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Infant receiving treatment for an ear condition in hospital. ZIMBABWE

PHOTO: DIEGO J SANTANA-HERNÁNDEZ

Ear and hearing care needs everyone's support!

Diego J Santana-Hernández
ENT Surgeon, CBM's Senior Ear and Hearing Care CBID Advisor, Santa Cruz de Tenerife, Spain

Hearing loss is an invisible public health issue that affects 1.5 billion people, of whom 430 million have disabling hearing loss and 34 million are children. According to the World Health Organization (WHO), 'Unaddressed, hearing loss imposes a global cost of more than USD 980 billion annually, and potentially risks the global goal of United Nations Member States to end poverty". In addition, acute middle ear infections affect over 700 million people, mostly children under five, and they may lead to hearing loss and life-threatening complications.[1]

Support for ear and hearing care is insufficient worldwide

WHO states that 50% of causes leading to hearing loss could have been prevented. In children, this figure is higher: nearly 60% of causes of hearing loss can be prevented through public health measures.[1] Cost-effective interventions exist to prevent hearing loss, mitigate its effects, and treat ear diseases, yet support for ear and hearing care (EHC) is insufficient worldwide:

- There aren't enough EHC trained personnel. 80% of people with hearing loss live in low- and middle-income countries (LMICs) and WHO states that 78% of low-income countries have less than one ENT specialist per million population and 93% have less than one audiologist. The figures are equally bleak for speech therapists and teachers of the deaf.[1]
- There are not enough hearing assistive devices either: worldwide, only 17% of the people who could benefit from a hearing aid actually have access to one.[1]
- People living with hearing loss find it difficult to access the EHC services that would improve their situation and prospects. Girls with disabilities are even less likely than boys with disabilities to receive access to assistive devices,[2] such as hearing aids.
- Unaddressed hearing loss is the third largest cause worldwide of years lived with disability.[1] According to WHO's *Global report on health equity for persons with disabilities*, 'many persons with disabilities face the risk of dying much earlier, even up to 20 years earlier, than persons without disabilities' due to systemic and persistent health inequities.[3] Women and girls with disabilities are particularly vulnerable.[2]

These facts are the reason why this issue is entitled 'Ear and hearing care needs everyone's support!'. The world needs more funding for EHC services, more trained human resources, more hearing assistive devices and more rehabilitation programmes. However, there is still more to be said.

Continues overleaf ➤

ICED International Centre for Evidence in Disability

IN THIS ISSUE

cbm christian blind mission

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Support for EHC matters, now more than ever

Not only do hearing loss and ear disease affect very large numbers of people worldwide, but they can also affect people throughout their life course and these numbers are set to increase worldwide.

From babies to older adults

For babies, congenital hearing loss (present at birth) is one of the most prevalent chronic health conditions, with up to 3 of every 1,000 babies being born with hearing loss.[4] Hearing loss in babies has been called a 'neurodevelopmental emergency'.[5] During the postnatal stage, low birth weight, jaundice and lack of adequate oxygenation experienced at the time of birth can all lead to hearing loss. A study has shown that 37% of children with even a minimal hearing loss (mild or only in one ear) failed a grade by third grade.[6] Children with disabilities, including those with a hearing disability (defined as moderate or worse hearing loss), may drop out from, or never attend, school.[2]

Adults with hearing loss have 1.58 times higher odds of low income and 1.98 higher odds of being unemployed or underemployed, compared to normal-hearing individuals.[7] Worldwide, the prevalence rate of hearing disability in the general population increases exponentially with age, and more than 42% of people with any level of hearing loss are over the age of sixty.[1]

In children, as in adults, early identification and prompt intervention and rehabilitation lead to significantly better life prospects and wellbeing outcomes. Adequate EHC services benefit not just individuals and their families, but local communities and society as a whole.

Numbers are increasing worldwide

Not only do hearing loss and ear disease have an impact throughout the life course, but the numbers of people living with ear and/or hearing conditions are also set to increase worldwide. It is estimated that by 2050, 1 in 4 people worldwide will experience hearing loss.[1] Age-related hearing loss is expected to increase with the current demographic shift, occupational noise remains a problem in all regions of the world, and the universal use of personal listening devices makes noise an everyday risk. It is estimated that 50% of people between 12 and 35 years of age listen to unsafe levels of sound through personal audio devices.[8]

Call to action

The *World Report on Hearing* (2021)[1] delineates a global **call to action** to prevent the further exponential rise of hearing loss around the world. This is summarised in the **HEARING** acronym, which compiles seven essential public health interventions: **H**earing screening and intervention, **E**ar disease prevention and management, **A**ccess to technologies, **R**ehabilitation services, **I**mproved communication, **N**oise reduction, **G**reater community engagement.

The *Community Ear & Hearing Health* journal's editorial committee adheres to WHO's call to action and wishes to contribute to finding the most appropriate solutions for each setting. Firstly, by **raising awareness** through sharing information and knowledge among our readers across the world. Secondly, by providing **advocacy tips** which can be used when engaging with governmental agencies, policymakers and key local stakeholders to request their support. And thirdly, by **increasing audibility** through this journal's platform, for persons and groups who are already working towards improving EHC in low- and middle- income countries, so that they are heard Let's make the right kind of noise![9]

WISE WORDS FROM PAST EDITORIALS

"1 of every 3 individuals above 65 has a hearing loss, yet in LMICs fewer than 3% of people receive the hearing devices they require. Up to 330 million people across the world are affected by chronic otitis media manifesting as a discharging ear. Ignorance is a key contributor to the current situation, where a high prevalence is compounded by poor availability of services and of human as well as financial resources for ear and hearing health."

SHELLY CHADHA, WHO TECHNICAL OFFICER FOR HEARING IMPAIRMENT, CEHH ISSUE 13 (2013)

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Correspondence
Please send all enquiries to: Joanna Jeremy (for contact details, see left).

There is no universal health without access for all to ear and hearing care

Diego J Santana-Hernández ENT Surgeon, CBM's Senior Ear and Hearing Care CBID Advisor, Santa Cruz de Tenerife, Spain.

In 2021, more than 40 years after the World Health Organization defined Primary Health Care (PHC),[1] its *Global report on health equity for persons with disabilities*[2] made clear recommendations for Member States and other global stakeholders on how to address the huge inequalities experienced by persons with disabilities of all ages. There are 1.3 billion people with disabilities worldwide (16% of the global population), and they are still often left behind.

If we want to achieve universal health coverage (Sustainable Development Goal target 3.8), we need to recognise the inequities persons with disabilities of all ages face in enjoying their right to health, and take urgent action to address these.

It is therefore mandatory that Ear and Hearing Care (EHC) is also included within PHC, so that Universal Health Coverage (UHC) can be achieved in a comprehensive manner. Without a reliable and effective PHC which includes Primary EHC, persons with ear conditions or hearing loss will continue to have limited or inefficient services at PHC level, and also delayed diagnosis and intervention for ear and hearing health care. Universal health care is a long-term goal, more so in low-resourced settings, which can only be achieved with the help of all health providers (local, national, international), community leaders, persons with disabilities, civil society and self-help groups.

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The need for healthcare support for hard-of-hearing people

Avi Blau President, International Federation of Hard Of Hearing People (IFHOH). Website: **www.ifhoh.org**

One of the main missions of the International Federation of Hard of Hearing People (IFHOH) is to emphasise the need for healthcare support for hard-of-hearing (HOH) people. The use of hearing aids, cochlear implants (CI), assistive listening devices, and captions, is crucial for addressing their unique challenges. Hearing aids amplify sound, enabling better communication and social interaction. CIs provide access to sound for those with severe hearing loss or deafness. Assistive listening devices, such as FM, infra-red hearing loops, induction loops, and the new Bluetooth systems, further enhance communication in various settings.

Unfortunately, the availability and accessibility of these technologies remain insufficient for many. Limited financial resources, insurance coverage, and healthcare infrastructure gaps create barriers to access. We must work together to advocate for equal access and reduce these barriers.

Prevention is also essential. Education and awareness programmes can promote early intervention and regular hearing screenings. By empowering individuals to take proactive measures, we can minimise the impact of hearing loss and improve outcomes for the HOH community.

In summary, comprehensive healthcare services, including access to hearing aids, CIs, assistive listening devices, and captions, are vital for HOH individuals. Prioritising their availability, affordability, and accessibility will help them lead fulfilling lives and participate fully in society.

FILIPINO SIGN LANGUAGE ACCESS TEAM FOR COVID-19

Sign language interpreter working remotely during the Covid-19 pandemic.
PHILIPPINES

The right of deaf persons to access healthcare

Joseph J Murray, Delphine le Maire and Kasper Bergmann
World Federation of the Deaf

Deaf people, especially in the Global South, face significant barriers in their access to ear and hearing care, as such care is often inaccessible in their national sign languages.[1] The vision of our organisation, the World Federation of the Deaf,[2] representing and promoting approximately 70 million deaf people's human rights, is 'a world where deaf people everywhere can sign anywhere'. Access to healthcare for deaf people must include cultural and linguistic resources, with national sign languages as a central resource as outlined in the United Nations Convention on the Rights of Persons with Disabilities.[3,4]

Healthcare providers should make a plan for service delivery in national sign languages. This could be via professional qualified sign language interpreters, or direct access via signing fluent professionals and deaf professionals.[5] At a minimum, deaf sensitivity awareness and training on deaf healthcare needs should be a standard part of training programmes.[6,7] Public awareness campaigns and information on ear and hearing care must be made accessible for deaf people in their national sign languages. These actions must be undertaken in close consultation and collaboration with national associations of deaf people, who are the experts on accessibility measures.[8] These actions lead to higher quality health outcomes.

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Benefits of ear and hearing health care

Valerie E Newton
Professor Emerita in Audiological Medicine, University of Manchester, United Kingdom

Although they are underdeveloped and underfunded in many countries, ear and hearing care (EHC) services should be part of all health service provision. The detection and management of ear disease and hearing loss is beneficial for the individual, the family and for the community as a whole.

DIEGO J SANTANA-HERNÁNDEZ

Learning to make a dry mop for primary ear and hearing care. INDIA

Benefits for children

Language development and communication

Early detection of a hearing impairment is possible and, in many countries, congenital hearing loss can now be detected soon after birth. When a hearing loss is detected in a child and assisted by hearing aids or cochlear implants with/or without learning to sign, this child's acquisition of communication skills can improve significantly (see Table 1). Children whose very severe hearing loss has been detected and habilitated early have radically improved outcomes compared to those whose hearing loss was detected late[1].

Hearing loss, whether affecting one or both ears, can develop at any time in childhood and hearing care facilities are important in detecting and measuring this so that help can be provided. The hearing loss may be temporary, as in the case of some middle ear conditions, but even this can result in problems for the child if undetected and not treated.

Psychological and social wellbeing

Children with a hearing impairment may be left out of play activities with other children. The availability of EHC services can help avoid emotional problems arising from feelings of isolation and reduce behavioural problems arising from frustration due to limited communication skills. The safety of hearing-impaired children also improves: they are more likely to hear approaching vehicles when standing by the roadside, as well as warnings for other types of accidents.

Educational achievements

With the support of EHC services, children with hearing loss will be better able to follow lessons at school and associate freely with their peers. Educators will see a fall in the number of hearing-impaired children with severe/profound hearing losses dropping out and class teachers will have more job satisfaction as they see the children improving their skills and achieving their potential. The children's experience in school is further optimised when hearing care services link with teachers specially trained to help them.

Children with mild or moderate hearing loss due to acquired conditions such as middle ear infections or 'glue ear' can have problems in a noisy school environment. Hearing test facilities could detect this problem in time to avoid it affecting their education and enable the child to be given a more favourable class position and referred for treatment.

Relationship with parents

The benefits of EHC services to children with a hearing impairment will be reflected in the health and wellbeing of their parents. Parents will have an answer as to why their child is different from other children of the same age with respect to their development. They may subsequently be able to find out the cause of the hearing loss and the chance of another child born to them having similar difficulties. Parents' anxieties can be alleviated by their child's progress in developing communication, their progress at school and ability to mix happily with other children.

Benefits for adults

Mental health and social wellbeing

Adults may have had a severe hearing impairment from birth or have an acquired loss of hearing. Hearing-impaired individuals denied the use of communication aids are often stigmatised and thought to be less intelligent than they actually are. This results in a loss to society of their many skills and depression and isolation of the individuals concerned.

Hearing care services with detection and measurement of the hearing loss and appropriate communication aids can prevent this loss to the community and also alleviate or prevent the emotional and social difficulties hearing-impaired and deafened individuals can experience (see Table 1). With good communication aids, hearing-impaired persons can feel more confident to mix socially. Their feeling of isolation will lessen, resulting in better mental health and improved relationships.

Hearing loss is not infrequently associated with tinnitus (noises in the ears) and vertigo (a sensation of the surroundings spinning round). These too can be very disturbing and require treatment.

WISE WORDS FROM PAST EDITORIALS

"The production of all hearing aids today only fulfils 10% of global need, and in developing countries this figure is less than 3%. [...] For adults with hearing loss, a well-functioning hearing aid may mean the difference between paid work and unemployment. For children with hearing loss, a hearing aid may be the difference between academic success and school failure. Above all, hearing aids enable both adults and children to communicate better."

BRADLEY MCPHERSON, PROFESSOR OF AUDIOLOGY, UNIVERSITY OF HONG KONG, CEHH ISSUE 19 (2018)

Economic independence

Hearing-impaired people can make a significant contribution to the economy of a country but are less likely to obtain employment in the first place compared to those with normal hearing[2]. This is less likely where potential employers are educated to understand how best to help employees with a hearing loss achieve their best performance at work. Hearing care services for adults can assist in providing this information to employers. These services are also important in enabling them to successfully enter the workforce and be able to continue to work should their hearing loss worsen. Employees' opportunities are improved by the use of communication aids, availability of a trained interpreter where needed and adjustments to the environment in the workplace.

The benefits of receiving hearing aids can be seen in a reduction of accidents in situations when warnings cannot be heard, for example in factories using heavy equipment, or simply when negotiating street traffic.

The presence of hearing testing in the workplace or nearby hearing health clinics can be important in industries using noisy equipment or toxic fluids. Hearing loss may be caused in these conditions and early detection of this impairment offers the potential of the worker avoiding deterioration in hearing levels by being moved to work in a quieter situation.

Benefits to other health services

Many syndromes, and other conditions such as chronic renal disease, cardiovascular disease and infectious diseases are associated with a hearing loss; the provision of communication aids when needed can improve the life experience of these patients. People with conditions such as severe visual impairment or blindness are better enabled to function by having their hearing loss detected and rehabilitated.

Medication which is ototoxic may be used in the course of treatment for some conditions, such as cancer, and can be used in neonatal care. Early signs of inner ear damage, such as hearing or vestibular dysfunction may not be noticed by patients, carers or professionals if the patient's illness is severe or if the loss of inner ear function is gradual. Monitoring hearing levels, especially in the high frequencies, can be an early indicator of toxic effects.[3] This can be particularly helpful where laboratory services are limited and it is not possible to monitor the drug's serum levels. Any slight drop in hearing levels can alert the physician and prevent further deterioration.

Hearing loss may also signal that a condition is developing, e.g. Alzheimers' disease, and contribute to its worsening through isolation. Early detection of this condition can enable treatment which may slow down the worsening of this condition.[4]

DESIRÉE BEGROW/CEDAF-UFBA

Use of sign language during a speech and language therapy session. BRAZIL

TABLE 1 BENEFITS OF EAR AND HEARING CARE SERVICES

Benefits of ear and hearing care services	
Children	Less affected by stigma Less isolated from other children More easily accepted by schools Better able to learn from the teacher and other children Less likely to drop out from school Safer from traffic and other accidents Treatment for hearing loss and ear disease *Parents: have explanation of child's communication and behaviour problems*
Adults	Reduction of stigma Less isolation More confidence in joining conversations Better social life and mental health More likely to get employment Less likely to have to give up working Less likely to experience work/road accidents
Community	Economic benefits for the country as more taxes raised Hard-of-hearing and deaf people can contribute to the workforce Less pressure on mental health services Improved care for other health conditions associated with hearing loss More inclusive society

Benefits for the community

The availability of EHC services also has a positive impact on the community as a whole.

As mentioned above, EHC both improves the care provided by other types of health services (e.g. cancer or dementia care) and reduces the pressure they may be under (e.g. mental health services). In addition, the community as a whole benefits from hearing-impaired people being more available for work: there are more skills available in the workplace, more taxes are raised, and it is less likely that affected families will experience poverty.

Finally, good EHC is also essential to the success of global initiatives that have already received a lot of attention and funding: the drive for universal health care, initiatives to end poverty (such as the UN's sustainable development goals), as well as campaigns for equal treatment and opportunities for persons living with disability.

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On the front line of ear and hearing care in low-income countries

Clement Chidziva
CEO, ENT Group Pvt Ltd; Director, AudioMax Clinic; Director, HEENT Institute, Harare, Zimbabwe

Lucia Nkomo
Programme Manager, WizEar Trust, Harare, Zimbabwe

Natasha Nguruye
Senior audiologist, WizEar Trust, Harare, Zimbabwe

Ear and hearing health care in Zimbabwe: an oasis in the desert

Tavonga's story

Tavonga (not his real name) is a nine-year-old boy, in a family of five, whose hearing loss was discovered at the age of three. Efforts to get audiometry services were fruitless due to inhibiting costs. Initially, Tavonga's parents decided to enrol him in school for social interaction and cognitive growth. The local school did not have any facilities or teachers suitable for him. He was just escorting other children to school without meaningfully benefitting, which led to his parents pulling him out of school. He had to endure watching his playmates leave for school and wait for them for over eight hours before they could return for playtime.

Tavonga's story is not only particular to him, but is a common phenomenon amongst children with hearing impairment in Zimbabwe. Research has shown that 9% of children in Zimbabwe have disabling hearing loss.[1] According to the World Health Organization, 5% of the world's population have hearing loss, and in children nearly 60% of hearing loss is due to avoidable causes.[2] Where services are available in Zimbabwe, they are costly for parents who live below the poverty datum line (the minimum level of income needed for the necessities of life). Through a social media group, Tavonga's parents heard about WizEar, a charity providing hearing health services to the underprivileged, and they decided to visit the organisation. Audiogram results showed that Tavonga's hearing loss was aidable and he was fitted with hearing aids. The smile on Tavonga's face spoke millions and his parents were overjoyed at the realisation that they could now effectively communicate with their son, something they could not do before the fitting of hearing aids.

Tavonga's parents were compelled to enrol him in school again. Fortunately, the school accepted him and he was reinstated in a lower grade, as he had missed so much of his school work when his parents pulled him out. Tavonga's teacher was also taken through basic audiometry so that she understood Tavonga's condition and how she could support him. At first, integration was a problem because the other students thought that the hearing aids were earphones and they often asked Tavonga if they could also wear his hearing aids. This allowed Tavonga and his teacher to talk to the other school children about hearing loss and assistive devices options.

The burden

Being an ENT surgeon in a country with a population of 15,178,979, where 260,839 have disabling hearing loss,[3] one is acutely aware that the ratio of ear and hearing health services in Zimbabwe does not commensurate with available statistics on service demand. There are several reasons for this:

WIZEAR

Otoscopy. ZIMBABWE

- **Competing healthcare needs.** Unfortunately, hearing health in Zimbabwe has not received adequate attention and funding due to other competing medical conditions like HIV, malaria, Covid and tuberculosis.
- **Lack of specialised personnel.** Zimbabwe currently has 19 qualified audiologists, 18 ENT specialists with 60% of them in private practice. All these specialist service providers are concentrated in the capital city, leaving the rural areas under-serviced.
- **The predominance of private practice.** 80% of audiologists are absorbed in private practices leaving government medical institutions with a service provision gap.[3] Similarly, ENT surgeons are also domiciled in the capital city and they run their own clinics. Only 2 ENT surgeons are based in Bulawayo, the second largest city in the country.
- **Lack of affordability.** On average, assistive devices like hearing aids cost between 600 and 2,800 USD, which is out of reach of most of the population, who live below the poverty datum line. In addition, there has been unprocedural disbursement of cheap over-the-counter hearing aids by pharmacies that do not provide further support and aftercare. Although over-the-counter hearing aids are cheaper, they are not durable, lack proper sound attenuation and are not programmable. Patients receive these without having to undergo any hearing testing and this is against the hearing aid fitting protocol.
- **Even greater lack of access in rural areas.** Some civil charities have started providing audiology services to vulnerable populations in Zimbabwe, but the demand for audiology services still remains high due to these services being centralised in urban areas. Based on the recent census that was conducted in 2022, Zimbabwe has a rural population of 68.9%, meaning only 31.1% is urban.

Such statistical mismatch between demand and available services not only overburdens government fiscus but also leaves ENT surgeons and audiologists

WISE WORDS FROM PAST EDITORIALS

"About half of all causes of hearing impairment are preventable or can be managed at the primary healthcare level by appropriately trained workers. Many of these conditions, however, remain undiagnosed despite their high prevalence, due to a lack of diagnostic skills, tools and knowledge of their presenting symptoms amongst health workers."

ISAAC MACHARIA, ENT SURGEON AND PROFESSOR OF ENT SURGERY, UNIVERSITY OF NAIROBI, KENYA, CEHH ISSUE 17 (2016)

overwhelmed. Economically, costs for ENT or audiology-related cases leave individuals making the hardest choice of choosing between general medical bills and food. In most cases, ear and hearing care (EHC) services become a luxury. Not everyone can afford to follow through the entire process including aftercare, due to financial incapacitation. Individuals who cannot afford this are referred to WizEar, which provides ear and hearing healthcare for vulnerable people in Zimbabwe.

The oasis

To address some of the issues highlighted above, WizEar facilitated the construction of an ENT clinic and paediatric theatre at one of the country's main referral hospitals. To consolidate the referral pathways, this initiative was supported by ongoing training of medical professionals in Primary Ear and Hearing Health. This has led to the equipping of 13 districts, 6 provincial and 4 central hospitals, with basic audiology equipment (i.e. diagnostic audiometers, otoscopes, headlamps, and some consumables).

Service delivery to both adults and children has seen over 28,000 consultations, 1,419 ENT-related surgeries, and 2,243 hearing aid fittings from ear camps, government, and WizEar clinics. Further support is also given in programming hearing aids, troubleshooting, and fixing hearing aids.

WizEar has also managed to initiate the BSc in Audiology and Speech Therapy so as to boost the number of service providers. Additionally, reverse fellowship has also been introduced for ENT doctors and registrars.

The desert

To cut down on the growing waiting lists for surgery and hearing aid fittings, particularly for children, WizEar's current output has to be doubled. So far government has offered operating theatres and nursing staff to assist, but the fit-rate and surgeries conducted remain lower than expected. We still face obstacles though:

WIZEAR

Ear syringing. ZIMBABWE

- The theatres need financial support for continuous functioning and this is in the form of supply of theatre consumables, qualified staff and staff incentives.
- Increasing stocks of hearing aids is vital to meet the ever-growing need for hearing aids, especially among school-going children.
- As more people become aware of available services, demand increases accordingly. The establishment of an ENT clinic and theatre in the Southern region to reduce the burden on the Northern region for surgical referrals is key.

The rain (what is needed?)

- Early detection is key as it leads to early intervention; ultimately this should culminate in newborn hearing screenings.
- Manufacture of low-cost hearing aids, to boost supply.
- Research to document results and inform policy. Essentially, we need research on the impact of hearing aids in students, the production of low-cost hearing aids in Zimbabwe, as well as barriers to access hearing assistive devices and technologies in Zimbabwe.

Resultantly smart partnerships (SDG 17) and multi-sectoral collaborations can provide the much-needed financial resource.

Further info

Those wishing to partner with WizEar can get in touch with us using the following contact details:

Email: **info@wizear.org** or **luciankomo@wizear.org**
Facebook: **@WizearZimbabwe**
Twitter: **@WizearTrust**
Instagram: **@WizearTrust**
Website: **www.wizear.org**

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Transforming ear and hearing care in Zambia: a journey of success

Racheal Hapunda
ENT Specialist, Lecturer, University of Zambia; ENT National Coordinator, Ministry of Health, Zambia

Alfred Mwamba
Audiologist, Executive Director of Starkey Hearing Foundation, Zambia

In the heart of southern Africa lies Zambia, a vibrant nation of 20 million people, predominantly youthful and full of promise. Recent surveys have shed light on a pressing concern – the prevalence of disabling hearing loss is 11.7%, a challenge we have wholeheartedly embraced.

Zambia's first ever national plan

Whilst our journey spans many years of an ongoing march to expand access to ear and hearing care, 2017 marked a significant turn as we launched the nation's first ever National Ear Nose and Throat (ENT) Strategic Health Plan 2017 – 2021. The plan included a comprehensive strategy anchored on prevention of hearing loss as a pivotal priority. The national plan also included the establishment of a position within the government for a national coordinator for ear and hearing care (EHC) services, which was a significant show of commitment from the ministry of health to ensure that more people could access EHC services across the country.

BEIT CURE HOSPITAL

A trained clinical officer raising awareness in schools. ZAMBIA

Improving access to ear and hearing care at community level

When we drew up the plan in 2017, there were only four ENT surgeons and a single audiologist in the country, so capacity building was on top of the

BEIT CURE HOSPITAL

Ear and hearing screening at a market.
ZAMBIA

agenda. They had all trained abroad – there was no audiology or ENT training in Zambia at the time.

Building up the workforce

With the support of the government and donor agencies, we focused on addressing the challenge of limited access to EHC services by training and equipping over 150 existing primary healthcare workers using the WHO training manuals, and integrating ear and hearing care into primary health facilities. As part of the development programme, we also provided a basic EHC package, which included an otoscope, headlight, ear probes, ear syringe, nasal speculum and tongue depressors. Furthermore, we trained 28 nurses and Clinical Officers as Hearing Instrument Specialists: they are able to screen for hearing loss, perform hearing tests, adapt and maintain hearing aids without supervision, but they do not have the more in-depth knowledge that a fully trained audiologist has acquired after years of training. The training programmes encompassed hearing screening, prevention and treatment of ear diseases, the provision of hearing assistive devices, and rehabilitation for those with significant hearing impairment.

With generous support from donors such as the Scottish and German governments, close to 120 primary health care facilities in Central and Southern provinces have established basic ear and hearing care clinics run by primary health care workers (doctors and/or nurses) with additional training and equipment; a silent revolution is unfolding in the field of ear and hearing care.

Within the government's three-tier service delivery model, patients are referred from first level health centres, which include community health posts, clinics, and district hospitals, on to second-level provincial hospitals, and finally third-level national referral hospitals respectively. Our development approach has focused on training and equipping facilities at all levels simultaneously.

The presence of EHC healthcare providers in communities has had the following benefits:

- A reduction in unnecessary referrals to tertiary healthcare facilities, not only reducing the load on specialists, but also ensuring that patients receive timely and appropriate care.
- EHC ambassadors have emerged from our trained healthcare providers, driving awareness about hearing loss prevention and providing access to ear and hearing care for the communities in which they serve.
- Communities are now better informed about the importance of early detection and intervention, which leads to improved outcomes.

Outreach for the most isolated

Through various government and donor-driven initiatives, EHC services are now accessible to underserved communities through outreach ear camps which are provided by visiting specialists (a combination of local and international ENT surgeons and audiologists), with the support of the trained healthcare providers. The camps have extended the reach of EHC services to even the most isolated regions.

Data collection to guide our initiatives

Recently, our trained personnel played a pivotal role as data collectors, which enabled us to conduct our first-ever prevalence survey for ear and hearing conditions. Findings from the survey have provided critical insights, guiding our efforts towards more targeted interventions, which include expanding primary ear and hearing care services to additional provinces across the country and championing hearing loss prevention with policymakers.

EHC professionals are making their voices heard

The formulation of the National EHC Strategic Plan also gave birth to the establishment of the Zambia Ear Nose Throat, Audiology and Speech Society (ZENTAS) as an association representing EHC professionals. ZENTAS has become a strong advocate, shedding light on existing gaps in ear and hearing care by sharing its members' experiences, and driving policy changes. ZENTAS has continued to make ear and hearing health a prominent part of Zambia's healthcare agenda.

One recent success of EHC personnel-driven advocacy, is the establishment of a register for Audiology Technicians at the Health Professions Council of Zambia (HPCZ). This register has enabled the formulation of guidelines to govern audiology services at various health levels.

Consequently, for the first time in Zambia's history, the government is in the process of recruiting audiology technicians to work in government hospitals. This development will further enhance access to EHC as the government has taken on ownership of the services as part of its universal health coverage agenda.

Challenges faced by the national programme

Despite our remarkable successes, programme sustainability continues to be our focus. We still face many difficulties:

Due to the limited specialised personnel, there are many regions across the country with a critical shortage of EHC personnel; this can lead to PEHC personnel being exhausted and neglecting their roles (as they already have general primary health care duties, for which they are being paid).

We also grapple with attracting personnel into the profession (ENT, audiologists and audiology technicians) due to limited recognition and underpayment for professionals in the field.

Funding gaps in health facilities continue to persist, which require patients to make out-of-pocket payments for both treatment and, when needed, hearing aids. This situation makes it difficult for many patients to access EHC.

Additionally, the use of technology, which has great potential to enhance EHC services through telemedicine and mobile applications, faces scaling

WISE WORDS FROM PAST EDITORIALS

"Trained primary health workers can have a frontline role in suspecting and detecting hearing loss. There is a growing scarcity of nurses and health professionals and, in some areas, primary health workers are the only health professionals whom people have access to."

KRISTINE VALENCIA, AUDIOLOGIST, PHILIPPINES, CEHH ISSUE 16 (2015)

challenges due to expensive internet services and a lack of reliable access to electricity in remote areas. Both limited access to the internet and an unreliable power supply make it difficult to implement telemedicine as a means to extend EHC services.

Building on our successes

Zambia's journey in ear and hearing care has seen remarkable progress within a short space of time. From training healthcare workers to conducting national surveys and advocating for policy change, our successes have created a ripple effect, improving the lives of individuals with hearing loss.

Through various education initiatives, we are working towards training more specialists in EHC. The recently commissioned temporal bone skills lab at the national referral hospital, the University Teaching Hospital, is poised to contribute significantly to the training of ear surgeons locally. With these collective efforts, we are optimistic about producing a substantial number of ear surgeons within the next 4 to 5 years.

In the ongoing development of our second ENT strategic plan, we aim to articulate a clear trajectory for the expansion of Ear, Nose, and Throat services. The emphasis is on extending EHC services, encompassing additional provinces, and integrating these services into secondary and tertiary hospitals within the health system. Our strategic vision is to enhance the accessibility and reach of EHC services, fostering a comprehensive approach to ear health.

Furthermore, as part of our future initiatives, we are planning to conduct a feasibility study on newborn hearing screening which will serve as the foundation for the implementation of early hearing screening and intervention programmes. Simultaneously, our goal is to upscale Primary Ear and Hearing Care services, currently available in three provinces across the country, to four more provinces in the near future. This expansion aims to broaden the scope and impact of early intervention efforts as the next frontier for the development of EHC services in Zambia.

Early days of SLT in Sri Lanka: creating a government cadre

Tony Sirimanna
Audiovestibular Physician, United Kingdom

ADKSN Yasawardene
Consultant ENT surgeon, Lady Ridgeway Hospital for Children, Colombo; Past President of the College of Otorhinolaryngologists and Head and Neck Surgeons, Sri Lanka

In Sri Lanka, which has a population of nearly 22 million, healthcare is provided universally by the Sri Lankan Health Department. Medical personnel in hospitals are government employees and there is a 'cadre' corresponding to each professional group, which determines their pay and secures money at government level for their employment.

Until the late 1990s, there were no speech and language therapists (SLTs) in Sri Lanka; just one SLT visiting from the UK six months a year for private practice. Audiology personnel was also sparse, consisting in a handful of 'audiology technicians'. Today, both SLTs and audiologists are being trained in the country and have a recognised 'cadre'. In this short piece, we want to reflect on what made this transition possible.

Identifying the problem

In the mid-1990s, Great Ormond Street (GOS) Hospital, in the UK, launched a non-profit programme in Sri Lanka to operate on people born with a cleft palate. A team was flown in and operated on patients of all ages at Galle Hospital, usually at night when the local team had completed their own workload. It became apparent that there were no SLTs to help patients post-operatively (cleft palate usually leads to speech and hearing difficulties; those who have had cleft palate surgery need SLT and audiology for best outcome).

Reference

[1] Wickenden M. et al. Folia Phoniatr Logop 2003; 55: 314–321.

TONY SIRIMANNA

Hearing testing. SRI LANKA

Building capacity to fill the service gap

Initially, the GOS-led team made follow-up visits to Sri Lanka every 6–12 months to help patients. In 1998, it was decided to establish an SLT Diploma course to train local staff[1]. A partnership with a university was negotiated. Local doctors were flown to GOS Hospital to witness how cleft palate patients were taken care of, and they reported to the Ministry of Health. This created awareness of a service gap.

The course then joined Kelaniya University and became a graduate course training SLTs as well as audiologists. It was modelled on 3-year courses producing both SLTs and audiologists, where subjects were taught in parallel until the final year. Some students paid privately, others received a government bursary.

Working with national structures and government

Qualified students (SLTs and audiologists) would only be able to work in public hospitals if they were given a cadre by the government and allocated funds. This meant involving not just the Ministry of Health, but also now the Cabinet and Parliament. Advocacy efforts came from high-level organisations and individuals, who explained this would minimise the number of people with hearing difficulties and the money spent on rehabilitation, and free funds for prevention and early screening. Advocacy also came from ground level: ENTs needed help, as did neurologists and paediatricians. This put pressure on the government from all sides and in 2005 both cadres were created and graduates deployed in public hospitals.

Well-wishers and team efforts

This achievement resulted from the convergence of different activities, such as professional bodies making their needs heard and a charity project pushing to set up a course. Pilot projects and seed money were essential as the government would not have provided funds to train audiologists and SLTs when there was no awareness of their importance.

Facing the next set of difficulties...

Recently, Sri Lanka has experienced financial difficulties, e.g. with tourism diminishing since Covid-19. There is less money for health in government and, as a result, some of the cadres created in hospitals are not filled. A new kind of advocacy must take place.

WISE WORDS FROM PAST EDITORIALS

“Many of the difficulties experienced by people who are deaf or hard of hearing are not due to their hearing impairment alone, but are greatly compounded by social attitudes and lack of access. By considering the practical needs of people who are deaf or hard of hearing and acknowledging their potential, we can become a more inclusive society.”

SALLY HARVEST, CBM EAR AND HEARING CARE ADVISORY GROUP, NATIONAL COCHLEAR IMPLANT SUPPORT PROGRAMME ORGANISER, IRELAND, CEHH ISSUE 14 (2014)

Otoscopy during an ear camp. ZIMBABWE

WIZEAR

Words from our readers

Karin Joubert SOUTH AFRICA

“I started receiving the journal in 2012, soon after I did the Public Health Planning for Hearing Impairment (PHPHI) course in Cape Town*.

I trained as both an audiologist and a speech and language therapist and am currently Associate Professor of Audiology at Witwatersrand (Wits) University in South Africa. I am also the programme manager of the Ndlovu Wits Audiology Clinic and Outreach Programme, a project I started with the Ndlovu Care Group, in 2014. We work in Limpopo province, one of the poorest provinces in the country.

In South Africa, 85% of the population make use of public health services and 15% have private insurance. The first entry into the healthcare system is a primary healthcare (PHC) clinic. If, at that level, ear and hearing problems can’t be treated, patients are referred to a secondary or tertiary hospital. In the public health sector, specialist ear and hearing care (EHC) services are mostly available at tertiary level.

Ninety-nine per cent (99%) of the population doesn’t have access to newborn hearing screening. We do have a policy for schools hearing screening, but it doesn’t actually happen in practice due to a host of challenges.

Lack of awareness of EHC and audiology services is a significant problem. Communities are so impoverished that they’re looking at meeting their basic needs before medical care. I’ve also found that old people think not hearing well is a normal part of ageing and therefore do not seek help. Nationally, we are in the process of developing an EHC strategy but this is a very slow process.

I use the *Community Ear & Hearing Health* (CEHH) journal both in my NGO work and in my role as a University teacher. With the Ndlovu project, we train community members to become hearing screeners and we use the journal to help us.

We also make all documents in the journal available to our students here at Wits University. In South Africa, audiology is a four-year undergraduate course, after which students qualify as audiologists. From the second year of study, our students start with clinical practicals. One of the practicals where I specifically make use of the CEHH journal is a six-week ‘community’ block in the final year of study. During this rotation students have to identify EHC needs in a community and have to set up some services. It could be something to do with prevention, where they inform the community about EHC; they can also train caregivers in the community or screen preschool children, school children or elderly people. The students go to rural communities on the outskirts of Johannesburg, but also urban communities adjacent to Wits University.

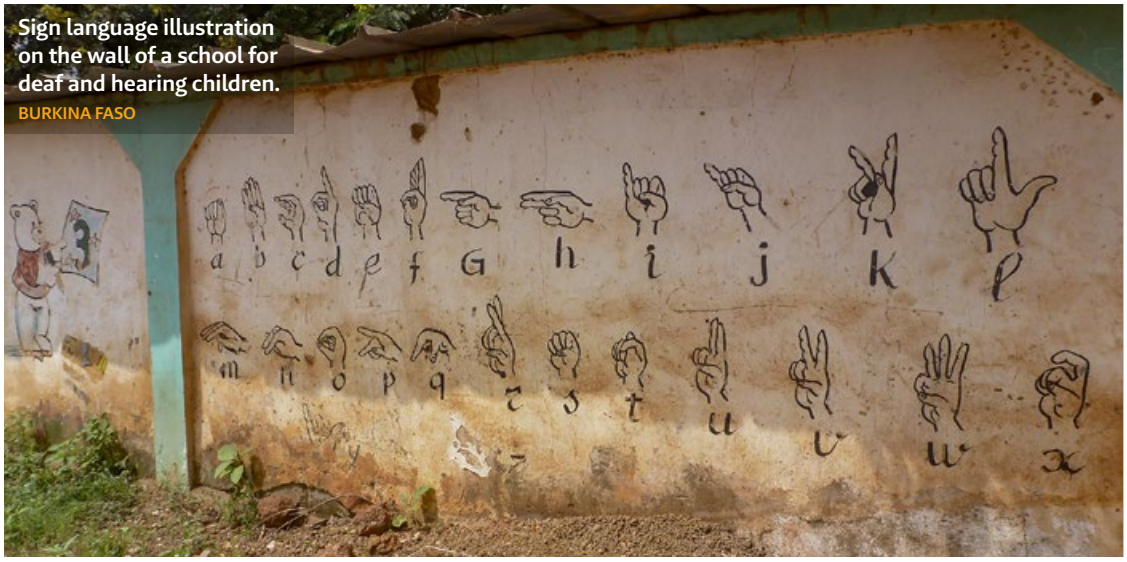
The CEHH journal is especially good for our first-year students; it gives them a basic introduction to what they will be exposed to in their career, which is important as they often don’t know what their future work will entail.

We make [journal] copies available to all students across the four years of the course, and we also distribute them to the community. All articles are valuable. The topics covered are quite extensive, from common ear diseases to awareness. There is a nice blend for both primary and secondary level, with more of a focus on primary. For example, looking at the issue on noise-induced hearing loss, I think it gives people at all levels the relevant information.

The illustrations and diagrams are very useful, and the photographs are all relevant to the topic. The health literacy level of the back-page poster is appropriate for our communities; we specifically liked the one on common ear diseases.

It is important to us to have a paper copy. In South Africa, although most of the population has access to smartphones and the Internet, data costs are very high. An internet-based journal would be very expensive, because of these costs. Also, it’s nice to hold something in your hands, and to have photographs full scale.”

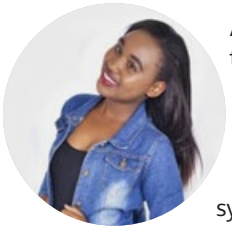
* The PHPHI courses are organised by the International Centre for Evidence of Disability at the London School of Hygiene & Tropical Medicine. For more information, please contact Joanna Jeremy, who is also this journal’s Editorial Assistant: **Joanna.Jeremy@Lshtm.ac.uk**



Sign language illustration on the wall of a school for deaf and hearing children.
BURKINA FASO

PRICARD

Natasha Nguruye ZIMBABWE



"I started receiving the *Community Ear & Hearing Health* (CEHH) journal in 2020, when I was still an audiology student. I had signed up for the journal during the PHPHI* training course conducted in Zimbabwe in 2019.

I am the Head Audiologist at WizEar Trust, a private voluntary organisation that specialises in ear and hearing health across Zimbabwe. At WizEar, we have 3 pillars, namely: service delivery, advocacy and training, as well as capacity building (see page 6 of this issue).

I always look forward to the journal. It resonates quite well with the work I do in low-resource settings. I started utilising the journal when I was still a student. We were 9 students and had gone to a very remote district hospital for our university Community-Based Rehabilitation attachment. We made use of the 2020 issue, which was about Ear and Hearing Care in the midst of the Covid-19 pandemic. We used the journal, along with other resources, to raise awareness amongst health professionals and the community about ear and hearing health. We conducted educational talks about hearing loss during the pandemic and how best everyone could assist. We photocopied some parts of the journals and shared them. In addition, we also utilised the 2019 issue, which was about noise-induced hearing loss, to conduct awareness campaigns in the community.

"I share the issues with our trained personnel in rural areas"

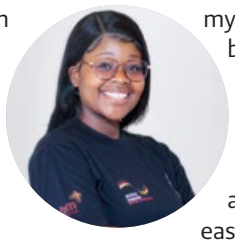
At WizEar, I make use of the journal all the time during our outreaches, campaigns and trainings. We conduct prevention campaigns and make use of the 2022 issue ('Preventing hearing loss'). I also refer to the 2018 issue ('Hearing aid systems in low-resource settings') since we provide hearing aids and aftercare to underprivileged persons in hard-to-reach low-resource areas.

We conduct basic and advanced ear and hearing health trainings and we always share the journal as part of valuable literature for future reference. I also share the latest issues with our trained personnel in rural areas, so that they can also read through.

The 2023 issue ('Human resources: what happens after training') has been quite valuable to us as an organisation. It was an eye-opener since we train multiple individuals, especially in low-resource settings. We refer to the journal in terms of our planning, execution and evaluation of the training programmes. Additionally, I share the journal with other staff members, audiologists and students as well.

I always love to receive the journal in hard copy. I can carry it, read , highlight and make notes on it for future reference. The Internet is not easily accessible here in Zimbabwe, therefore a hard copy always makes it easier when I travel to rural areas for outreaches."

Patience Mhiripiri ZIMBABWE



"I recently graduated as an audiologist from the University of Zimbabwe. I started receiving the journal in 2020, after I attended the PHPHI* in Harare.

I read most issues of the CEHH journal because they provide the latest information about ear and hearing health. This information is important to me, as I am passionate about professional development and knowledge acquisition is one of the ways I can develop. I also share the information with my work-mates so that we provide the best service possible within our own community. We try to contextualise the information to fit our population.

A paper copy is important because it is information that can be easily assessed and written records are not easily manipulated. You do not have to worry about a file being corrupted or the laptop crashing. A paper copy allows you to focus when you are reading because there are no distractions."

WISE WORDS FROM PAST EDITORIALS

"Around 90% of the world's hearing-impaired children live in countries where limited resources are likely to present a significant challenge to the implementation of newborn hearing screening. [...] One of the lessons from [novel pilot or emerging programmes in some low- and middle-income countries] is that even where follow-up services are under-developed, parents benefit from knowing early the status of their child's hearing and can modify their communication style to facilitate essential effective parent-child interactions."

ALAN DAVIS AND GWEN CARR, THE UK NATIONAL SCREENING COMMITTEE, CEHH ISSUE 15 (2014)

Ear and hearing care needs everyone's support!

50% of causes leading to hearing loss could have been prevented. Cost-effective interventions exist to prevent hearing loss, mitigate its effects, and treat ear diseases, yet support for ear and hearing care is insufficient worldwide.[1]

Benefits of ear and hearing care services

P RICARD

For children

- Less affected by stigma
- Less isolated from other children
- More easily accepted by schools
- Better able to learn
- Less likely to drop out of school
- Safer from traffic and other accidents
- Treatment for hearing loss and ear disease

PIET VAN HASSELT

For adults

- Less affected by stigma
- More confidence in joining conversations
- Better social life and mental health
- More likely to get employment
- Less likely to have to give up working
- Less likely to experience work/road accidents

MONDI YOBI KALIFA

For the community

- More inclusive society
- Economic benefits for the country
- Hard-of-hearing and deaf people can contribute to the workforce
- Less pressure on mental health services
- Improved care for other health conditions associated with hearing loss

POSTER: DIEGO J SANTANA-HERNÁNDEZ, VALERIE E NEWTON, PADDY RICARD & LANCE BELLERS

Hearing loss affects 1.5 billion people, of whom 430 million have disabling hearing loss and 34 million are children. Acute middle ear infections affect over 700 million people, mostly children under five, and they may lead to hearing loss and life-threatening complications.[1]

[1] World Health Organization. *World Report on Hearing*. 2021