

Promoting Pediatric Audiology in Vietnam and Ecuador

By Paige Stringer, MA

The World Health Organization estimated that 32 million children globally have disabling hearing loss (greater than 30 db in the better ear; WHO, 2017). About 80 percent live in low-and middle-income countries. Disabling hearing loss, left untreated, causes delays in a child's development that can significantly impair language acquisition, cognitive faculties, and reduce his or her ability to complete even primary-level education (*Am Ann Deaf.* 1999;144[2]:68).

Congenital hearing loss occurs in approximately six per 1,000 births in low-and middle-income countries (*Arch Dis Child.* 2012; 97[7]:654). Many studies show that excellent developmental outcomes are possible in children with congenital hearing loss, but these outcomes are dependent on three essential elements: early identification, appropriate hearing technology, and early intervention services (Mueller, 2000, et al). When all three elements are in the first years of a child's life, children with hearing loss can develop on par with their peers with normal hearing. They can attend regular schools in their neighborhoods, and can aspire to broad education and employment opportunities. They can integrate fully into their communities.

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Unfortunately, in many parts of the world, these three key elements are limited or may not exist at all.

The Global Foundation For Children With Hearing Loss is helping to address this issue. Established in 2009, the



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organization aims to make a direct and lasting impact on infants and children with hearing loss living in developing countries by providing them with access to the early identification, hearing technology, and trained professionals that they need to reach their full potential. The Global Foundation has a team of over 70 speech and hearing professionals from five countries who routinely volunteer their time and expertise to the organization's mission and projects. The Global Foundation has worked in Vietnam since 2010, and recently expanded its work to Ecuador and Mongolia.

SUCCESS IN VIETNAM

The Global Foundation works with multiple partners across hearing health care and education in Vietnam to help raise awareness of pediatric hearing loss and address some of the expertise areas needed to support this population. The organization provides training in pediatric audiology, auditory-verbal practice, speech pathology, and early intervention to Vietnamese medical professionals, audiology technicians, teachers, therapists, and families who work with or have children with hearing loss. Graduates of the training program are then included in training their peers to make the benefits exponential and sustainable.

The Global Foundation has brought together Vietnamese professionals from different disciplines across hearing health care, habilitation, and early education across the country, forging lasting interdisciplinary partnerships. Over the past

AUDIOLOGY WITHOUT BORDERS

seven years, a more robust cross-functional support network than the one when the program first started has been developed. This professional network has notably improved the efficiency and increased the expertise of the Vietnamese participants, who consequently took the initiative to enhance services that were previously lacking in their country.

The Global Foundation also helps the Vietnamese build audiology services. For example, it has contributed resources to build centers on pediatric audiology, early education, and auditory-verbal therapy for children with hearing loss living in three regions outside Hanoi and Ho Chi Minh City. These centers are staffed by Vietnamese professionals previously trained by the Global Foundation.

The organization also supplies hearing aids to young children in need, and delivers them as part of the audiology clinical practicum. The hearing aids are fit by Vietnamese professionals with the support of the Global Foundation's team. The children are then given ongoing services by the Vietnamese medical doctors, audiology technicians, teachers, and therapists trained by the Global Foundation. This approach builds trust between the families and the Vietnamese professionals, and ensures the availability of the locally-based support for the children.

Over 1,000 children with hearing loss have directly benefited from the Global Foundation's efforts in Vietnam. The Vietnamese government recently sought to collaborate with the Global Foundation to make some aspects of the training program part of the national standard for professionals working with children who are deaf or hard of hearing. The success in Vietnam is an example of how a bottom-up approach can contribute to efforts to influence positive change on a national level to address the needs of young children with hearing loss and their families. In contrast, the Global Foundation's newly established program in Ecuador works within the framework of a top-down governmental model to achieve similar goals.

EXPANSION TO ECUADOR

An estimated 10,000 children under age 5 in Ecuador have permanent congenital hearing loss, the key years of child development (UNICEF). The Ministry of Public Health has a national pediatric hearing health program that provides some hearing screening, pediatric audiology, and habilitation therapy support in its medical facilities. Cochlear implants and hearing aids are supplied to patients of low income. However, the ministry recognizes the need for increased community awareness for hearing loss, systematic improvements to their diagnosis and habilitation services, and additional training for its medical and therapy professionals working with infants and children with hearing loss. The ministry and the Global Foundation have entered a partnership to address these needs.

The Global Foundation's Ecuador program includes professional and family training, awareness campaigns, and technical assistance. The organization also supports the Ministry's efforts to improve national processes and standards of care. All planning, communication, and execution of project work is coordinated by the Global Foundation through the ministry of Public Health offices in Quito. To show support for this col-

laboration, the ministry committed funds to support additional audiology equipment and therapy resources in some facilities involved with the Global Foundation program.

The Global Foundation launched in Ecuador with a four-week professional development initiative in January 2017. The training is cumulative so that the same participants return over time to build on their skills and expertise. The ministry effectively mobilized about 60 medical and therapy professionals working in the government health system of public hospitals and clinics across 18 provinces to attend trainings in northern and southern Ecuador. The program was led by the Global Foundation team who covered topics on newborn hearing screening, pediatric audiology, and auditory-verbal therapy. In addition, 40 children under 6 years of age and their parents participated in the therapy sessions and audiology clinics. About 80 families attended the weekly Family Nights to learn about supporting language development in children with hearing loss.

The participants showed motivation to learn and sincere concern for their patients' well-being. At the end of the training session, they were enthusiastic to share how they would incorporate new techniques and procedures into their daily practice and seek collaboration with other members of the pediatric team. The Global Foundation identified opportunity areas for additional professional development, and gave well-received recommendations to help the participants achieve the best outcomes for the families and children they serve.

Looking ahead, the Global Foundation is determined to ensure continued progress with its partners in Vietnam, Ecuador, and Mongolia in improving the quality of care for infants and young children with hearing loss. 