech and Swallow Rehabilitation Cooperative Development
Vietnam	Rehabilitation therapist	Bachelor	No	No		Vietnamese Audiology Association
Cambodia	No	No	No	No		No

Pathology (BASLP) degree is the minimum qualification requirement. The undergraduates can work as audiologists as well as speech therapists in India. There is no national license examination for speech therapists or audiologists. Professionals can receive further education by enrolling in a master's degree program with a specialization in speech-language pathology or audiology. Currently, including both government and private institutions, a total of 77 colleges offer undergraduate BASLP degree programs, 25 colleges offer Master in Audiology postgraduate degree programs, and 26 colleges offer Master in Speech-Language Pathology postgraduate degree programs. Several colleges also offer PhD programs.

### **Licensure**

Efforts to streamline rehabilitation services led to the formation of the Rehabilitation Council of India (RCI) where a license is issued for both audiologists and SLPs. The RCI was set up as a registered society in 1986. In 1993, it became a statutory body in the Ministry of Social Justice and Empowerment. A mandate was given to the RCI to regulate and monitor services provided to persons with disabilities, standardize education curricula, and maintain a central rehabilitation register of all qualified professionals and personnel working in rehabilitation and special education. The RCI Act also prescribes punitive action against unqualified persons delivering services to persons with disabilities. The criterion to get the RCI license is to have completed a bachelor's or master's degree in speech-language pathology and audiology from an RCI-accredited educational institution. The RCI certificate needs to be renewed every 5 years by attending continuing professional education from RCI-approved seminars/conferences. Private universities offer speech and hearing programs with a syllabus and models provided by the RCI. Understanding the importance of clinical expertise, the RCI added a 1-year internship to the existing 3-year undergraduate program. In 2010, the master's programs were split into two branches, namely, Master of Science in Audiology and Master of Science in Speech-Language Pathology.

### **National Organization**

A professional body was formed in 1967 called the Indian Speech and Hearing Association (ISHA). Presently, it has more than 4,000 members. ISHA sponsors an annual convention, ISHACON, and publishes the *Journal of Indian Speech and Hearing Association*. The association's central office is at the AIISH, Mysore. Every state has its own branch of ISHA that conducts professional activities such as seminars and workshops. In addition to ISHA, several other professional bodies/groups in speech and hearing exist in India.

## **Japan**

### **Beginnings**

From 1950 to 1965, the first generation of speech and/or hearing professionals in Japan was composed of physicians and therapists with a background in deaf education and other related fields. However, most early professionals did not receive a systematic education regarding communication disorders. Some studied abroad (e.g., the United States) and received a PhD or master's degree in communication sciences and disorders. Therapists who were trained at institutions and university clinics in Japan and/or received a formal graduate education in speech-language pathology in the United States continued to practice in Japan until 1970.

The first formal 1-year postgraduate program at the National Center for Hearing and Speech Disorders started in 1971. A limited number of this program's graduates were appointed as speech therapists and audiologists until 1980. Since then, speech therapists and audiologists have been trained at domestic university hospitals/clinics (e.g., otolaryngology, oral-facial surgery, neurology), higher education systems (e.g., National Rehabilitation Center College or Osaka University of Education), or foreign universities. The number of formal 3-year or 4-year post-high school and 2-year postgraduate educations has increased in Japan.

### **Education**

In Japan, a professional who works with individuals with communication disorders is called a speech-language-hearing therapist (SLHT). The minimum educational requirement to become an SLHT in Japan is a 3-year post-high school education. As of April 2022, 78 institutions in Japan provide programs for speech-language-hearing sciences and disorders. All academic programs must be approved by the Ministry of Education or the Ministry of Health, Labour and Welfare in Japan. These programs include 28 four-year university programs, 26 three- or four-year college programs (i.e., vocational school), 19 postgraduate 2-year courses, and one 1-year postgraduate course. The last 1-year program is intended for dual medical licensees (e.g., physical therapists, occupational therapists, nurses) with prerequisite education from medical training colleges or 4-year universities. The educational requirement for speech-language-hearing therapy covers both speech-language pathology and audiology. The curriculum includes both basic and clinical courses. Clinical practicum requires 480 hr of supervised clinical practicum across all speech, language, and hearing areas. In addition, 13 master's and nine doctoral programs are available to provide more advanced training.

## **Licensure**

The national licensing system was established by law in December 1997, and the first national license examination for SLHTs was administered by the Ministry of Health, Labour and Welfare in March 1999. A Japanese license is required to work as an SLHT at facilities that provide services under national health insurance and long-term care insurance in order to receive insurance reimbursement. Graduate degrees (e.g., master's degree and/or doctorate) in speech-language-hearing are not required for a clinical license. Students who graduated from undergraduate programs are eligible to take the national licensure exam to work as SLHTs. Unlike in the United States, speech-language pathology and audiology are not separate professions in Japan; thus, an SLHT acts as an SLP and an audiologist. As of May 2023, there were 39,896 licensed SLHTs (Japanese Association of Speech-Language-Hearing Therapists [JAS], n.d.).

## **National Organizations**

JAS (n.d.), a national professional and scientific association, was founded in January 2000 to unite and represent nationally licensed SLHTs. As of March 2023, JAS has a membership of 21,081 (JAS, n.d.). Forty-seven additional local professional organizations exist in Japan. The primary academic associations include the Japan Society of Logopedics and Phoniatics and the Japanese Association of Communication Disorders. JAS headquarters undertakes national and local projects, including continuing education, scientific meetings, scholarly publications, and professional surveying. Additionally, JAS exchanges ideas and opinions during forums with other medical and health organizations.

## **South Korea**

### **Beginnings**

From the late 1960s, medical professionals in South Korea increased their awareness of assessment and treatment needs for individuals with speech and language problems in university hospitals. Speech therapy training began in 1969 at the Speech and Hearing Research Institute of the Department of Otolaryngology, Yonsei University Medical Center. Gloria Levin, a speech therapist and member of the U.S. Peace Corps, provided speech therapy and trained therapists at Severance Hospital and Seoul National University Hospital. Several speech and hearing clinics were opened including Seoul National University Hospital in 1971, Samyuk Rehabilitation Center in 1974, St. Mary's Hospital Rehabilitation Department in 1976,

and Kwangju Christian Hospital in 1976. The Korean Red Cross also provided surgical repairs to children with cleft palate and set up speech therapy rooms for postoperative speech rehabilitation in the Seoul branch in 1979, Busan branch in 1981, and Gwangju branch in 1981. Until the mid-1980s, speech therapy courses were mainly offered within special education majors. Besides the Korean Red Cross, the Seoul Welfare Center for the Disabled provided monthly training for SLPs and caregiver education (The Korean Academy of Speech-Language Pathology and Audiology, 2016).

### **Education**

The first official undergraduate program for speech therapy in Korea was established in 1988 at the Department of Speech Therapy at Daegu University in Daegu, Korea. Another concurrent training program was offered by Yonsei Medical Center beginning in 1994. Soon after, in 1995, a third training program was established at the Department of Communication Disorders in the Graduate School of Ewha Womans University. Since 2000, the number of speech-language therapy programs has rapidly increased in South Korea with a total of 87 associate degree, bachelor's, master's, and doctoral programs in speech-language pathology in more than 50 types of schools, including 3-year community colleges, 4-year universities, and graduate schools to date (Park et al., 2018). Out of the 87 programs, 75 offer speech-language therapy, 11 offer audiology, and one offers both majors.

In 2006, the Korean Council of Academic Programs in Communication Disorders (KoCAPCD) was established for speech and language rehabilitation-related departments specified in Article 72(2) of the Disability Welfare Act and Article 57(4) of the Enforcement Decree of the Disability Welfare Act. KoCAPCD aims to contribute to the development of speech and language therapy departments nationwide and train speech and language therapy professionals by improving research and teaching environments within speech and language therapy departments.

### **Licensure**

Until 2010, private- or organization-level certificates were issued in Korea until a desire to transition from private certificates to national certificates emerged (Kim, 2007). The Korean Speech-Language Pathology Association was launched to oversee national certification. In 2012, the National Qualification Law for Speech-Language Pathologists offered first- and second-level SLP licenses through the national examination once a year. To obtain a second-level national certification for SLPs, applicants must complete 19 major subjects; conduct at least 30 hr of

clinical observation; and complete 90 hr of clinical diagnosis and speech rehabilitation practice at either community colleges, universities, or graduate schools with more than half of the total time spent on campus (Kim et al., 2018). To achieve the first-level national certification, 3 years of clinical experience for bachelor's degree holders or 1 year of clinical experience for master's degree holders is required. To maintain their speech therapist certification, professionals are required to complete 8 hr of continuing education each year offered by the Korean Speech-Language Pathology Association (Park et al., 2018). This process has produced more than 1,000 SLPs annually and approximately more than 15,000 SLPs to date. In audiology, a private certificate is issued by the Korean Society of Audiologists. Undergraduate students majoring in audiology can take the audiologist certification examination if they have completed their third year or if they have completed their third semester of a master's program. Individuals with a bachelor's degree in audiology and at least 6 years of continuing education and 120 hr of continuing education, or a master's or doctoral degree in audiology and at least 3 years of continuing education, are eligible to take the professional audiologist certification exam (J. H. Lee et al., 2017).

### **National Organizations**

The Korean Society of Speech-Language Pathology was founded in 1986 by a small group of experts. The Korean Society of Speech-Language Pathology was renamed the Korean Academy of Speech-Language Pathology and Audiology in 1998. The goal was to broaden its academic scope to include both speech-language pathology and audiology. The Korean Speech-Language and Hearing Association, another speech-language pathology-related society, was founded in 1990. In 2004, the Korean Academy of Audiology was launched.

## **Taiwan**

### **Beginnings**

The first speech-language service in Taiwan was provided by Audry Smithson from the United Kingdom in the neurology department at the National Taiwan University Hospital in 1964 (Wang, 2001). The Taiwan Speech-Language-Hearing Association (TSLHA) was established in 1986 (Y.-M. Chung, 2019). As of May 2022, TSLHA is the national professional and scientific association for 900 members who are speech therapists; audiologists; speech, language, and hearing scientists; students; and affiliates. The main mission of TSLHA is to advance communication science, facilitate continuing professional education, and support academic activities nationally and internationally

as well as create assessments, diagnostic tools, and therapeutic materials. In 1992, TSLHA began to provide a 6-month training program, authorized by the Taiwan Ministry of Health and Welfare (MOHW) for those with a college diploma in nursing, psychology, special education, or a foreign language to become SLPs in departments of rehabilitation in hospital settings (S.-E. Lee, 1993). This 6-month training program focused on learning via a clinical practicum with short lectures on a number of specific topics (e.g., articulation disorders). It did not, however, provide formal courses in diverse areas (S.-E. Lee, 1993). The first two training programs, held at Taipei Veterans General Hospital, had 20 participants in each training program. This 6-month training program was discontinued in 2005 (Y.-M. Chung, 2019).

### **Education**

In 1994, the first 4-year undergraduate program in the Speech-Language Pathology and Audiology Division of the Department of Rehabilitation Medicine at Chung Shan Medical University was launched, with 95 program credits (S.-E. Lee, 1993). These credited courses were adapted from graduate speech-language pathology and audiology programs in the United States. In 2000 and 2001, both the National Taipei University of Nursing and Health Sciences and the National Kaohsiung Normal University established graduate programs in speech-language pathology and audiology (Chen et al., 2005). In 2004, the University of Taipei established another graduate program solely dedicated to speech-language pathology (Chen et al., 2005). There are currently six graduate programs (five in both speech-language pathology and audiology, one solely in speech-language pathology) and six undergraduate programs (five in both speech-language pathology and audiology, one solely in speech-language pathology) in Taiwan. Graduates who have completed at least 6 months or at least 375 hr of practical training are eligible for the qualification examinations for speech therapists and hearing specialists (i.e., audiologists). Students attending either graduate or undergraduate programs in speech-language pathology and audiology are qualified to practice as speech therapists or audiologists after passing the qualification examinations and obtaining a certificate from MOHW (2008a, 2008b). A graduate degree is not required for speech therapists or audiologists to work in Taiwan. Speech therapists' practice includes assessment and treatment of articulation, fluency, voice, and resonance disorders; assessment and treatment of language comprehension and expression disorders; assessment and treatment of swallowing disorders; evaluation and training for the use of augmentative and alternative communication systems; assessment and treatment of delayed language development; operation of instruments with language, speech,

or swallowing function; and other speech therapy businesses as approved by the central competent authority (MOHW, 2008b). Audiologists' practice includes evaluation of the auditory system, assessment of nonorganic hearing loss, evaluation of vestibular function of the inner ear, evaluation of the use of hearing aids, preoperative and postoperative audiological assessment of artificial cochlea (electronic ear), hearing restoration and rehabilitation, and other hearing specialist businesses as approved by the central competent authority (MOHW, 2008a). Currently, most licensed speech therapists and audiologists in Taiwan have completed undergraduate and/or graduate programs in speech-language pathology and audiology, while others have received a 6-month speech therapist or audiologist training program provided by TSLHA (Yeh, 2015), which was discontinued in 2005 (Y.-M. Chung, 2019).

### **Licensure**

The Ministry of Examination (2024) schedules Second Senior Professional and Technical Examinations for speech therapists and hearing specialists (i.e., audiologists) administered in written form each year. Candidates for the Senior Professional and Technical Examinations must be graduates of public or accredited higher education institutions or of an equivalent level of foreign institutions recognized by the Ministry of Education (Ministry of Examination, 2024). Additionally, these candidates must have completed at least 6 months or at least 375 hr of practical trainings. Six professional subjects for Senior Professional and Technical Examinations for speech therapists and hearing specialists (i.e., audiologists) are included (Ministry of Examination, 2024). The speech therapist certificate and hearing specialist (i.e., audiologist) certificate are authorized by MOHW, and practice licenses are registered and obtained by the municipality or county (city) authorities at the intended place of practice (MOHW, 2008a, 2008b).

### **National Organizations**

In 2013 and 2019, the Taiwan Speech-Language Pathologist Union and Taiwan Audiologist Association were established. These associations have 13 and eight national affiliates, respectively. Both are established to protect the common interests of their affiliates and assist the government in implementing legislation and social services. As of 2023, 1,975 speech therapists, 964 audiologists (MOHW, 2023), and 115 self-financed speech therapy clinics are licensed by MOHW (2018). Furthermore, all speech therapists and audiologists' services in medical settings are reimbursed by the National Health Insurance Program administered by the MOHW (Tsai, 2019). In addition to providing early intervention services to children under the age of 6 years with delayed development

and their families according to regulations set forth by MOHW in 2020, speech therapists and audiologists in Taiwan also provide services based on the Long-Term Care Services Act regulated by MOHW in 2019.

## **China/Hong Kong**

### **Beginnings**

In the 1970s, the Hong Kong government started providing hearing aids for children with hearing impairment, and thereafter, speech therapy began to emerge. However, there were no locally trained speech therapists in Hong Kong. A few qualified speech therapists who were educated in other countries and came to Hong Kong with missionaries provided speech therapy services. Due to the severe shortage of speech therapists, the education authorities implemented a transitional measure by establishing a position called the "teacher assisting speech therapy" to provide speech and language therapy for children with disabilities in special schools.

### **Education**

In 1988, The University of Hong Kong (HKU) began offering the first local undergraduate degree program in speech therapy, enrolling about 20 speech therapists per year. Today, the program has expanded to train around 60 speech therapists annually. In addition to HKU, The Hong Kong Polytechnic University (PolyU) began to offer an undergraduate degree program in speech therapy in 2023, training about 12 speech therapists per year. In 2013, two self-financed master's degree programs were developed by PolyU and The Education University of Hong Kong, which admit around 35 or 40 students yearly, respectively. In 2018, The Chinese University of Hong Kong's master's degree program admitted around 50 students biennially.

Audiological education and services in Hong Kong began in the 1970s when the Hong Kong government funded a scholarship program to send post-secondary school students and university graduates to 1- or 2-year audiology programs in other countries such as England and Australia (K. Chung et al., 2012). Only those who completed 2-year master's degree programs were recognized as audiologists. These audiologists were obligated to serve a government agency or the Education Bureau for 3 years. In 1996, HKU began offering the first and only 2-year master's audiology program in Hong Kong. The program accepts eight students biennially. In short, Hong Kong has two bachelor's programs and three master's programs that offer a speech therapy degree program, whereas only one audiology program is available.

## **Licensure**

Until the late 2010s, speech therapists and audiologists were not required to be registered with their respective boards or councils before they were allowed to practice in Hong Kong. The Hong Kong government launched the Pilot Accredited Registers Scheme for Healthcare Professions in 2018, which aimed to establish a regulatory framework for health care professions, including setting minimum qualification standards, developing codes of professional conduct, and establishing a disciplinary mechanism. Under the principle of “one profession, one professional body, one register,” the Hong Kong Institute of Speech Therapists (HKIST) was established in 2017. HKIST has been accredited by the Department of Health as the recognized professional body responsible for regulating the speech therapy profession and managing the registration of speech therapists. For a speech therapist to practice in Hong Kong, he or she must hold a bachelor’s degree or higher in speech therapy from a recognized tertiary institution or equivalent. Furthermore, a speech therapist must demonstrate competency as specified in Competency-Based Occupational Standards 2011 concerning the supplementary documents by HKIST. On the other hand, the Hong Kong Institute of Audiologists (HKIA), which was established in 2018, is the accredited professional body responsible for regulating the audiology profession and managing the register of audiologists. For an audiologist to practice in Hong Kong, he or she must hold a master’s degree or higher in audiology from a recognized tertiary institution with reference to the supplementary documents by HKIA. In summary, there is no licensure for speech therapists and audiologists in Hong Kong. Nevertheless, the HKIST and HKIA maintain and update the registers of accredited speech therapists and audiologists, respectively, in Hong Kong. Currently, there are over 1,000 speech therapists providing speech, language and swallowing therapy, and over 100 audiologists providing audiology services in various public and private institutions in Hong Kong.

## **National Organizations**

Apart from the training of professionals and the expansion of diversified services to the public, professional development and regulation have been essential for developing the speech therapy and audiology professions in Hong Kong. The Hong Kong Association of Speech Therapists (HKAST) was established in 1981 to promote and strengthen the professionalism among speech therapists in Hong Kong. Over the years, HKAST has advocated for the statutory registration of speech therapists and continues to raise public awareness of local speech therapy services. The Hong Kong Society of Audiology, founded in 1992,

plays a vital role in advancing audiology in Hong Kong by fostering professional growth, promoting research, raising awareness, and advocating for improved hearing health care services.

## **Malaysia**

### **Beginnings**

Initially, speech-language pathology and audiology services in Malaysia were minimal. In the 1960s, volunteering organizations from the United States and United Kingdom began to offer speech-language pathology services sporadically (Lian & Abdullah, 2001). In the 1980s, fewer than 10 SLPs were in the country (Ahmad et al., 2013). Around the same time, a few medical assistants and medical doctors pursued audiological training at the diploma and master’s levels, respectively. The first formal educational program to train SLPs and audiologists was offered by the Universiti Kebangsaan Malaysia (UKM). The university established two degree-level curricula—Bachelor of Audiology and Bachelor in Speech Sciences in the mid-1990s (van Dort, 2005). Experts from various universities in Australia and the United Kingdom supported the development of these 4-year bachelor’s programs. The first cohort included nine SLPs and nine audiology students who graduated in 1999.

### **Education**

While internationally visiting professors and lecturers continuously reinforced academic and clinical training at UKM’s programs during their first decade to ensure sustainability, UKM employed their program graduates, who then received government funding to pursue master’s and doctoral degrees. In 2005, UKM’s degree programs were endorsed by the National Accreditation Board and became the benchmark for other local universities and colleges (Ahmad et al., 2013). Three universities (i.e., UKM, University of Science Malaysia, and International Islamic University Malaysia) offer a bachelor-level education in speech-language pathology and audiology through separate degree programs. All six programs are accredited by a government-based body, the Malaysian Qualification Agency (MQA). Their curriculums are reviewed every 5 years (MQA, 2016). Faculty members of the programs have established the Conjoint Board of Studies for Audiology and Speech Sciences, which aims to support the growth of speech-language pathology and audiology education in Malaysia. In establishing the educational standard in speech-language pathology and audiology, MQA considers input from the Conjoint Board. The universities where speech-language pathology and audiology programs are



offered have also received and maintained recognition from the International Organization of Standardization that aims to ensure high-quality operations and procedures in various aspects, including teaching and achievement of speech-language pathology and audiology.

Although speech-language pathology and audiology trainings are offered separately in Malaysia, the students from both programs enroll in similar courses in their initial years. Some standard courses speech-language pathology and audiology students take include language development, developmental psychology, introduction to communication disorders, and basic linguistics. As they progress in their studies, speech-language pathology and audiology students begin to attend courses that are more specific to their distinct fields. For example, speech-language pathology students are trained in the management of specific disorders, such as developmental language disorders, phonological disorders, motor speech disorders, neurogenic communication disorders, dysphagia, and voice disorders. In contrast, audiology students are trained in audiological techniques and instrumentation, hearing amplification technologies, and vestibular disorder rehabilitation.

Students in these programs are required to complete courses with total credits ranging from 137 to 153. The actual credits completed by the students depend on the curriculum offered by a particular university. Clinical practicum courses are embedded within these credits. In the clinical practicum, students provide services in their respective fields under a qualified speech-language pathology or audiology supervisor. Prior to graduating, students are expected to accumulate a minimum of 350 total clinical hours, with at least 200 hr obtained from direct contact with clients, caregivers, and individuals who are involved in the management of speech, language, and hearing disorders. Clinical activities, such as screening, evaluation, intervention, counseling, and training, may be considered toward direct clinical contact (MQA, 2016).

Advanced training in research at the master's and doctoral levels is also offered by those three universities. Private universities (e.g., UCSI University) and international universities with local branches (e.g., University of Nottingham and Monash University) offer research-based advanced degrees that are relevant to speech-language pathology and audiology, such as clinical linguistics, bilingualism, and special education in individuals with communication disorders. None of the local universities have developed clinical-based training programs at the postbachelor's level.

### **Licensure**

In 2016, the Malaysian parliament passed the Allied Health Professions Act 2016. This act aims to regulate the

practices of health care professionals, including SLPs and audiologists. The Malaysian Allied Health Professions Council (MAHPC) oversees the licensure, credentialing, and any misconduct issues among health care professionals. MAHPC is regulated by the Malaysian Ministry of Health. SLPs and audiologists must be granted the MAHPC license to be considered a registered practitioner in the country. To obtain the license, an individual must hold a bachelor's degree granted by universities in countries that allow a bachelor's level of education for practice (e.g., Malaysia, Australian, the United Kingdom). A master's degree or PhD is not required if an SLP or audiologist graduated from those countries; however, if a person graduates with a bachelor's degree in speech-language pathology or audiology from a country that requires a master's or doctoral degree for practice (e.g., the United States), a clinical master's degree in speech-language pathology or a doctorate in audiology is required for obtaining the license. A practicing certificate is issued to registered SLPs (RSLPs) and audiologists by MAHPC, which must be renewed every 2 years. All SLPs and audiologists must present their continuous professional development efforts to MAHPC in order to maintain their license. The council is also responsible for investigating any reports of misconduct among the professionals (MAHPC, 2023).

### **National Organizations**

For speech-language pathology and audiology, MAHPC consists of representatives from MOH itself, universities, and private sectors. MAHPC has also consulted with three national associations related to speech-language pathology and audiology: the Malaysian Association of Speech and Hearing (MASH), the Malaysian Speech-Language Therapist Association (SPEAK), and the Malaysian National Society of Audiologists (MANSA). MASH was the first association established in 1995 to represent SLPs and audiologists in Malaysia. About a decade later, SPEAK was established, focusing on the professional development of SLPs and advocating for individuals and families with communication and swallowing disorders. MANSA was established in 2010 to represent Malaysian audiologists and became the primary audiology advocate.

## **Singapore**

### **Beginnings**

Speech therapy was introduced in Singapore in the 1960s. The first speech therapy department was set up at the Singapore General Hospital (SGH) in 1968 by pioneer speech therapist Mrs. Juliet McCully. By the 1970s–1980s,

units were set up in public health institutions offering speech therapy services, staffed by one to two therapists. The first audiology unit was set up at SGH in 1977 under the ear, nose, and throat (ENT) department. In the 1980s, there were only four audiologists, five audio technicians, and less than 20 speech therapists working in Singapore. Most of these professionals were expatriates who had received their degrees from abroad. A pioneer audiologist starting in 1977 at SGH is Yiap Kim Hong, who is also the founding member of the Society for Audiology Professionals Singapore (SAPS). As an academic, Yiap was instrumental in setting up the first audiology service at SGH and advocated for the use of objective assessment of hearing in children using auditory brainstem response (ABR; Yiap & Loh, 1984). This facilitated the eventual rollout of newborn hearing screening in 1999 at SGH. A pioneer audio technician is Sie Swee Hoon, who started her career at the age of years 21 at SGH. She was tasked to lead the newborn infant hearing screening program and still works at SGH today.

## **Education**

The Singapore government provides scholarships through the Public Service Commission and its various ministries for allied health professionals to access overseas training (Lau et al., 2015). With the rising demand for local audiologists and speech therapists, the National University of Singapore (NUS) established the first speech-language pathology master's program in 2007 and the first audiology training master's program in 2013 (NUS, 2023a, 2023b). These are 2-year programs that accept graduates from a variety of disciplines. In 2020, the Singapore Institute of Technology established the first speech and language therapy undergraduate degree 4-year program (Singapore Institute of Technology, 2023). Practicing professionals working in public health care institutions can also access postgraduate training through the Health Manpower Development Plan via overseas attachments and the visiting expert's program (Lau et al., 2015). These attachments often consist of a period of time training at an overseas institution to improve clinical skills. The visiting experts program invites renowned professionals from overseas to share their skills and knowledge with local professionals through lectures, seminars, and workshops. In summary, there is one undergraduate and one master's speech therapy program and one audiology master's program in Singapore. No doctorate programs for either profession are available currently.

## **Licensure**

In 2011, the Ministry of Health established the Allied Health Professions Act and the Allied Health

Professions Council (AHPC, 2023; Lau et al., 2015). The AHPC regulates the practice of allied health professions (AHPs) in Singapore through issuing practicing certificates known as "practising certificates" to AHPs who have registered and met requirements for training, conduct, and practice. Under the Allied Health Professions Act Section 29, "It is an offence to practise as an Allied Health Professional in Singapore without registration and a valid practising certificate." Speech therapists, along with occupational therapists and physiotherapists, were the first professions to be registered in 2013. Registration and regulation for other AHPs under the Act, including audiologists, will commence in subsequent phases. In December 2022, there were 791 registered speech therapists (AHPC, 2022). In 2023, there are 126 registered audiologists (SAPS, 2020).

In order to practice in Singapore, all AHPs under regulation must be registered with AHPC and issued a practicing certificate. All speech-language therapists (SLTs) and audiologists who wish to practice in Singapore must possess a primary professional qualification (bachelor's or master's) in their profession. If their basic professional qualification is not found on AHPC's list of recognized qualifications, they will be required to take a qualifying examination for their profession, which is an assessment of professional knowledge and skills expected of their profession. Additionally, foreigners should have an offer of employment in their profession in Singapore to be considered for AHPC registration (AHPC, 2023). The practicing certificate has a validity of 2 years, and AHPs are required to renew their certificates with AHPC.

## **National Organizations**

From 1968 to 1984, speech therapists were able to join the Singapore Physiotherapy Association as associate members (Wong, 1994). Subsequently, 20 speech therapists came together to set up the Speech-Language and Hearing Association Singapore (SHAS) in 1994, in order to provide an avenue for professional development and advocate for the profession. SHAS is now known as Speech and Language Therapy Singapore. SAPS was formed with 10 founding members in 2000 (SAPS, 2020). The members were composed of four pioneer audiologists and five audio technicians who started at SGH in 1977, as well as one hearing health professional.

## **Thailand**

### **Beginnings**

The speech-language pathology program in Thailand was initiated in 1974 by two founders (Lertsukprasert &

Dechongkit, 2014). Prof. Dr. Poonpit Amatayakul received a master's degree in audiology at Temple University in the United States in 1968. Assoc. Prof. Dr. Rochana Dardarananda also studied speech-language pathology at Temple University and received a master's degree in speech-language pathology in 1971. After they returned to Thailand, the two professors worked together to create a postbachelor's training program at Mahidol University. With continuing advice from faculty members at Temple University—including M. Halfon, Carolina Town, M. Goehl, and Rosenberg—the program educated people who earned degrees in nursing, education, linguistics, public health, and medicine.

## **Education**

In 1976, the Faculty of Graduate Study at Mahidol University offered a 2-year Master of Arts (Communication Disorders) designed to train 10–12 students per year in audiology and speech-language pathology. In 2004, in addition to a master's degree, Mahidol University began to offer the first bachelor's program in Thailand. It is a 4-year program, with an enrollment of approximately 30 students per year (e.g., 15 audiology and 15 speech-language pathology). In 2016, the Faculty of Medical Technology at Chiang Mai University launched a 2-year master's program, enrolling six to eight students per year. In 2020, the Faculty of Medicine at Khon Kaen University launched another 2-year program of Master of Science in Communication Disorders, enrolling five to seven students for both audiology and speech-language pathology. In short, one Bachelor of Science program in Bangkok and three master's programs in Bangkok, Chiang Mai (north), and Khon Kaen (northeast) offer the communication sciences and disorders educational programs in Thailand.

## **Licensure**

Students must choose either speech-language pathology or audiology as a major in each program. They then must complete 350 practical hours related to their specialty. Students who graduate from the bachelor's or master's program are eligible to take a national speech-language pathology or audiology examination. After passing the license exam, graduates must be registered by the Division of Art of Healing before working in the field. The national examination is administered once a year under the policy of the Ministry of Health. Without a license, an individual cannot provide speech therapy or audiological services. In 2018, a new regulation for continuing education was established. A minimum of 50 continuing professional education units are required to renew registration every 5 years.

With a bachelor's degree, audiologists can provide services in basic audiometry, tympanometry, otoacoustic

emission testing, ABR testing in adults, hearing aid fitting in adults, and aural rehabilitation and hearing conservation programs. With a master's degree, audiologists can provide pediatric services (e.g., hearing evaluation in young children, hearing aid fitting, cochlear implant mapping and rehabilitation, and vestibular disorders). With a bachelor's degree, speech therapists can diagnose and provide therapy for patients with articulation disorders, delayed speech and language development, and aural rehabilitation needs. With a master's degree, speech therapists can diagnose and treat medically related patients with voice disorders, cleft palate speech, swallowing disorders, and cognitive communication disorders. The number of professionals in Thailand remains limited because, when the communication disorders academic program started, only individuals with a bachelor's degree in a relevant field were accepted to study in the master's degree program. This resulted in a slow, gradual increase of professionals. As of December 2022, there are 461 certified communicative disorders professionals and 222 Thai Speech-Language and Hearing Association members in Thailand.

## **National Organizations**

In 1994, a group of experienced audiologists and SLPs established the Audiology and Speech-Language Pathology Professional Club. The professional club's objectives were to promote academic and professional activities, maintain current knowledge, and support new professionals in Thailand. In 1997, the "Thai Speech-Language and Hearing Association" was established. The initial mission of the association was to develop professional standards and to systematically organize professional knowledge for providers to support adherence to global academic and professional principles. In particular, during the first 3 years of the association, the professional committee developed the association's standards and ethics. Following a public hearing, their initial proposal was revised based on the input of the association members. The developed standards and ethics were formally adopted as professional guidelines in 2000 and have been updated every 5 years. The second mission of the Thai Speech-Language and Hearing Association was to provide proper education to practitioners who work with individuals with communication disorders in collaboration with the Division of Art of Healing and the Ministry of Public Health.

## **Philippines**

### **Beginnings and Education**

Speech-language pathology was first established in the Philippines in 1978. Professor Rosella De Jesus-

Sutadisastra, in collaboration with two U.S. Peace Corps volunteers, Kathleen Mary Boehigheimer and Kathleen A. Quigley, developed and implemented a 4-year bachelor's degree program in speech-language pathology after receiving approval from the Board of Regents of the University of the Philippines Manila (UPM). In 1982, Maria Teresa Castillo became the first and sole graduate of UPM. By 1989, there were only 15 graduates from the program. The College of Allied Medical Professions at UPM opened the Master of Rehabilitation Science-Speech Pathology program in 1998. A total of 377 SLPs had graduated from the program by 2010. The University of Santo Tomas (UST) opened their Bachelor of Science in Speech-Language Pathology (BSSLP) in 2009. Cebu Doctors' University became the first university to offer the BSSLP program in the Visayas and Mindanao regions in 2012. Finally, in 2014, De La Salle University's Institute of Health Sciences opened their BSSLP program. Currently, of the aforementioned universities, four universities offer undergraduate speech-language pathology programs, and one also offers a master's speech-language pathology program. At the same time, a 10-month speech pathology training program is offered at the University of Visayas. This program has not been approved by the Commission on Education and is not recognized by the Professional Regulatory Board of Speech-Language Pathology (PRB-SLP).

### **Licensure**

In 1991, 30 speech pathology graduates founded the Philippine Association of Speech Pathologists (PASP). While the profession's work in increasing its presence in the legislative space had continued during the early 2000s, PASP moved toward self-regulation amid reports of individuals providing speech-language pathology services despite not having adequate training. Members of PASP recognized the urgency to meet the Filipino public's need for access to qualified clinicians and to obtain data to justify opening more university programs, training more clinicians, and nudging the profession toward national recognition. In 2008, Prof. Jocelyn Marzan and two other SLPs, Carla Cuadro and Barbara Munar, presented a validation research article on the core competencies that are expected of SLPs practicing in the country to the Commission on Higher Education (CHED). The article became the basis for the development of a core speech-language pathology curriculum. By 2009, the Technical Committee for Speech-Language Pathology Education panel was established. The committee put out a CHED Memorandum Order 29 series of 2011: Policies, Standards and Guidelines for Speech-Language Pathology Education (CHED, 2011). The memorandum outlined a 5-year, competency-based speech-language pathology degree program whose fundamental structure promoted the "end view of meeting the national health service delivery needs and

keeping pace with the demands of global competitiveness" (CHED, 2011).

In March 2019, President Rodrigo Duterte signed a bill, the Republic Act No. 11249, regulating the practice of speech-language pathology in the Philippines. By 2021, the first chair for the PRB-SLP, Mae Catherine Sadicon was sworn into office, along with Juan Paolo Santuele as its first member. Rowena Arao-Ynion became its second member in 2022. These individuals became the first RSLPs in the Philippines in April 2022. By virtue of the grandfather clause that applied to Filipino SLPs who graduated before the law was signed, the historical milestone was achieved when these SLPs participated in the very first oath taking at the Manila Hotel in March 2023.

Prior to the professionalization of audiology in the Philippines, trained audiometricians performed audiology work. A course had been made available to ENT specialists for reading and interpreting ABR results. For a time, it was only these ENT graduates who, as nonaudiologists, were trained to diagnose hearing loss via ABR. By 1999, a Master of Clinical Audiology program had been established at both the University of the Philippines (as MCLinAud) and UST (as MCIAud). Today, any graduate with a master's degree in clinical audiology can practice as an audiologist.

### **National Organizations**

By 2021, PASP had 670 members. The association had created SIGs to expand the profession and organize clinicians into specialist groups. Since its first national convention was held in 2016 in Taguig City, PASP has held a national convention every 2 years. By November 2023, another milestone took place with the introduction of the national speech-language pathology licensure examinations headed by the PRB-SLP. To date, only SLPs who have been licensed in the Philippines may practice in the country. PASP—as the accredited and integrated professional organization of licensed SLPs in the Philippines—has no reciprocal practice with another country.

## **Indonesia**

### **Beginnings**

In Indonesia, the term "speech therapy" (in Bahasa Indonesia, we called it "terapi wicara") has been adopted to define speech therapy services. The speech therapy profession was first introduced around 1971 by Johana Sunarti Nasution, Dr. Hendarto Hendarmin, Sp. THTKL, and Dr. H. Teguh A.S. Rakasuma, Sp.S, who later founded the Bina Wicara Education Foundation (Lembaga Pendidikan Bina Wicara). These pioneers started to establish the

Akademi Terapi Wicara (Speech Therapy Academy) where a 6-month speech therapy training program, including the Speech Correction Courses A and B, was launched between 1971 and 1972 to improve the knowledge of health care professionals who work with patients with communication disorders in the country.

## **Education**

When the speech correction training courses ended by the end of 1972, an evaluation of the implementation and results of the courses was carried out, resulting in the decision to upgrade the course to a 3-year educational program. From early 1973, the Akademi Terapi Wicara (Speech Therapy Academy) in Jakarta started to offer a speech therapy degree program. Participants in this program included high school graduates who are accepted as first-year students, while those who had graduated from the Speech Correction Courses A and B were immediately accepted as second-year students. In 1985, Bina Wicara Education Foundation further collaborated with the Medical Rehabilitation Foundation (Yayasan Bina Wicara Indonesia) to offer a combined program including speech and physical therapy programs. In 1987, Bina Wicara Education Foundation remained to support the speech therapy training program only at the Akademi Terapi Wicara (Speech Therapy Academy).

In addition to the Speech Therapy Academy that offers one 3-year program (called Diploma 3<sup>1</sup> of Speech Therapy), there are three other colleges in Indonesia that offer speech therapy programs across various cities in Indonesia. The second is Health Polytechnic of Surakarta, which started to offer three types of speech therapy programs in 2006. The programs include a Diploma 3, which takes 3 years to complete; an Applied Bachelor of Speech and Language Therapy, which can be completed in 4 years; and a transfer program from Diploma 3 upgraded to Applied Bachelor, which ranges from 1.5 to 2 years. The third college is Polytechnic Al Islam in Bandung, and the fourth is College of Health Sciences STIKes Mercubaktijaya in Padang, established in 2012 and 2017, respectively. Each college offers a Diploma 3 of speech therapy program.

## **Licensure**

From 1988, speech therapy education was offered officially under the guidance of the Minister of Health (No. 221/Kep/Dinakes/XII/88) through the Republic of Indonesia Minister of Health Decree. All college graduates must pass the speech therapy national examination before they

practice. Through Government Regulation Number 32 of 1996 concerning Health Personnel, Chapter II, Article 2, speech therapy education graduates are named speech therapists and are recognized as health workers who are included considered as physical therapy personnel together with physiotherapy and occupational therapy. A college degree in speech therapy, registration certificate, and license are required. To practice, individuals with the registration certificate need to renew their license every 5 years.

## **National Organizations**

As a health profession, speech therapy is required to have a professional organization that accommodates speech therapists in Indonesia. The Bina Wicara Education Foundation started the Indonesian Speech Development Association (IKABWI) in 1993. IKABWI was an informal and preliminary organization without articles of association and bylaws. In 2006, IKABWI changed its name and management to “Indonesian Speech Therapists Association” (Ikatan Terapis Wicara Indonesia/IKATWI) and was registered as an official organization of speech therapy in Indonesia. IKATWI involves a registration certificate of members in accordance with the rules contained in the articles of association and bylaws of IKATWI as well as the Ministry of Health. Speech therapists who are registered and become IKATWI members are authorized to practice in Indonesia. IKATWI also oversees speech therapists in Indonesia. If foreigners want to work as a speech therapist in Indonesia, they must submit proof of education and practice and register with IKATWI and the Indonesian Health Workers Council. According to the last member update in May 2023, there were about 2,580 members. Membership increases by about 300 members each year. IKATWI has organized an annual speech therapy conference since 2007. New leadership of the organization is elected every 5 years.

## **Mainland China**

### **Beginnings**

In China, a professional who works with patients with communication disorders is called a speech therapist. Speech therapy is still an emerging discipline in China. Professor Yang Hejun and Professor Liu Yongxiang from Beijing Friendship Hospital, pioneers in voice disorder research, established the Voice Medical Clinic and the Artistic Voice Research Laboratories in 1979. The China Rehabilitation Research Center for Hearing and Speech Impairment (formerly the China Deaf Children Rehabilitation Research Center) was established in 1983 and is affiliated with the China Disabled Persons’ Federation. It is China’s sole state-level institution dedicated to hearing and speech

<sup>1</sup>The Diploma 3 program is equivalent to a 3-year associate degree program in the United States.

rehabilitation, which has been pivotal in developing and refining rehabilitation methods, techniques, and industry standards for children with hearing impairments in China. In 1988, the China Rehabilitation Research Center, also known as Beijing Boai Hospital (a public hospital in Beijing), established its Hearing and Speech Department. Professor Li Shengli, the inaugural director of the China Rehabilitation Research Center, pursued advanced studies in the late 1980s and early 1990s at the University of British Columbia in Canada and the National Rehabilitation Center of Japan. Meanwhile, Professor Tian Hong became the first to study speech-language pathology at the National Rehabilitation Center of Japan. This initiative to foster the speech therapy profession in China received financial support from the Japan International Cooperation Agency (JICA). JICA dispatched more than a dozen Japanese experts in speech-language pathology to provide continuous guidance to the China Rehabilitation Research Center over 5 years in the 1980s. This collaboration introduced multiple Japanese speech-language pathology assessment tools to China.

## **Education**

Since the 1980s, training pathways have evolved from early-stage short-term training (ranging from 12 weeks, 36 weeks, or up to 1 year) utilized from 1983 to 1988. From 1989 to 2000, rehabilitation treatment majors (which did not specify speech-language pathology) emerged on the educational landscape. Technical secondary schools, colleges, and universities offered these rehabilitation treatment programs. After 2001, there was a significant shift toward full-time higher education in rehabilitation therapy, and dedicated programs in speech and language therapy (Zhuo, 2004) were created. Speech therapy education in China initially began in vocational and technical schools as well as medical colleges. Presently, speech-language pathology programs in China fall under four types: hearing and speech rehabilitation, speech and hearing rehabilitation technique, speech and hearing sciences, and educational rehabilitation.

Zhejiang Chinese Medical University started to offer an undergraduate degree in audiology in 2001, making it the earliest program of its type in China. In 2004, East China Normal University successfully established the first undergraduate major in speech and hearing sciences. Ningbo College of Health Sciences took the lead in introducing the Speech and Hearing Rehabilitation Technique major in 2012. The School of Language Rehabilitation at Beijing Language and Culture University was founded in 2018. It was the first institution in China to offer a speech-language pathology major at a linguistics-focused university. Hearing and speech rehabilitation was first granted as a major among undergraduates by the Ministry

of Education in 2012, which marked the introduction of speech-language pathology education in the medical field in China. In short, 43 universities are currently offering programs training SLTs and audiologists in China. These programs have received recognition from the Ministry of Education of China. These universities include 17 vocational colleges, 26 undergraduate institutions, and eight programs offering master's and/or doctoral degrees. In China, vocational colleges typically offer 3-year programs emphasizing skills and practical applications, while universities provide 4-year undergraduate programs focusing on comprehensive education and research capabilities.

Unlike the United Kingdom and the United States, no authoritative body currently regulates the curriculum, content, and quality of speech-language pathology programs in China. Most higher education institutes include content related to both speech-language pathology and audiology. After graduation, students can choose between becoming speech therapists or becoming audiologists. Individual departments may tailor their courses to align with the unique characteristics of their institutions.

## **National Organizations**

The growth of academic organizations at all levels has played a key role in promoting the development of speech-language pathology and audiology professions in mainland China. Each of the national scholarly organizations—the Chinese Association of Rehabilitation Medicine, the Chinese Medical Association, the Chinese Medical Doctor Association, and the China Association of Rehabilitation of Disabled Persons—has established speech-language pathology committees or groups. In 2012, the Professional Committee Speech Therapy Group was first formed under the supervision of the Chinese Association of Rehabilitation Medicine Rehabilitation Treatment. In 2020, the Speech Rehabilitation Professional Committee of the Chinese Association of Rehabilitation Medicine was founded. The Department of Rehabilitation Medicine at the Second Xiangya Hospital of Central South University took the lead in establishing a nationwide and cross-regional collaborative medical consortium with a focus on public welfare in 2018. Their initiative marked the official launch of the National Alliance for Speech and Swallow Rehabilitation Cooperative Development in 2018. To date, nearly 200 hospitals have joined this alliance.

## **Vietnam**

### **Beginnings**

The history and development of the speech-language pathology profession in Vietnam has been well documented

in several reports (Atherton et al., 2013, 2017, 2020a, 2020b; S. A. S. Lee, 2021). The first speech-language pathology service in Vietnam served children with cleft palate in 1972. This intervention was given by Pat Landis, an SLP from the United States. The speech-language pathology service for children with cleft palate continued with support from SLPs affiliated with Operation Smile, a nonprofit organization based in Norfolk, VA (Ducote, 1998, 2001). Charlotte Ducote reported that, during the time she volunteered, only a few people in Vietnam held the title of speech therapist and none had a speech-language intervention degree. Since the need for speech pathology services was acknowledged by the health care industry, medical doctors (e.g., otolaryngologists, craniofacial surgeons), nurses, or other health care professionals (e.g., physical and occupational therapists) started to provide services for individuals with communication disorders with training offered by visiting international SLPs or other Vietnamese colleagues with independently acquired skills (McAllister et al., 2010). Cheng (2010) reported that hospitals and clinics in Hanoi have offered workshops in speech therapy since 2002.

## **Education**

In 2008, Sue Woodward, an SLP from Australia, and Dr. Nguyen Thi Ngoc Dung at the Ho Chi Minh City ENT Hospital collaborated on a speech therapy education program. Dr. Dung was exposed to speech therapy as an otolaryngology intern in France. After she returned to Vietnam, Dr. Dung opened a 6-week short course at Pham Ngoc Thach (PNT) University of Medicine, HCMC in 2009 (McAllister et al., 2010), which was the first non-degree training program. In 2010, Dr. Dung opened a 2-year postgraduate speech therapy training program at PNT University with support from Trinh Foundation Australia (TFA) and Australian speech-language pathology volunteers. This nondegree training program trained 33 graduates in two cohorts (2010–2012 and 2012–2014).

Although universities have begun to offer speech therapy education in Vietnam, a number of nondegree training programs are concurrently offered by universities, public hospitals, and even private clinics. Three universities, endorsed by the Ministry of Health, currently offer a degree program of rehabilitation therapy where speech therapy courses are taught in Vietnam. These universities are Da Nang University of Medical Technology and Pharmacy and Hai Duong Medical University that offer a 4-year bachelor's program, while the University of Medicine and Pharmacy in HCMC offers a 2-year master's program. The purpose of the master's program at the University of Medicine and Pharmacy at HCMC is to produce future educators to teach in bachelor's degree programs in

Vietnam. These degree programs cover most aspects of speech and language pathology across the life span including speech, language, voice, fluency, dysphagia, and multimodal communication. Clinical practicums include 22 weeks of supervised clinical placement to obtain around 750 clinical clock hours. These programs have been managed through multilateral memorandums of understanding (MOUs) between the funders (U.S. Agency for International Development, Viet Health, the Medical Committee of Netherlands-Vietnam, and TFA). However, until 2024, their degrees are not “bachelor's or master's in speech therapy.” Instead, they are under “rehabilitation therapy” including physical therapy, occupational therapy, and speech therapy.

Among the many nondegree certificate speech-language pathology programs in Vietnam, two significant programs provide a relatively more extensive course of study covering the major aspects of speech-language pathology. PNT University of Medicine offers a 1-year certificate in pediatric speech therapy. The curriculum includes both basic and clinical courses. Students also undertake clinical practice under supervision. Hue University of Medicine and Pharmacy offers a 9-month certificate program with support from the Korean International Cooperation Agency and Jeonbuk National University, South Korea. The Hue University program includes 6 months of clinical training and 3 months of intensive coursework covering the primary subject areas (e.g., language development, phonetics, speech/hearing sciences) and major disorder areas (e.g., pediatric speech or language disorders, adult neurogenic communication disorders).

## **National Organizations**

Since speech therapy is emerging in Vietnam, no speech-language pathology professional association has been established as of 2023. During the panel discussion of the APSSLH Conference in Vietnam, it was presented that approximately 100 students graduated from the three university programs and studied speech therapy under the rehabilitation therapy program. Unlike speech-language pathology, the Vietnamese Audiology Association (VAA) was launched by several otolaryngologists in Vietnam in 2022. Audiology services are mainly provided by otolaryngologists and nurses in Vietnam, along with individuals who sell hearing aids. Audiology training programs at the university level are scarce. According to the president of VAA (via personal communication with Dr. Nguyen Tuyet Xuong), over 500 otolaryngologists are members of this association. The first conference was held in April 2022 in Hanoi, and the second conference was held in June 2023 in Nha Trang, Vietnam.

## Cambodia

In early 2014, two nonprofit organizations from the United States (i.e., Speech Therapy Cambodia [STC]) and Australia (i.e., OIC Cambodia) arrived in Cambodia with plans to introduce speech therapy programs in Cambodia. STC has focused on training in management of adult dysphagia, initially creating basic training classes in dysphagia management in three Phnom Penh public hospitals for working Cambodian doctors, nurses, and physical therapists. Teaching and training materials for dysphagia management specific to a Cambodian context were developed and refined over the years. STC holds an MOU with the Cambodian Ministry of Health and three government hospitals in Phnom Penh. In late 2021, STC contracted with the University of Puthisastra (UP), a prominent private Cambodian medical school, to offer a course in dysphagia management for working Cambodian hospital nurses, doctors, and physical therapists.

The resulting UP course focuses on expanding the services that STC had been providing. A requirement for participating Phnom Penh hospitals—in 2023, there were five—is that there must be a concrete plan to implement a robust dysphagia service in their facilities. The course is endorsed by the Nursing and Medical Councils of Cambodia and is funded by a generous Rotary International global grant. A postgraduate certificate will be awarded to trainees who pass university exams and practicum competencies. The yearlong part-time course began in October 2023. The first cohort of 15 trainees will complete the training in September 2024. The course requires 190 hr of study specific to adult dysphagia, including 40 hr of online lectures and in-person workshops and 150 hr of practical workplace training. The trainers and course developers are SLPs from the United States, the United Kingdom, and Canada, all with extensive experience in dysphagia management. Trainers are accompanied during the practicum training by Rotary-funded Cambodian Khmer–English interpreters trained in medical and dysphagia-specific terminology. The course will repeat twice more, in 2024–2025 and in 2026.

OIC Cambodia's vision is “speech therapy led by Cambodians and available to all who need it” (Salter & Yeoh, 2016). Aiming for a contextualized, comprehensive scope of speech therapy across the nation, OIC used a system-strengthening approach. OIC initially trained teachers and social workers in early-childhood support and raised awareness of Speech Therapy need (Bryce et al., 2023). Mapping services and community supports, OIC has developed an evidence base of speech therapy knowledge, practice, resources, and attitudes (Net et al., 2023). Service pilots helped reveal referral pathways and future jobs within Cambodia's health and rehabilitation systems. Fostering self-advocacy groups, growing skills and resources in augmentative

and alternative communication have facilitated inclusion of people with communication disabilities. By engaging both national leaders and provincial authorities, OIC has influenced policy and resources across Cambodia's disability, health, and education ministries (Bryce et al., 2023). OIC's mission also includes supporting the development of university degree programs. Current work includes a speech therapy competency framework to guide professional accreditation and support training development. In 2025, OIC will pilot 12 months of competency-based training within provincial health and rehabilitation services, including pioneering services within provincial hospitals and health centers. The organization continues to discuss course development with the University of Health Sciences and other providers.

All Ears Cambodia (AEC) is a local nongovernmental organization established for the relief of persons with ear disease and deafness and the preservation and protection of hearing in Cambodia. It has been operational for over 20 years and has a formal Memorandum of Agreement with the Ministry of Health. The Ministry plays a largely facilitating role where AEC supports and provides government and nonstate ear health care at multiple levels of the health system. It currently has five clinics across the country and works in partnership with over 80 local and international aid organizations and two public hospitals.

Focus is on the weakest and hardest hit. AEC has established a network of referral points to target vulnerable and high-risk populations. It recognizes government health equity funds registration to ensure free services for the poor. AEC's current annual patient caseload is over 29,000. Services at AEC focus on primary ear health care and audiology. The medical work often revolves around ear infections, not least in children. The team meets international standards, treating disease using appropriate examination and therapeutic techniques. At the community level in Phnom Penh, AEC works closely with local wats (Buddhist temples), which play an important role in providing residential and social support for vulnerable elderly people, and with schools to raise children's awareness with respect to ear and hearing health. AEC also educates health workers at the community level. For example, district health nurses have been trained in the prevention of hearing loss and in recognizing signs of diseases of the ear. There is currently no national ear care strategic plan in Cambodia. In the meantime, AEC has created an in-house school of audiology and primary ear health care to address the paucity of specialists in these fields.

## Discussion

The goal of this article is to introduce a brief history and provide the current status of the speech-language



pathology and audiology professions in Asian countries or regions affiliated with the APSSLH. Based on mutual agreement between the first author and the country representatives, the development status of the participating countries was categorized as fully established, in development, and emerging. The criteria to determine the developmental status include (a) whether speech-language pathology or audiology programs are self-sustained without the support of foreign countries' assistance, (b) whether the licensure systems are fully established, (c) whether the speech-language pathology and audiology degree programs produce educators who teach speech-language pathology and audiology courses, and (d) whether the number of speech-language pathology and audiology programs is large enough to provide services to people with needs in each country. If a country meets all four criteria, the country is considered as fully established, whereas if a country does not meet all four criteria, this country is considered as emerging. Countries that meet most criteria except for one or two are considered as in development. The speech-language pathology and audiology professions are fully established in India, Japan, South Korea, Taiwan, and Hong Kong/China. These professions are still developing in Malaysia, Singapore, Indonesia, Thailand, the Philippines, and Mainland China, whereas in Vietnam and Cambodia, they are emerging. It should be noted that these categorizations do not intend to judge each country. Instead, they may help readers understand the development status of these countries.

The speech-language pathology profession was introduced to Asia by foreign and native pioneers from the early 1960s. Most countries typically require a bachelor's degree in speech-language pathology or audiology. Without a bachelor's degree in communication sciences and disorders, a master's degree is required. A licensure system has also been developed in most countries categorized as fully established and in development. Since speech-language pathology practice is provided by native practitioners in these countries, there are no clear procedures and regulations about the possibilities for foreign speech therapist practice in these Asian countries. However, in some countries such as India, Hong Kong/China, and South Korea, foreigners may be able to work if they meet the qualifications of speech-language pathology licensure. For example, the RCI regulates the quality of speech therapists or audiologists. Similarly, HKAST is responsible for the statutory registration of speech therapists. Foreign SLPs or audiologists may be able to apply to become eligible to work in these countries after their application is approved by their national licensure endorsing organization. However, services are often provided in the native language. A foreign practitioner must speak the language unless English is the service language during assessment and intervention. Most countries have more than one professional organization.

Despite the tremendous growth in the speech-language pathology and audiology professions during recent decades in these countries, there are several standing issues among countries in development. The primary concern is a lack of speech-language pathology and audiology professionals. For example, in Malaysia, the population is estimated at 33.4 million, and the number of SLPs in 2019 was approximately 300 (Chu et al., 2019). In the Philippines, there is one SLP for every 8,000+ clients (Ponciano-Villafania, 2018). It is not uncommon to hear of non-SLPs accepting pediatric language, adult language, or dysphagia cases.

The secondary issue is the limited number of education programs that contribute to the lack professionals in countries where speech-language pathology and audiology are developing. For example, only one undergraduate program and one graduate program were available in Thailand until 2020. Currently, three to four universities offer either speech-language pathology or audiology programs in Thailand, Malaysia, and the Philippines. The third issue is the lack of qualified educators in these countries. Speech-language pathology was introduced by foreign practitioners from Western countries such as the United States or United Kingdom. Although some countries offer master's and doctoral degrees, the number of graduates who complete an advanced degree each year is still limited. Some countries also still need help from international visiting professors or experienced practitioners. However, language or financial barriers are always present. In addition, clinical/research facilities and infrastructure must be upgraded to cater to more students. Without adequate infrastructure, offering quality education or clinical service is a daunting task. Some of these issues are closely intertwined, and it is difficult to separate them apart. In addition, several local challenges, including language barriers, must also be raised. For instance, to address Malaysia's unique multilingual, multicultural landscape, the need for assessment tools and intervention resources sensitive to local languages and cultures is critical (Hassan et al., 2023). Finally, the speech-language pathology practice in the Philippines is not fully monitored by the PRB-SLP. There are still unlicensed practitioners who are able to provide speech-language pathology services in that country, although regulation for speech-language pathology practice was established. It indicates that continued monitoring and regulation systems are warranted until regulatory standards are fully implemented in countries where speech-language pathology is in development.

In order to facilitate growth of the speech-language pathology and audiology professions in Asian countries where these professions are in development or emerging, the implementation of the following recommendations may be necessary:

1. Increasing recognition of communication and swallowing difficulties to the public, stakeholders, and legislators.
2. Exchanging and sharing educational and practice experiences and ideas through international networks such as APSSLH and ASHA SIG 17 to promote a sustained program and to offer continuing education programs.

In conclusion, this article provides the first comprehensive profile of the speech-language pathology and audiology professions in Asian countries. It is the authors' hope that readers have a better understanding of speech-language pathology and audiology training programs and intervention options available at present in various Asian countries reviewed here, and they are encouraged to find a way to contribute to speech-language pathology and audiology in countries where these professions are in development and emerging.

## Data Availability Statement

No data sets were generated or analyzed during the current study.

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