

Thinking Globally About Audiology Education

By James W. Hall III

This article is the first of a two-part series on global education in audiology. A second article will review general strategies and specific steps for enhancing the quantity and quality of audiology education worldwide.

More than 90 percent of the world population has little or no access to hearing health care. In a rather long list of countries, many in Africa, no audiologists are available to identify, diagnose, and manage children and adults with hearing loss and related disorders. The creation of new educational programs in the many developing countries previously without these efforts, coupled with expansion of existing programs in countries with too few of them, is essential. According to Goulios and Patuzzi (2008), formal education of audiologists is lacking in at least one-third of all countries.

Perhaps the most successful long-term educational strategy isn't new. It begins with the identification of a handful of bright young people who are highly motivated to enter a health-care profession. The carefully selected individuals complete formal audiology education, usually at the doctoral level in a country such as the United States, United Kingdom, or Australia, often with funding from their home country. These highly qualified and daring souls then return to their home country to assume the role of audiology pioneers in establishing an educational and clinical infrastructure for their new profession. Along the way, the future leaders of audiology also need to acquire knowledge and skills in social entrepreneurship and their country's

individual politics to enhance the chance of success against possibly difficult odds. This approach has largely led to the establishment and development of the profession of audiology in countries as diverse and distant as India, South Africa, and, more recently, South Korea.

Audiology educational models and entry-level degrees vary considerably throughout the world (Goulios and Patuzzi, 2008). Let's take a whirlwind international audiology tour, beginning in the Americas and then traveling east. Only the United States requires a doctoral degree (doctor of audiology, AuD) as a minimal requirement for clinical practice. There are more than 75 AuD programs in the United States and one in Puerto Rico (the only Spanish-language program). Most clinical audiologists north of the border in Canada hold a master's degree. Most audiologists in Central and South America hold a bachelor's degree, although a post-graduate diploma in audiology is an option in Colombia. Although most countries in the region (Ecuador, Guatemala, Nicaragua, Paraguay, Peru, and Uruguay) have no formal educational programs for audiologists, the profession is rapidly growing in some countries, such as Brazil and Colombia. Brazil deserves special mention for an increased number of PhD-level audiologists and a corresponding increase in research productivity.

Audiology education and clinical credentialing are undergoing change in the United Kingdom with the implementation of a plan titled "Modernising Scientific Careers" (www.baaudiology.org). Audiologists now practicing, teaching, or conducting research in the United Kingdom hold various academic credentials, such as a bachelor's of science (BSc Audiology), master's, or PhD degree. According to Goulios and Patuzzi (2008), roughly 25 percent of the audiologists in the world have a medical degree with a non-surgical specialization in audiology. With the medical model, technicians or other non-doctoral professionals, rather than audiologists, perform many of the day-to-day clinical tasks (hearing assessment, ABR measurement, and hearing aid fittings). The medical model for audiology specialization is followed in multiple European countries, as explained in documents available from the European Federation of Audiology Societies (www.efas.ws). Audiology, as a profession independent from medicine, exists in Scandinavian countries. In other European countries and in Russia, individuals with various formal scientific academic backgrounds (e.g., physics) specializing in audiology provide clinical services. Non-audiologists, such as "hearing aid acousticians," also share in the provision of some services within Europe.

Audiology education is currently and rapidly expanding in the Middle East region of the world. Iran has an active and growing profession of audiology, with opportunities for clinical and research education at the undergraduate and graduate level. A five-year bachelor's degree audiology program is in place at Amman University in Jordan. Additional audiology programs are about to open at Kuwait University and American University in Beirut, Lebanon. Saudi Arabia offers bachelor's degree audiology programs at four institutions. Additionally, a sizeable number of Saudi Arabian audiologists have pursued, or are currently enrolled in, doctor of audiology or PhD programs in the United States and elsewhere. The education of audiologists, and the autonomous profession of audiology, is well established in other countries in the region such as Turkey and Israel. In contrast, Egypt adheres to the medical model for audiology education.

Five universities in South Africa offer formal education for audiologists, with some schools exclusively focused on audiology and others transitioning from a combined audiology-speech pathology format. Swanepoel (2006) explains that "this move toward a clear distinction between the professions has come about as a result of international trends and the increasing demands of providing adequate standards of training in two rapidly expanding professions." Students in South Africa may elect to pursue master's or PhD degrees in audiology. Although audiology education lags behind in other sub-Saharan countries, efforts are underway to create a bachelor's degree program in Kenya and a proposal for a master's degree is being prepared for a university in Nigeria.

More than a dozen educational institutions in India offer a bachelor

of science degree (BSc) in hearing and speech pathology, and at least four of them also provide education at the master's degree level. However, the number of formally educated audiologists is woefully inadequate to serve the needs of individuals with hearing impairment in the large and rapidly growing population of more than 1.2 billion people. A substantial number of audiologists from India have immigrated to the United States, where they have earned PhD degrees, pursued academic or clinical careers, and contributed importantly to the profession in their adopted country.

Audiology as a profession is strong in Australia and New Zealand. Universities scattered across each country produce numerous graduates at the master's degree level. The countries also offer a handful of well-respected PhD programs.

Asian countries or entities with long-standing academic programs in audiology include Hong Kong, Malaysia, Singapore, South Korea, and Thailand. There is increasing interest within the region in the development of graduate-level educational options. For example, Hallym University in South Korea is moving quickly toward the first doctor of audiology degree outside the United States. China and Japan essentially follow the medical model for the provision of audiology services, whereas other countries, such as Cambodia and Vietnam, have no opportunities for the education of audiologists.

The systematic development of an audiology educational presence in as many countries as possible is the only

effective strategy for meeting the high demand for quality hearing-care services worldwide. A future ACAE Corner article will address emerging strategies and efforts to expand the availability and enhance the quality of global audiology education. 

James W. Hall III, PhD, has 40 years of experience in audiology as a clinician, administrator, teacher, and researcher. He is a founder of the Academy, and has served on the Academy Board, the ABA Board, and is now the vice chair of the ACAE Board.

References

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