Audiology and Hearing Health Professionals in Developing Countries

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Overview:

According to the World Health Organization (WHO), approximately 250 million people worldwide have a disabling hearing loss (i.e., moderate or worse hearing loss in the better ear). Of these 250 million people, two-thirds live in developing countries. In developing countries, hearing loss is often left undetected in all age ranges due to the lack of hearing screening availability. Infants with hearing loss are typically left undiagnosed until a mean age of 22 months. It is estimated that 6 per 1000 infants, in developing countries, have hearing loss; however, the incidence may be even higher due to the large number of births occurring outside of hospital settings.

The goal of this project was to make available current information regarding audiology and hearing healthcare professionals in developing countries. In order to reach out to as many people worldwide as possible, information was posted on wikipedia.com due to its ease of accessibility, optional translation to a number of languages, and ability for others to edit and add more to the data in the future.

This poster is an example of the information made available online at: *https://en.wikipedia.org/wiki/Audiology_and_hearing_health_professionals_in_developed_and_developing_countries.*

Prevention:

According to the World Health Organization, "half of all cases of hearing loss can be prevented through primary prevention. Some simple strategies for prevention include:

- Immunizing children against childhood diseases, including measles, meningitis, rubella and mumps;
- Immunizing adolescent girls and women of reproductive age against rubella before pregnancy;
- Screening for and treating syphilis and other infections in pregnant women;
- Improving antenatal and perinatal care, including promotion of safe childbirth;
- Avoiding the use of ototoxic drugs, unless prescribed and monitored by a qualified physician;
- Referring babies with high risk factors (such as those with a family history of deafness, those born with low birth weight, birth asphyxia, jaundice or meningitis) for early assessment of hearing, prompt diagnosis and appropriate management, as required; and
- Reducing exposure (both occupational and recreational) to loud noises by creating awareness, using personal protective devices, and developing and implementing suitable legislation.

Hearing loss due to otitis media can be prevented by healthy ear and hearing care practices. It can be suitably dealt with through early detection, followed by appropriate medical or surgical interventions."

Example of Brazil, India, and Nigeria's Websites:

Audiology and hearing health professionals in Brazil

From Wikipedia, the free encyclopedia

Despite having the largest economy in South America or Central America, Brazil is still considered a developing country due to its low gross domestic product, or GDP, per capita, low living standards, high infant mortality rate and other factors. "With regard to hearing health, the Brazilian government established the national policy for giving attention to hearing health in 2004, in which the Ministry of Health, considering the social magnitude of hearing impairment in the Brazilian population and its consequences, presented the proposal to structure a network of services set up by regions and in hierarchy that aims to be implemented in all federative units of Brazil, with integrated actions to promote ear health, hearing impairment prevention, treatment and rehabilitation organized and managed by the National Health System, Sistema U´nico de Saude (SUS), in Portuguese," writes Bevilacqua et al. (2010) [1]


Clay County Hospital at Brazil

In Brazil, audiology grew out of the field of ear nose and throat (ENT) medical field. According to Bevilacqua et al. (2008),[2] "audiologists in Brazil work at private institutions, including private medical practices and dedicated speech and hearing clinics. They are also employed in a wide array of public institutions, including community clinics, elementary schools, colleges, and universities. In both the private sector and health clinics, audiologists perform diagnostic evaluations of auditory and vestibular disorders, select and fit hearing aids, and provide aural rehabilitation. At the public level, they assist with workers' health programs, dispense hearing aids, and aural rehabilitation."

Audiology and hearing health professionals in India

From Wikipedia, the free encyclopedia

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Hearing healthcare professional qualifications [edit]

According to Manchaiah et al. (2010),[1] "Audiological services in India are available in both the public and private sectors. Both sectors offer services such as hearing assessment, selection and fitting of hearing aids, and aural rehabilitation. Some of the centres have successful cochlear implantation programmes, however, the services in some of the specialised audiology areas like vestibular assessment and rehabilitation, assessment and management of auditory processing disorders, and tinnitus rehabilitation are limited. Services provided in the public sector are funded by the Department of Health or the State Governments which usually offer free services mainly at district level hospitals, educational institutes and district health rehabilitation centres. There is also provision for free body level hearing aids and solar driven rechargeable batteries through the scheme 'Assistance to Disabled Persons for Purchase (ADIP)' funded by the Ministry of Social Justice and Empowerment. The paediatric population has a provision of subsidised BTE hearing aids under the National Program for Prevention and Control of Deafness (NPPCD) scheme. Private audiology centres in India are generally equipped with all the necessary diagnostic instruments. Their main focus of work is in hearing aid dispensing. However, these clinics or institutes are not easily accessible to people living in rural settings as most of them are based in urban locations."

Audiology and hearing health professionals in Nigeria

From Wikipedia, the free encyclopedia

Hearing healthcare professional qualifications [edit]

Nigeria is a low income developing country located in Africa. Currently, there is a lack of information regarding audiological and hearing healthcare in Nigeria.

Current statistics [edit]

Country	GNI $Int PPP	Pop. (000s)	Auds	Auds/Mil. Pop.	ENTs	ENTs/Mil. Pop.	Aud Phys	Aud Tech	H/A Tech	SLT	TOD
Nigeria	1050	124009	N/A	N/A	60	0	1	50	15	N/A	150

GNI $Int PPP: Per Capita Gross National Income in international dollars; Pop. (000s): Population (000s); Auds: Total Audiologists; Auds/Mil. Pop: Audiologists per million people; ENTs: Total ENT surgeons; ENTs/Mil. Pop: ENT surgeons per million people; Aud Phys: Audiological Physicians; Aud Techs: Audiological Technicians; SLT: Speech-Language Therapists; TOD: Teachers of the Deaf[1]

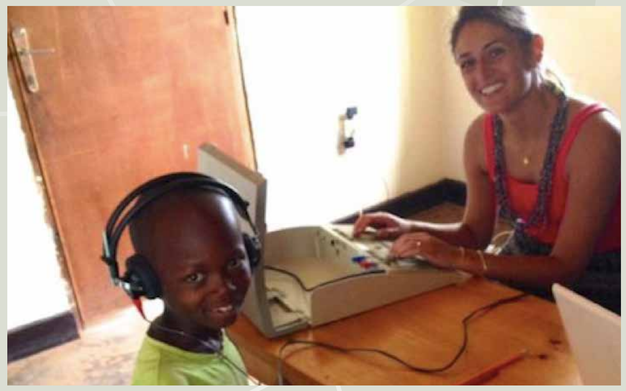
Screening for Hearing Loss:

Limited personnel and financial resources, according to McPherson and Olusanya (2008), contribute to the lack of hearing screenings in developing countries. Hearing screenings are considered a high priority component of a hearing healthcare program due to the fact that early detection of hearing loss in infants can allow for prompt assessment, detection, and intervention of congenital and early onset hearing loss. Hearing screenings may also be able to detect transient hearing losses that may dissipate with appropriate medical intervention.


CPA in Yinchuan, China as part of the University of Colorado, Boulder humanitarian outreach. Photo courtesy of Alison Meagher.

Detecting Hearing Loss:

In developing countries, the predominant method of detecting children with hearing loss is through parental suspicion due to the child's lack of response to sound and occurs at a mean age of 22 months (Gopal et al., 2001; Mukari et al, 1999; Olusanya et al., 2005). Early detection of hearing loss requires a reliable, valid, easy to apply, and safe hearing screening battery in order to be used in developing countries. Two objective screening tests available for use in infants are otoacoustic emissions (OAEs) and auditory brainstem response (ABR).


Standard audiometry in Rwanda, Africa. Photo courtesy of Kellie Hirce.

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