DEAFNESS FORUM AUSTRALIA

oneinsix

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A Human Rights Act.

Teaching students diagnosed with auditory processing disorders.

A survey of U.S. adults with diagnosed hearing loss sheds light on the public's attitude towards hearing aids.

People need high quality safety and crisis information.

Reduce Stigma, Enhance Accessibility.

48 million Americans (and 4 million Australians) experience hearing loss, yet only 20% of those who could benefit from a hearing aid actually use one.

A survey of U.S. adults with diagnosed hearing loss sheds light on the public's attitude towards hearing aids. It revealed that nearly half of the respondents do not wear hearing aids regularly despite recognising the benefits.

The stigma associated with wearing hearing aids remains a significant hurdle. 48% of respondents believe wearing a hearing aid carries a stigma, primarily due to associations with aging and disability. This perception is more prevalent among millennials compared to older generations. The social barriers for those with hearing loss include difficulty hearing in public spaces and over the phone, affecting their ability to participate fully in society and work.

Cost and Aesthetics Concerns

Cost is a major barrier, with 56% of respondents citing high prices as the reason for not using hearing aids. 19% avoid hearing aids due to concerns about their visibility, although newer models have become more discreet and aesthetically pleasing.

Despite the challenges, the benefits of wearing hearing aids are clear. They not only enhance the ability to hear in various environments but also improve overall mental health and social interaction. Regular users report gains in confidence, a reduction in loneliness, and a lower risk of cognitive decline.

Impact on Mental Health

A significant 79% of respondents reported that hearing loss had negatively impacted their mental health to some extent, with feelings of stress, depression, and anxiety being common. This impact is most pronounced among millennials.

Many delay seeking help for their hearing loss, with 15% waiting over three years (it’s worse in Australia). Immediate attention is crucial as prolonged untreated hearing loss can lead to more severe health issues and reduced effectiveness of hearing aids later on.

Expert Advice for Reducing Stigma

Experts suggest that education and open communication about hearing loss can help reduce stigma. For instance, those without hearing loss can create supportive environments, ask meaningful questions, and encourage loved ones to seek help. This approach not only aids in normalising hearing aid usage but also fosters an inclusive community.

Read the full story at Forbes Health.

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A Federal Human Rights Act: a Crucial Step Towards Equality For All.

One of the key recommendations of the recent Disability Royal Commission into Violence, Abuse, Neglect and Exploitation of people with disability was increased legal protections through a new federal Disability Rights Act.

This article by Deafness Forum's Director of Policy and Advocacy, Hayley Stone discusses why Australia's formal recognition of human rights for people with disability is a critical step towards full equality.

But don't we already have access to human rights in Australia?

Australia, as a signatory to various United Nations treaties and conventions including the Convention on the Rights of People with Disability, has international obligations to uphold the human rights of its citizens, but there is no legally enforceable national duty to consider people's basic human rights in Australia. Victoria, Queensland, and the ACT have state based Human Rights Acts, but these only cover their residents – so it's the luck of where you happen to live.

But what about federal anti-discrimination laws and other mechanisms?

Our Constitution protects some rights both expressly and implicitly, but its scope is very limited. Australia has various federal anti-discrimination acts, which go some way towards ensuring that certain groups of people get fair protections in some states, but the problem is that they are also limited in scope and it's possible for the discriminating party to argue that there are extenuating circumstances why they shouldn't be required to comply.

An additional problem is that anti-discrimination laws require a wrong first – and it's then up to the individual who has been wronged to make a complaint to the Australian Human Rights Commission, which many can't, or choose not to do, for various reasons. Even if a complaint is proved, the most the complainant might receive is some form of compensation or a letter of apology. There's no way for the Australian Human Rights Commission to enforce compliance or compel broader systemic change.

So, what would be different with a Rights Act?

A National Human Rights Act would ensure that everyone's rights were protected, all the time and would require people's human rights to be considered in the development of any policies, laws, or practices at the time they are created as a positive duty of all decision-makers.

It would also, for the first time, articulate what people's human rights are, and provide legal remedies to people when their rights are breached.

Australia is the only liberal democracy in the world that does not have a national act or charter of rights. Every Australian should be able to know what their rights are, as Australian citizens, and know that their rights will be protected irrespective of where, in Australia, they live.

Deafness Forum Australia supports the introduction of a Human Rights Act as crucial to realising the full rights and freedoms of the communities we represent.

If you are interested in learning more about a Federal Human Rights Act, jump onto the Australian Human Rights Commission website.

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Oxidative Stress in Age-Related Hearing Loss.

Age-related hearing loss affects a large proportion of adults aged 60 years and older. Oxidative stress and inflammation have been identified as potential contributors to this condition.

Oxidation is a normal and necessary process that takes place in your body. Oxidative stress, on the other hand, occurs when there's an imbalance between free radical activity and antioxidant activity. When functioning properly, free radicals can help fight off pathogens - pathogens lead to infections. When there are more free radicals present than can be kept in balance by antioxidants, the free radicals can start doing damage to fatty tissue, DNA, and proteins in your body.

By addressing modifiable lifestyle risk factors that exacerbate oxidative stress, there may be an opportunity to prevent hearing loss. Therefore, this narrative review provides an overview of the major modifiable lifestyle risk factors associated with age-related hearing loss, that is, exposure to noise and ototoxic chemicals, smoking, diet, physical activity, and the presence of chronic lifestyle diseases, and offers an overview of the role of oxidative stress in the pathophysiology of this condition.

A prevalent type of hearing loss is age-related hearing loss. Its development is influenced by a combination of aging, health comorbidities, lifestyle, environmental, and genetic factors. These factors promote inflammation-related processes that ultimately lead to oxidative stress. This oxidative stress is believed to cause damage to delicate inner ear structures.

There is a need for public health strategies aimed at reducing oxidative damage to manage the severity and burden of age-related hearing loss. Although some factors contributing to oxidative stress cannot be changed, there are several modifiable lifestyle risk factors that can be managed. These lifestyle risk factors include exposure to noise and ototoxic chemicals, smoking, a lack of regular physical activity, a poor diet, and the presence of chronic lifestyle diseases.

Healthy lifestyle behaviours such as safe listening levels, smoking cessation, a healthy diet, and regular physical activity have been shown to reduce the risk and progression of age-related hearing loss.

Noise Exposure.

According to the WHO, exposure to noise louder than 80 dB for more than 40 h per week can result in noise-induced hearing loss, which may progress to age-related hearing loss. To prevent the risk of hearing damage from noise exposure, the primary recommendation is to minimise exposure to loud sounds and noises. For occupations that frequently expose individuals to noise, regular hearing assessments to monitor staff hearing health should also be considered.

Chemical exposure.

Age-related hearing loss can be exacerbated by ototoxic chemicals. It may be difficult to avoid exposure to ototoxic drugs as they are often used to treat life-threatening conditions. Chemicals such as pharmaceutical drugs, solvents, asphyxiants, and heavy metals can cause damage to the auditory system, including hair cells, spiral ganglion cells, and auditory nerves, as they enter the bloodstream and reach the cochlea or central nervous system.

Smoking.

Smoking directly increases oxidative stress and triggers an inflammatory response in the body. This is because cigarette smoke contains ototoxic chemicals such as hydrogen cyanide as well as water-soluble components that can circulate throughout the body, causing oxidative stress. Quitting smoking has been shown to increase the concentration of protective antioxidants in the plasma and improve resistance to oxidative challenge.

Dietary Factors.

A high-quality diet such as the Mediterranean diet is a rich source of antioxidants and micronutrients that can inhibit inflammation and reduce oxidative stress. This diet consists of nutrient-rich vegetables, fruit, fish, olive oil, and moderate wine intake. By contrast, an eating pattern that is energy-dense, high in saturated fat, salt, and sugar, and low in fibre, increases oxidative stress and the risk of obesity, type II diabetes, and cardiovascular disease.

Vitamins A, C, and E are suggested to reduce oxidative stress by acting as free radical scavengers.

Alcohol is associated with alcohol-induced oxidative stress. However, red wine is rich in antioxidants.

Exercise.

Compared to other modifiable lifestyle risk factors, fewer studies have explored the relationship between exercise and age-related hearing loss, but the findings are promising. For example, in one study it was found among women that walking at least 2 hours each week significantly reduced hearing loss risk. The benefits of regular exercise are likely due to reductions in oxidative stress and inflammation associated with ageing through the management of obesity, sarcopenia, and mitochondrial dysfunction.

Lifestyle diseases.

Engaging in unhealthy lifestyle behaviours has been linked to the development of lifestyle diseases, such as obesity, diabetes, and cardiovascular disease. Studies have shown that the presence of these conditions may heighten the risk of age-related hearing loss

Associations with other conditions.

The link between hearing loss, cognitive decline, and dementia has gained widespread attention in the last few years. Hearing loss in mid-life has been identified as the biggest modifiable risk factor for a future dementia diagnosis, almost doubling dementia risk. Further research is needed, but it is thought that hearing loss results in auditory deprivation to the brain, which causes dysfunction such as reduced cognitive performance: remembering things and solving problems.

Conclusions.

With an ageing population, the prevalence of age-related hearing loss will increase. Practicing healthy and safe lifestyle behaviours appears to have a role in delaying age-related oxidative damage to the inner ear and can help to preserve auditory cells and inner ear function.

From a paper by Diana Tang, Yvonne Tran and Bamini Gopinath from Macquarie University Hearing; and Piers Dawes from University of Queensland. https://www.mdpi.com/2076-

Screening Newborns for Hearing Issues.

Newborn hearing screening programs have been implemented in various countries around the world, with varying degrees of coverage and effectiveness.

A systematic review found that 38% of the world's population lives in countries with no or minimal newborn hearing screening, while 33% live in countries with universal newborn hearing screening (UNHS) covering over 85% of newborns.

The review also found that the average age at diagnosis of permanent childhood hearing loss was 4.6 months for screened children, compared to 34.9 months for non-screened children. Similarly, the average age at start of intervention was 6.9 months for screened children and 35.2 months for non-screened children.

Guidelines on newborn hearing screening from different countries and organisations generally recommend screening all newborns within the first 1-3 months of life, with diagnostic evaluation and intervention provided within the first 3-6 months.

However, implementation and coverage of these guidelines varies significantly between countries. A review of the global status of newborn and infant hearing screening found that screening is often performed in birth facilities (93% of countries), as well as other healthcare settings like clinics and homes. Screening is carried out by a range of professionals including physicians, audiologists, nurses, and community health workers.

Overall, while newborn hearing screening has been shown to benefit children, significant global disparities in screening coverage and effectiveness persist.

NextSense, an Australian hearing health organisation, said that Australia's experience with newborn hearing screening can influence programs in the Asia-Pacific region. In a recent article, a spokesperson said Australia has an "internationally regarded, gold-standard network of universal newborn hearing screening programs" that could serve as a model for other countries in the region to follow.

The Egyptian Government announced last week that its hearing screening services have been provided to 6 million children, as part of a presidential initiative for early detection and treatment of hearing impairment and loss in newborns. The program began in 2019 at 3,500 health units. Dr. Hossam Abdel Ghaffar, for the Ministry of Health and Population said, the number of hospitals and hearing referral centres have been provided with the latest medical devices and supplies in support of the hearing initiative services.

A recent study published in Nature's Scientific Reports analysed the audiological outcomes of children referred from a universal newborn hearing screening program in Beijing, China over a 9-year period. The study found that the the screening program program in Beijing was generally effective, with newborns screened in two stages - an initial screening within 48 hours of birth and a rescreening within 42 days for those who failed the initial test. Infants who do not pass the two-step screening undergo diagnostic audiological testing by 3 months old.

An article from the American Academy of Pediatrics provides recommendations for hearing assessment in infants, children, and adolescents beyond the newborn period. It emphasises the importance of ongoing surveillance for changes in hearing status, as 1-3 per 1,000 children can become deaf or hard of hearing later in childhood. The article recommends that all children, regardless of risk factors, have their hearing screened.

Tinnitus linked to auditory nerve degeneration.

Mass Eye and Ear researchers have found that some people with tinnitus—often described as a ringing in the ears—are actually losing nerve fibres in their ears, and regular hearing tests don't catch this.

This research, backed by a National Institutes of Health grant, explores hidden hearing loss and aims to better understand where tinnitus comes from. The study is published in the journal Scientific Reports.

Mass Eye and Ear in the U.S., a part of Harvard Medical School since 1824, is known globally for its work in treating and researching eye and ear conditions.

Dr. Stéphane F. Maison, the lead researcher, explains that tinnitus isn't just annoying—it can seriously disrupt sleep, work, and social life, and lead to anxiety and depression. He notes that understanding how tinnitus starts is crucial to figuring out how to stop it.

The study builds on the idea that the brain tries to make up for hearing loss by working harder, which can create the illusion of sound, known as tinnitus. This theory was given more credibility in 2009 when Mass Eye and Ear researchers discovered that people can have significant nerve damage in their ears even if they pass a hearing test. Dr. Maison's team measured how the nerves and brain respond in people who hear fine but still experience tinnitus, finding not only nerve loss but also increased brain activity.

Looking ahead, Dr. Maison is hopeful about developing treatments that could regenerate these nerves and perhaps calm the brain's overactivity. Read more here.

One in Six special issue: Auslan

The *One in Six* newsletter is seeking articles for a special future issue on Australian Sign Language (Auslan). This edition will cover access to quality Auslan services, affordability impacted by the NDIS, a shortage of interpreters, investing in training the next generation of interpreters, AI augmenting or replacing human signing, preservation of the language and culture within the Deaf community, and more.

Got a story to tell? Expressions of interest are due by 30 May 2024.

DEAFNESS FORUM AUSTRALIA

Members of Deafness Forum Australia will meet to vote on proposed changes to modernise the Constitution.

Detailed information is available here.

Meeting details:

Wednesday 1 MAY 2024 at 6:30 pm

To be held online: contact us for login details via info@deafnessforum.org.au

Teaching students diagnosed with auditory processing disorders.

Auditory processing disorder (APD) and central auditory processing disorder (CAPD) are umbrella terms for any kind of hearing disorder where the brain and the central nervous system cannot process sound properly.

By Dr. Pamela Cooper, M.A., MBA, Ph.D for njea.

Most cases start in childhood. It is estimated that about 1 in every 20 students has APD. Students with APD are unable to process verbal information the same way as other students because their ears and brain are not working together properly. A delay in the brain's processing of the information coming from what is heard can last 10 seconds or longer. By the time the brain begins to process the first word that was spoken, the person speaking has already said the entire sentence. This means that a student with APD may have heard only the first word, or the first few words, spoken.

Students with auditory processing disorder can have difficulty doing schoolwork, especially if instruction is long or has multiple steps. Processing words and their meanings may be difficult for these students. These students also commonly have speech and language difficulty, as they cannot decipher the difference between similar sounding letters. For example, consonant blends at the beginning of words, such as "pr" and "dr" may sound the same to these students.

Students with auditory processing disorder also have auditory memory problems and based upon learning styles, rely on visual processing skills. Visual aids in the classroom can help the student learn or know what steps to do next in class.

Misunderstanding students with APD.

Unfortunately, students with auditory processing disorder are often thought to be easily distracted, not focused, not paying attention, not caring about what is happening, lazy, disrespectful or in need of medication.

Students who have auditory processing disorder may also suffer from auditory attention problems, especially if there is an abundance of background noise in the home or classroom. It may appear that the student has a hearing disorder, is simply not listening, or that they have attention deficit hyperactivity disorder - a common misdiagnosis - as their brain tries to keep up with processing verbal information.

Possible causes of APD.

Researchers are still working to identify the exact cause of auditory processing disorder. Some researchers report that exposure to lead, trauma to the head, heredity, prenatal

drug/alcohol exposure or chronic ear infections may be contributing factors.

Proper screening can be conducted by a learning disabilities teacher-consultant, school psychologist, or a speech-language pathologist knowledgeable in APD.

Proper diagnosis can help the student succeed in school and at home, as parents, teachers and other aides can work together to provide the right support and services in the home and school.

Understanding auditory processing disorder.

Auditory processing difficulties can manifest in various ways. No two students face the same auditory processing challenges. Students may experience difficulties with listening, understanding what is being said and engaging in conversation. They may struggle with social skills. They may have difficulty maintaining a working memory. Executive functioning and poor organisational skills are common with auditory processing disorder in students.

Auditory localisation.

The student cannot locate the source of sound and may lack a skill called auditory localisation. The student has trouble identifying precisely where a sound is coming from. Auditory localisation is essential in most daily activities. Imagine trying to walk through a busy hall between class or crowded cafeteria without being able to identify where sounds are coming from.

Auditory sequencing.

The student cannot understand the order of sounds. Students with auditory processing disorder may lack a skill called auditory sequencing and may be confused about the order of sounds. Their brain cannot store and recall auditory stimuli, such as the exact order in which sounds arrive. Not being able to store and recall makes it difficult for students to learn anything by repetition, recite a poem or remember music. The student would have difficulty following verbal instructions or understanding the consequences.

Auditory word discrimination and sound discrimination.

Students with auditory processing disorder cannot differentiate between similar sounding words like crash and cash or eighteen and eighty. This is due to a limited ability for auditory word discrimination and sound discrimination.

Auditory discrimination.

The student with auditory processing delays does not always understand speech. They are lacking in the skill of auditory discrimination, having difficulty understanding speech when more than one person is talking, there's noise in the background or the quality of sound is bad. This is because the student cannot differentiate between sounds of different frequency, duration, and intensity and cannot distinguish speech from background noise. The student may not understand when someone speaks fast. The rate at which we process sound is known as temporal processing. For a student with APD, temporal processing is slow. As a result of slow temporal processing, there is a bigger time gap between hearing a sound and processing it.

Auditory memory.

APD affects auditory memory or the ability to store sound information and recall them, as necessary. When the speed of processing sound is low, students take more time to understand spoken instruction, directions or commands. The student may ask that information be repeated, or they form a habit of guessing.

Auditory figure-ground.

The student with APD gets distracted easily by noises, self-distractions and/or environmental distractions. They find it difficult to listen in a

noisy place, classroom, hallway, school bus, etc. The student may not be able to identify the primary sound from background noise, a necessary auditory skill known as auditory figure-ground. Students with auditory processing disorder may also have a short auditory attention span.

Auditory fatigue.

Students with APD become tired easily and may be observed with their head down on their arm, pretending to be involved in the lesson, eyes closed or staring. A noisy place can be tiring due to the increased need to put in more effort to listen above the noise or not be distracted. In fact, the daily effort of listening may become so strenuous that the student may just stop trying to adjust. This is known as auditory fatigue.

Auditory closure.

Students with auditory processing disorder may not perform well at school. Sometimes, when a part of a sentence is missing or garbled, we make sense of the context and fill the gap using common sense. For example, in the sentence, "The ___ rises in the east," we can easily fill in the missing word, sun, from what we know. This is known as auditory closure. We all use auditory closure to understand what is being said. Students with APD might constantly have to rely on auditory memory and auditory closure. Since the student with APD needs to allocate extra mental resources (energy) just to understand what is being said, they are often left with a reduced capacity for other schoolwork, homework or socialisation.

APD impact on spelling, reading, recall and singing skills.

Students with APD have poor spelling, reading, recall and singing skills. While instructing a student with APD to spell or read, make sure to speak in a clear, distinct way with pauses and repetitions. Students with APD mispronounce words and leave out syllables. While singing, they might change both the lyrics and the tune. Learning to read, spell or sing depends on auditory skills as identifying and joining syllables, attaching meaning to sounds, and remembering the sequence of sounds and words. Students with APD lack these basic skills, they perform poorly in any area that is dependent on hearing and display limited vocabulary.

APD impact on holding conversations.

Students with APD struggle with holding conversations and may speak in ways inappropriate to the moment or their age. They may say too much or too little, use inappropriate language, fail to follow a conversation, or have difficulty organising their thoughts or staying on topic.

Accommodations for students with APD.

Students with auditory processing delays will need help from a speech-language pathologist to stay at the same speech and language level as their peers. These students may need help from a friend or help from an aide in the classroom when organising schoolwork in the classroom or to bring home in their backpacks.

Classroom seating, materials, and routines.

- Provide a quiet area for independent work.
- Let the student sit near the teacher and away from auditory distractions, like doors and windows.
- Check in frequently to make sure the student understands the work.
- Give extra time for testing.

Giving instructions and assignments.

- Give step-by-step instructions, and have the student repeat them.

- Use attention-getting phrases like “This is important to know because…”
- Decide with the student on a nonverbal signal to show that a key point is being made.
- Say directions, assignments and schedules aloud, and rephrase as needed.
- Repeat key information throughout the lesson and rephrase as needed.
- Use visual tools, images and gestures to enhance and support spoken lessons.
- Break down test or classwork instructions into short, written steps.
- Highlight key words and ideas on worksheets.
- Adjust quantity of homework. Give written homework instructions.

Introducing new concepts/lessons.

- Speak clearly and slowly when presenting information.
- Give material on a new concept to the student before it is taught to the whole class (so the student can become familiar with the material ahead of time).
- Give a list of or highlight key vocabulary and concepts for upcoming lessons.
- Give a brief review or connection to a previous lesson before teaching something new.
- Give the student an outline of the lesson.
- Grade based on the student’s completion of the lesson goal. (For instance, do not grade spelling errors if that is not what the student was supposed to learn.)
- Consult with the learning disabilities teacher-consultant and/or speech pathologist for additional support and strategies.

Harmonising Health and Heritage.

Dr Carol Dowling is the Deputy Chair of Earbus Foundation, a children's charity that works to reduce the incidence of middle ear disease in Aboriginal and at-risk children in Western Australia.

Carol is a Badimaya/Yamatji woman whose family comes from Coodingnow & Wydgee Stations in the Central West of Western Australia.

Carol is former Chair of Dumbartung Aboriginal Corporation and Noongar Radio. She holds a Masters in Indigenous Research & Development from Curtin University and is an award-winning radio documentary producer. Her documentary series on Aboriginal child ear health in her community won the National Community Broadcasting Association of Australia award in 2013 as well as a Australian Human Rights Commission award.

A long-term foster mother with three sons, Carol is a passionate advocate for the rights of Indigenous children to equity of access to essential health services.

Newman Earbus funded for a second year.

Earbus Foundation's Western Desert Program in Newman will run for at least another year thanks to an extension of funding from Deterra Royalties.

Deterra's support to date has enabled the program to provide mobile one-stop-shop ear assessments for about 150 children across four schools, day care centres and early learning centres. This included 357 ear screens, 201 hearing tests and 247 health checks.

The new commitment builds on funding already provided by Deterra in support of the innovative ear health service in the region since 2023. Managing Director and CEO Julian Andrews said the company was keen to maintain its support of Earbus as it continues its mission to improve children's health and education outcomes.

"We are pleased to partner with Earbus Foundation on its mobile clinics, a program that provides access to such important health care to children in remote regions and communities", Mr Andrews said.

The Newman Earbus Program is delivered in partnership with Puntukurnu Aboriginal Medical Service.

Physical and Social Activities Promote Healthy Brain Ageing.

Physical and social activities in old age have a protective effect on the entorhinal cortex, researchers in Switzerland have shown. This important area of the brain, which plays a central role in memory, is impaired in patients with Alzheimer's disease, even in its early stages.

Physical exercise is associated with a variety of positive health aspects. Numerous studies have shown that regular physical activity has a preventive effect on cardiovascular diseases, diabetes, cancer, high blood pressure and obesity. But how do various leisure activities – physical, social and cognitive – affect brain health in old age? A team of researchers from the Dynamics of Healthy Aging and from the Healthy Longevity Center of the University of Zurich (UZH) decided to investigate this question.

They examined data from a comprehensive longitudinal study on brain development and behaviour in old age. The longitudinal study was set in motion 12 years ago by Lutz Jäncke, now professor emeritus at UZH, who continues to supervise the project. The aim of the current research is to investigate the relationships between the thickness of the entorhinal cortex (that part of the brain involved in memory, navigation, and the perception of time), memory performance and leisure activities in cognitively healthy adults over the age of 65, for a period of seven years.

Exercise and social activity slow down neurodegeneration.

The entorhinal cortex is one of the brain regions that is affected early on in the development of Alzheimer's disease.

"Our findings show that in people who were more physically and socially active at the beginning of the study, the thickness of their entorhinal cortex decreased less over the seven-year period," says neuropsychologist Jäncke.

The researchers found that the thickness of the entorhinal cortex is closely linked to memory performance.

"Physical exercise and an active social life with friends and family are therefore important for brain health and can prevent neurodegeneration in later life," says Jäncke.

Brain can be trained like a muscle.

It was also shown that higher memory performance at the beginning of the study was associated with a lower decline in memory performance over the course of the study.

"These findings support the idea that we have a 'cognitive reserve', and that the brain can be trained throughout our lives like a muscle to counteract age-related decline," says researcher Isabel Hotz.

"It pays to be physically, mentally and socially active throughout our lives, including in later life."

Fortunately, many older people in Switzerland already seem to be living by this belief: according to the Swiss Health Survey in 2022, around three quarters of people over 65 get the recommended amount of physical exercise in their daily lives.

For further information contact:

Dr. Isabel Hotz, URPP Dynamics of Healthy Aging, University of Zurich email

Prof. Dr. Lutz Jäncke, Department of Psychology, University of Zurich email

Crisis communication saves lives – but people with disability often aren't given the message

In a pandemic, bushfire or flood, people need high quality safety and crisis information.

Getting emergency messages quickly can help people know how to prepare, what rules to follow, where dangers are, where to gather safely and when help is on the way.

This life-saving potential exists for everyone – including people with disability, who may be particularly affected by climate change.

So, it is important that crisis information is accessible and its meaning is clear for everyone.

Yet, the disability royal commission and advocates say people with disability have not been provided with enough thorough, timely and up to date, accessible information during recent crises.

For example, the government's accessible information about the early dangers of COVID was not made available at the same time as the standard information and didn't include enough different types of accessible information.

With climate change making extreme weather events more common and more intense, we asked accessible information provider organisations what could improve accessible crisis communication for people with disability.

So, what is accessible information?

Accessible information can come in a range of types, including captions, other languages, Easy Read and Easy English (which both use pictures as well as simpler language) and braille.

Beyond specific formats, information is accessible when it is:

- made for a specific audience
- matched to their technical requirements
- co-designed with and user tested by people with disability
- easy to locate and distribute to people who need it
- to the point and practical
- up to date, accurate and verified
- delivered with a "human touch".

Who makes accessible information?

There is a small group of provider organisations who make accessible information. Some are specialist accessibility businesses and others are disability advocacy organisations. They usually work from project to project to develop individual accessible products with payment from commissioning bodies, such as government, councils, community organisations and private businesses.

This is important work, yet the piecemeal nature of it means it is hard to build and expand information accessibility businesses between projects. It is also hard to ensure there is accessible information to cover everything

people with disability need to know, let alone keep it updated and make sure it is produced under best-practice conditions.

These challenges are even more serious in a crisis. If accessible crisis information is not accurate, complete, up to date and high quality, there can be life and death consequences for people with disability in a bushfire, flood or pandemic.

For example, they may not know if it is controlled backburning or an uncontrolled fire approaching their property or about pandemic safety rules.

Four ways to improve accessible crisis information.

Accessible information provider organisations told us four things that could help:

1. A direct source of information

Keeping up with constantly changing details in a crisis is difficult for accessible information provider organisations. Having a direct source (such as a government or emergency services contact) of correct information to "translate" into accessible formats would help.

2. Subject matter experts

Accessible information provider organisations are experts on style and accessibility – not crises. There needs to be support from subject matter experts (such as doctors or emergency service personnel) to check accuracy.

3. Not waiting for a crisis

Making high quality, accessible information takes time, money and skilled staff. Ensuring the required workplace, professional learning and human resources conditions are in place is a long term task. Sufficient resourcing for accessible information provider organisations is important from way before a crisis.

4. Upskilling agencies

Not all accessible crisis information can be made by provider organisations. Sometimes crisis information – like evacuation orders or information about approaching fire – needs to be available immediately. Emergency services need more thorough baseline accessibility skills to make this information themselves.

New rules and resources could help

Clearer and more comprehensive national legislation requiring the production of accessible information would give people with disability the information they need to stay safe in times of crisis. Such laws should clearly outline all situations in which accessible information must be provided (including crises), formats to be considered and the standard necessary.

There are different options for how to make this legislation. In its final report, the disability royal commission said information accessibility should be covered in a new Disability Rights Act. Our report shows information accessibility requirements should also be clearly and consistently included in the governing legislation of sectors like emergency response and health.

Accessible information provider organisations should also have reliable, ongoing funding (not only project to project payments), with capacity for expansion during weather emergencies and public health disasters. This would ensure the workforce and systems are in place to expand workflow quickly when needed and get messages out rapidly to people with disability.

And everyone – from media organisations to designers, businesses and service providers – needs to get on board. The more people who prioritise accessible information, the safer people with disability can be in a crisis.

Author

Ariella Meltzer
Research Fellow in Social Impact, UNSW Sydney

Eustachian Tube Dysfunction.

The Eustachian tube is an opening that connects the middle ear with the nasal-sinus cavity. This tube helps to balance pressure in the middle ear (commonly felt as your ears popping), drain fluid from the middle ear and protect the ear from both hearing sounds your body causes and nasal drainage.

The Eustachian tube contains a valve that opens and closes. Inadequate opening of this tube can cause a buildup of fluid in the ears, which can lead to a feeling of pain and pressure in the ear. A tube that is too open can also cause a persistent feeling of pressure as well as hearing unusual sounds such as your own breathing or your own voice too loudly. Eustachian tube disorders are common and one of the leading causes of ear infections (otitis media).

Patulous Eustachian Tube Dysfunction.

Patulous Eustachian tube dysfunction is a disorder of the valve of the Eustachian tube that causes it to remain open. When this valve remains open, sound can travel from the nasal-sinus cavity to the ears, allowing you to hear your own voice or your own breathing too loudly, or even the sound of blood pumping.

Your doctor may use a variety of techniques to diagnose patulous Eustachian tube dysfunction while viewing your ear drum (tympanic membrane). Your doctor may ask you to breathe deeply and swallow to see how the ear drum responds. They may also measure the pressure inside your ear using specialised tools.

Medical treatment for patulous Eustachian tube dysfunction includes limiting decongestants and caffeine, and drinking more water. Surgery might be recommended.

Obstructive Eustachian Tube Dysfunction.

Obstructive dysfunction occurs when the valve of the Eustachian tube does not open properly. This prevents pressure from balancing and fluids from draining out of the ear.

Over time, negative pressure can build up in the ear, causing pain, ear fullness and muffled hearing. When this occurs, sometimes your doctor can see the ear drum change shape due to this pressure and become concave.

Obstructive eustachian tube dysfunction can be chronic, intermittent or short term. When it is only felt during airplane flights or SCUBA diving, this is known as baro-challenge-induced Eustachian tube dysfunction.

A common course of treatment for Eustachian tube dysfunction is the use of decongestants or antihistamines. In some cases, this treatment may make the condition worse. If decongestants or antihistamines do not provide relief, contact your doctor. You may need to see an ear, nose and throat specialist for treatment.

From John Hopkins Medicine.

DEAFNESS FORUM AUSTRALIA

A membership body like Deafness Forum Australia can offer numerous benefits to its members while also enabling them to contribute to the organisation's goals and initiatives.

Our members include people living with hearing loss and their families; as well as associations of these people; and individuals and associations which provide services that promote hearing health and wellbeing.

Benefits to Members

1. **Access to Information and Resources:** Members receive up-to-date information on research, developments, and policies related to deafness, balance disorders, tinnitus and hearing loss via the regular national newsletter.
2. **Networking Opportunities:** Membership provides access to a community of individuals and organisations with similar interests and concerns. Events, communities of practice, and forums facilitate networking, sharing of best practices, and collaborative opportunities.
3. **Advocacy and Representation:** We advocate for our members at various levels, including government, to influence policies and programs that affect them.
4. **Promotion:** We promote the members' various initiatives and position statements and aid them in developing policies and platforms for advocacy.

Enhancing Citizen Consultations and Co-Design

Deafness Forum Australia can play a pivotal role in facilitating meaningful citizen consultations, engaging community members in committees, and co-designing processes for consultations that incorporate the perspectives and needs of the deaf and hard-of-hearing community.

1. **Identifying Interested Participants:** We can help government and organisations identify and reach out to individuals in the deaf and hard-of-hearing community eager to share their insights, experiences, and expertise. Our extensive network ensures that consultations and co-design processes benefit from a wide range of perspectives, including those of individuals with different degrees of hearing challenges, communication preferences, and lived experiences.
2. **Facilitating Engagement:** Deafness Forum Australia is a bridge between organisations and the deaf and hard-of-hearing community by encouraging engagement opportunities. This includes organising forums, roundtables and surveys where organisations can directly interact with community members. Our expertise in accessible event planning ensures that these interactions are inclusive and productive.
3. **Communication Support:** To ensure effective participation, we offer support in overcoming communication barriers that might hinder the deaf and hard-of-hearing community's involvement in consultations and co-design efforts. This can include providing advice on captioning services, hearing augmentation and sign language interpreters.
4. **Advising on Best Practices:** We can offer organisations guidance on best practices for engaging with the deaf and hard-of-hearing community. This includes insights on how to approach consultations inclusively, ensuring that all participants' voices are heard and valued.
5. **Amplifying Outcomes:** Following consultations or co-design activities, Deafness Forum Australia can help amplify the outcomes and recommendations arising from these efforts. By sharing results with our broad network, we can help ensure that the insights gained reach a wider audience

and contribute to greater awareness and understanding.

Through these support mechanisms, Deafness Forum Australia facilitates our members' direct involvement in important decision-making processes and enhances other organisations' capacity to conduct consultations and co-design initiatives that are inclusive and reflect the diversity within the deaf and hard-of-hearing community.

Contribution to Deafness Forum Australia.

Members contribute to the work of Deafness Forum Australia in several ways:

1. **Sharing Expertise and Insights:** Members bring valuable perspectives, expertise, and lived experiences that enrich the organisation's understanding of the needs and challenges of the community it represents.
2. **Volunteering:** Members actively volunteer in various capacities, from participating in committees and working groups to helping organise events and campaigns. This voluntary support is crucial for the organisation's operations and initiatives.
3. **Advocacy and Awareness:** By participating in advocacy campaigns and community outreach, members help raise awareness about issues affecting the deaf and hard-of-hearing community, amplifying our voice.
4. **Financial Support:** Membership fees and donations provide essential financial support that help fund our programs and advocacy efforts.

The Importance of a Diverse and Representative Membership.

One of the primary beneficiaries of membership is Deafness Forum Australia. A diverse and representative membership grants us the authority to speak on behalf of sector matters with a citizen focus. This diversity ensures that our advocacy reflects the broad spectrum of experiences and needs within the deaf and hard-of-hearing community. It strengthens our position when negotiating with policymakers, stakeholders, and the broader community, as we can legitimately claim to represent a wide range of interests and perspectives.

A representative membership base enables us to identify and address emerging issues more effectively, ensuring that our work is relevant and responsive to the community we serve.

Ultimately, this authority and legitimacy enhance our ability to make a meaningful impact, advocating for positive changes and improvements that benefit the 4 million people we represent.

Your membership in Deafness Forum Australia is a public display of your belief in the need for an independent national voice that advocates for the issues and concerns of Australians with hearing challenges.

Contact us

Steve is our CEO and he would be happy to discuss it further. Email him on info@deafnessforum.org.au

Parliament House, Canberra: Minister for Health and Aged Care, Mark Butler meets with Deafness Forum Australia chair David Brady.

SafeWork launches hearing loss campaign.

SafeWork South Australia has launched a campaign targeting risks associated with working in noisy environments.

The six-month campaign, starting this month, will raise awareness of noise related risks, which will include compliance audits across manufacturing, warehousing, transport, construction and mining industries.

During the audits, SafeWork SA inspectors will assess how noise is being managed to prevent hearing loss of workers, in accordance with the work health and safety regulations. This will include who and when hearing tests are required.

Inspectors will issue statutory notices to businesses where non-compliance has been identified.

Noise exposure is the most common preventable cause of occupational hearing loss and whilst preventable, once acquired it is irreversible.

Long-term exposure to noise can cause other physical symptoms, whether the noise is hazardous enough to cause hearing loss or not. These include increased blood pressure and heart rate, stress, reduced concentration, insomnia and changes to hormone, cholesterol and stomach acid levels.

Research suggests that exposure to noisy environments is also associated with a higher relative risk of accidents. Workers with hearing loss greater than 15dB are three times more likely to be at risk of multiple accidents.

The Australian Work Health and Safety Strategy 2023-2033 has set a target to reduce the frequency of hearing loss injury claims resulting in permanent impairment by 15 per cent.

Under the Work Health and Safety Act and Regulations 2012 (SA), businesses must provide audiometric (hearing) testing for a worker if they are required to frequently use personal hearing protectors as a control measure for noise that exceeds the exposure standard. This testing must take place within first three months of their employment and then twice a year.

Without these tests, it is difficult for employers to determine the efficiency of noise exposure controls they have implemented in the workplace.

SafeWork SA Executive Director Glenn Farrell said there is likely a lack of understanding among some employers of their obligations with respect to noise levels both in terms of assessing the risks and monitoring the health of their employees.

‘The rising trend in occupational noise induced hearing loss claims suggests that more can be done to prevent harm,’ Mr Farrell said.

‘We hope that by running this campaign, the awareness of the issue and measures to manage the risks of noise exposure will be raised and greater compliance will be observed.’

For more information about managing noise in the workplace and how you can protect yourself from hearing loss, visit www.safework.sa.gov.au

Know someone who deserves their own copy of One in Six?

Email hello@deafnessforum.org.au