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An Overview of Higher Education Programs in Communication Disorders in Thailand

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Abstract

Communication disorders education in Thailand has been developing for almost 40 years since 1974. The founders were an audiologist and a speech language pathologist who graduated from Temple University, USA. Both of them began establishing a graduate program, a Master of Arts in Communication Disorders. The program accepted the first generation of the students in 1976. Four years later, there was another one-year study program offered, a Certificate in Communication Disorders, to produce audio-technicians to be audiologist assistants. Both programs were gradually producing graduates in communication disorders. However, many problems occurred during that time such as inappropriate personnel to patient ratio which resulted in work over load, uncontrolled service quality by these personnel and other non-professionals, few research studies and innovations in communication disorders, a low number of instructors and so on. Afterward, the educational committee decided to stop the certificate program and tried to upgrade audio-technician to diploma and bachelor levels, respectively. In the meantime, a group of senior professionals concerned and raised the issue of professional licensing. They collected relevant information and presented it to the National Laws Committee. National licensing of communication disorder professionals began in 2002. All professionals were required to pass the national examination and applied for a license. In order to raise the standards and quality of educational programs in communication disorders, the educational committee agreed to establish the Bachelor of Science in Communication Disorders program in 2004 and updated the content of the Master of Science in Communication Disorders program. At present, the number of audiologists and speech pathologists is still far from the target requirement. The objectives of this presentation include a retrospective review of the communication disorders profession in Thailand, demonstration of current communication disorders curriculums, and human resources in this profession. Factors and problems will be discussed.

Key Words: communication disorders, audiology, speech pathology

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Background

The program in communication disorders in Thailand was founded by Professor Doctor Poonpit Amartayakul and Associate Professor Doctor Rochana Dardarananda in 1974 at Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok. They both graduated from Temple University in the U.S.A. and earned a Master degree in Audiology and Speech-language Pathology respectively. The program in communication disorders is the first and only one in Thailand since then. At that time, most of the graduate students earned bachelor degrees in nursing and education. Some earned degree in linguistics, psychology, and physiotherapy, and only one of each in public health and doctor of medicine[1]. The program produced 2 groups of graduates (audiology and speech & language pathology) which included about 4-6 professionals in each group. However, the number of the graduates was not sufficient.enough to provide service for the Thai people. In 1979, the program offered another one-year program for high school students to be audio-technicians who were audiologist assistants. There were 10-12 students each year. After graduation, some audio-technicians had to work independently in several hospitals. There were many problems that occurred during that time in terms of service and quality. In 1997, senior professionals in the field of communication disorders founded the Thai Speech and Hearing Association in order to support the professional development of its members[2]. In 1999, the program offered an associate degree (Diploma) in order to upgrade the knowledge and potential of audio-technicians. There were only 40 audio-technicians out of about 140 who enrolled in this program[3]. The graduate program in communication disorders has been improved corresponding to knowledge advancement in the field. In 2000, the academic degree of the program was changed to Master of Science in Communication Disorders (earlier it was Master of Arts in Communication Disorders). To deliver better service for people with communication disorders, these senior professionals raised the issue of professional licensing with the National Law Committee. In 2002, all professionals in this field were required to pass the national examination for a license[4]. In the meantime, an undergraduate program in communication disorders (Bachelor of Science in Communication Disorders)[5] was established in 2004 to raise the educational standards in communication disorders programs and improve service quality for people with communication disorders.

The program committee members also changed the curricular content of the graduate program to correspond to the courses in the undergraduate program. At the same time, there was a need to encourage people who earned an associate degree to continue by earning a Bachelor of Science in Communication Disorder degree. There were only 12 out of 40 people enrolled in this program. Also, the graduate program in communication disorders was revised according to the requirements of the Ministry of Education (Table 1).

Current educational curriculum

At present, there are 2 programs in communication science and disorders which are the Bachelor and Master of Science in Communication Disorders[6]. The bachelor degree program admits high school students by an entrance examination. The Bachelor of Science program is a 4-year program which requires a minimum of 131 credit hours for graduation. The curriculum consists of 40 credits in general education, 85 credits in an area of specialization, not less than 6 credit hours of elective courses, and 350 practice hours[3]. There are 2 majors, audiology and speech pathology. The courses in general education include social sciences, humanities, language, general science, and mathematics. Specialization courses include foundations of the profession, core courses, and courses in audiology and speech-language pathology. Each

major admitted 15 students. At present, there are 5 instructors in speech pathology and 4 instructors in audiology. For the Master of Science in Communication Disorders Program, all graduate students are admitted by an entrance examination. There are 2 majors, audiology and speech pathology, and each major admits about 4 to 6 students every other years. This is a 2-year program with a minimum of 39 credits which consist of 9, 18 and 12 credits in core courses, required courses, and thesis, respectively. The core courses include research methodology, pediatric audiology, and a seminar in communication disorders. Students need to take different required courses depending on their majors. Students in audiology are required to take the courses in auditory evoked potentials, vestibular disorders, advanced hearing devices, and an audiology clinic practicum. Students in speech-language pathology need to take courses in voice disorders, neurological speech-language disorders, cleft lip and palate speech, and speech clinic practicum. In addition, all students are required to complete a master's thesis in English (Table 2). At present, there are 3 instructors in speech pathology, 1 instructor in audiology, 1 instructor in oto-neurology, and 1 instructor in special education. During academic year 2013, the program invited 2 experienced visiting professors to teach graduate students in each major. Professor Leonard LaPointe, from Florida State University in the U.S.A., taught 45 hours in a course on neurological language and speech disorders, and Associate Professor Ann Eddins, from University of South Florida in the U.S.A., taught 45 hours in a course on the auditory of evoked potentials.

In terms of service competency, graduates with bachelor degrees and master degrees have different qualification and potential to serve people with communication disorders corresponding to the courses they study (Table 3). Those who earn a bachelor degree with a major in speech pathology are able to serve children with articulation disorders and delayed speech and language development including children with hearing impairments, mental retardation, autism, and learning disabilities. On the other hand, graduates who earn a master degree in speech pathology can also serve people with a cleft palate, voice disorders, stuttering, neurogenic speech and language disorders, and swallowing disorders.

Similarly, graduates who earn a bachelor degree in audiology are able to provide services in audiometry, immittance measurement, adult hearing aid fitting, newborn screening, and aural rehabilitation. Graduates who earn a master degree in audiology can also provide services in evoked potentials, hearing evaluation and hearing aid fitting for children, cochlear implant mapping and rehabilitation, and vestibular function test and rehabilitation.

Table 1 Development of Communication Disorders in Thailand.

Year	Development Details
1976	Master of Arts (Communication Disorders) (20 groups)
1979	Certificate in Medical Science (Communication disorders-Audiology) (14 groups)
1997	Thai Speech-language and Hearing Association (TSHA)
1999	Diploma in Medical Science (Communication disorders-Audiology)
2000	Master of Science (Communication disorders) (3 groups)
2002	Registration for professional license
2004	Bachelor of Science (Communication disorders)
2012	Revision of Master of Science (Communication disorders) (TQF)

Table 2 Current Educational Programs

Item	B.Sc. Program		M.Sc. Program	
Examination	Entrance		Entrance	
Years of study	4		2	
Credits	133		39	
Other requirements	350 practical hours		English thesis	
Number of students	Audio 15	SLP 15	Audio 4-6	SLP 4-6
Number of instructors	Audio 4	SLP 5	Audio 1	SLP 4

Table 3 Communication Disorders Service Competency

Professional Degree	Audiology	Speech-language Pathology
B.Sc. Program	Audiometry (adults)	Articulation defects
	Immittance measurement	Delayed speech &language
	Hearing aid fitting (adults)	Aural rehabilitation
	Newborn screening	
	Aural rehabilitation	
M.Sc. Program	Evoked potentials	Cleft palate
	Hearing test for children	Voice disorders
	Hearing aid fitting in children	Stuttering
	Cochlear implant	Neurogenic speech disorders
	Vestibular disorders	Swallowing disorders

Table 4 Number of Licensed Audiologist & and Speech-Language Pathologist*&

Professional	B.Sc.	M.Sc.	Total
Audiologists	64	54	118
Speech-language pathologists	68	66	134
Total	132	120	252

Note. * Update May, 2013

Communication disorders practitioners

At present (May 2013), there are 252 people with a professional license that include 68 and 66 people who earned a bachelor degree and master degree in speech pathology respectively, and 64 and 54 people who earned a bachelor degree and master degree in audiology respectively, (Table 4).

Based on the demand forecast by the Ministry of Public Health (Table 4), approximately 1000 professionals are needed in 2013 to provide services for Thai people[7]. The present number is far from the target requirement. Furthermore, in 2013, Thai Speech and Hearing Association reported that most of the professionals work in Bangkok. There are few audiologists and speech pathologists who work in the other parts of the country (Figure1). This causes excessive workloads for providing professional services to Thai people. Inaddition, there is less time to conduct research studies for professional advancement to lead in society. This constraint causes less recog-

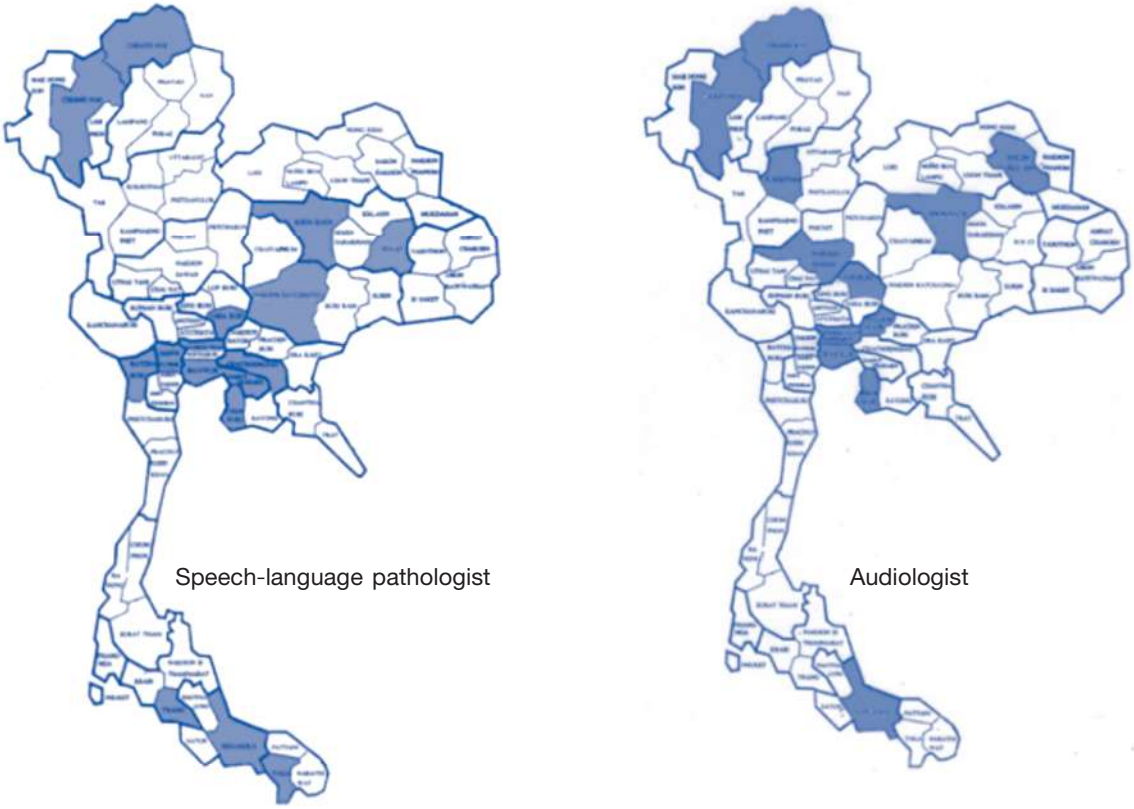

Figure 1. *Distribution of speech-language pathologists and audiologists in Thailand*

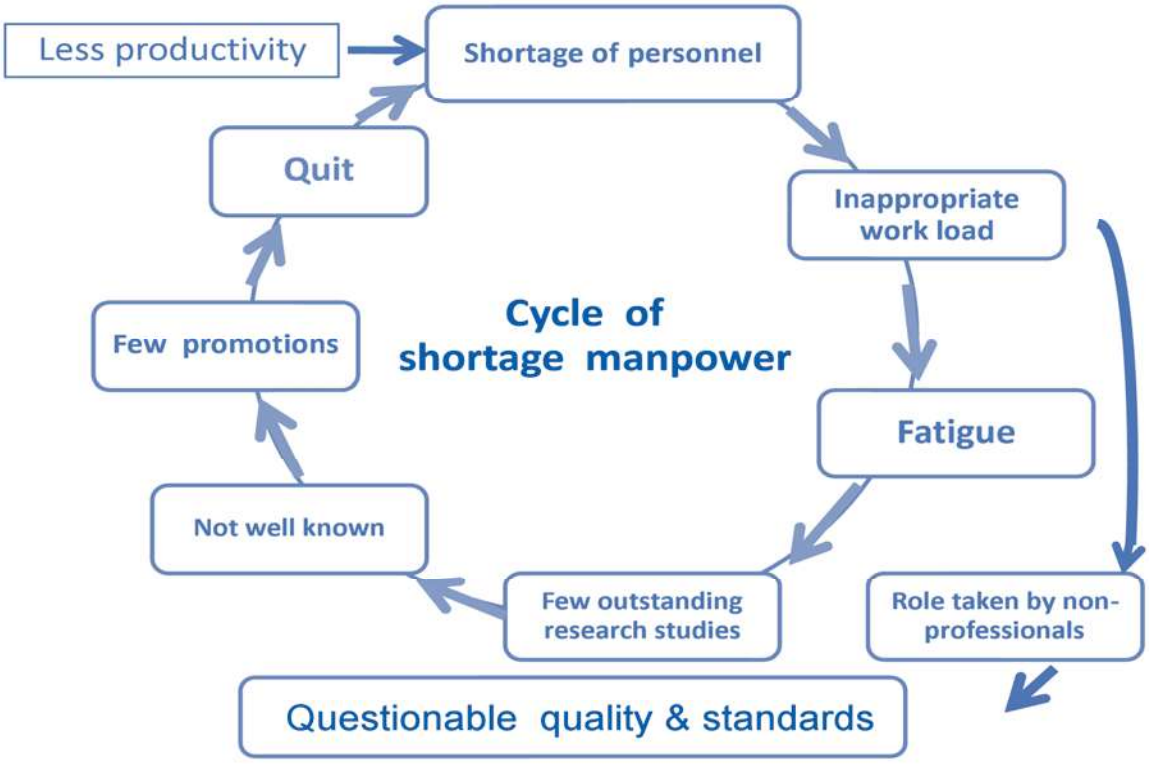

Figure 2. *Cycle of shortage manpower*

Table 5 Demand Forecast for Communication Disorders Professionals

Year	Population	Demand Forecast
2009	67,774,000	968
2010	68,559,000	979
2011	69,135,000	988
2012	69,617,000	995
2013	69,999,000	1,000
2014	70,311,000	1,004
2015	70,630,000	1,009
2016	70,902,000	1,013
2017	71,250,000	1,018
2018	71,679,000	1,024

Note. Calculations based on a population ratio of 1:70,000

nition of the people in this field and also causes burnout of some professionals. Therefore, the result is a cycle of lack of manpower (Figure 2) in the field and even less service for Thai people.

Discussion and suggestions

The development of communication disorders program in Thailand since 1974 has increased the number of professionals slowly , due to many obstacles. For example, Dardarananda reported that there were 23 audiologists and 37 speech-language pathologist graduated from the only program in communication disorders in Thailand since 19761. For other programs in communication disorders in Asia, the types of courses are different from one another by region. For example, Bangladesh and Hong Kong offer bachelor programs, whereas Vietnam offers a masters degree in speech-language pathology. On the other hand, both bachelor and master degree programs are offered in Korea, Malaysia, Philippines, Taiwan and Thailand. In the field of audiology, some countries in Asia, namely Taiwan, Korea, and Thailand, offer courses in bachelor and master degree programs. However, Hong Kong, Philippines and Singapore offer causes in master degree programs. Indonesia offers a diploma program while Vietnam does not offer formal courses in audiology[8]. At present, there is still only one institution in Thailand that provides educational program in communication disorders, audiology, and speech-language pathology. However, outcomes at the undergraduate level are limited and their competencies are restricted. While communication disorders education is dynamic in terms of technological change and the number of communication disorder patients, it is necessary to be concerned not only with an increase in number of professionals, but also with the standards and quality of higher educational training. According to the health policy in the strategic planning for health professionals for the next two decades (2007-2026)[9], it is necessary to promote the production at the expert level as at well as the technical level. At present, education in communication disorders has been established according to the standard sequence, beginning with undergraduate level and continuing to the graduate level[3]. Lack of qualified teachers is one of obstacles in increasing the number of professionals. The experiences with visiting professors and their projects seemed to help, but there still are financial and some language barriers. However, it is impossible to meet

the target requirement based on the demand forecasted by the Ministry of Public Health (Table 5), e.g. more than seven hundred additional professionals are needed in 2013. In fact, the shortages of health care professionals and an increasing need for their services are one of the global challenges. It is also true that there are not enough audiologists and health care professionals in other areas in the USA.[10] What we and others can probably do at this time is as follows

1. Increase health promotion and prevention in order to decrease the number of patients.

2. Establishment of admission process and capitalization in shortage area in order to distribute the professionals to county and create a referral networking.

3. Create an international network connection to exchange and share ideas about the educational and service systems.

4. Increase motivation for more positions in a government setting and in the promotion of professional advancement opportunities.

5. Promote the use telemedicine conferences and services in order to meet the growing needs of people with communication disorders. These activities will allow professionals to gain recognition as important members of the healthcare team.

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References

1. Dardarananda R. Speech-language pathologists and audiologists in Thailand: their education and training. Asia Pac J Speech Lang Hear 1996;1:127-31.
2. Thai Speech-Language and Hearing Association. Distribution of Professionals in Thailand. [serial online]. Available from: http://www.thaisha.or.th/content/member/search Accessed September 24, 2013.
3. Division of Health Professionals, Department of Health Service Support, Ministry of Public Health. Standards for Health Professionals in Communication Disorders. Bangkok: The Cabinet Secretariat Printing; 2009 (in Thai).
4. Division of Health Professionals, Department of Health Service Support, Ministry of Public Health. Medical Registration Act 2nd Version Year B.E. 2547. Ministry of Public Health. Bangkok: The Cabinet Secretariat Printing; 2005 (in Thai).
5. Bachelor of Science Programme in Communication Disorders. [serial online]. Available from: http://med.mahidol.ac.th/commdis/th/commdis/edth Accessed September 24, 2013.
6. Master of Science Programme in Communication Disorders. [serial online]. Available from: http://www.grad.mahidol.ac.th/grad/curriculum/view.php?lang=en&curid=2222M01G Accessed September 24, 2013
7. Bureau of policy and strategy, Ministry of Public Health, Forecast demand of health professionals in next two decades. Bangkok: The Cabinet Secretariat Printing; 1997 (in Thai).

8. Bowen C. Speech-language pathology in Asia [serial online].2013 Available from: http://www.speech-language therapy.com/index.php?option=com content&view=article&id=54:asia&catid=11:admin&Item=122 Accessed September 24, 2013.
9. Jindawatana A. Strategic plan for the decade of the health workforce B.E. 2550-2559. Ministry of Public Health. Bangkok. The Graphic Systems Company; 2008
10. Carlson D. Interview with Deborah Carlson: Special Report. ENT & Audiology News 2013;22:114-5.