

Top neurologist
Dr Sabina Brennan
on the importance
of giving our ears
some attention



How protecting your hearing could help stave off

DEMENTIA

TURN TO NEXT PAGE

The ultimate
guide to
vitamins

SEE PAGE 5



Studies show untreated hearing loss in mid-life is one of the largest dementia risk factors



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LAST week we celebrated World Hearing Day and it got me thinking about vanity. We are all a bit vain, aren't we? I hated wearing glasses when I became short-sighted as a teen.

Back then we didn't have the range

of glasses to choose from that are available now. I know for sure that my family didn't have the disposable income to splash out on glasses that weren't covered by the HSE, let alone trendy, designer ones.

I had glasses that were just a small step above the pink-rimmed 'national health' ones that were foisted upon the kids with poor eyesight in primary school.

Much as I despised wearing glasses, I had to persevere. Not wearing them simply wasn't an option unless I wanted to miss out on so many things, miss out on my life basically. I just didn't feel like me when I wore them.

I did not identify as someone who wore glasses. I did, however, draw the



line at wearing them when I went out at night.

My teen self couldn't see how anyone would find a girl who wore glasses attractive. As soon as I could afford to, I invested in contact lenses. I found them uncomfortable to put in and wear, but at least I could see.

As the technology, if that's the right word,, progressed I moved with it. First on to soft contact lenses, then disposable ones and finally I had Lasik surgery which not only corrected my short-sightedness but also saved me from the 'indignity' of having to wear reading glasses when I hit 40 thanks to a little trick performed by the surgeon.

One thing that utterly blows my mind is that people today wear glasses as a fashion accessory even if they don't need them. How attitudes have changed!

I mentioned World Hearing Day, so why am I talking about eyesight? Well, I think it's time for attitudes to hearing loss and hearing aids to change because we now know that untreated hearing loss is a big risk factor for dementia.

Thankfully wearing hearing aids can mitigate that risk so forget vanity and worrying what others might think. Get your hearing tested regularly so that you can catch any loss early.

Honestly, I get the vanity bit, I really do. But it's based on outdated perceptions of hearing aids as big 'flesh-coloured' devices that everyone can see and hear as they whistle at inopportune moments and actually don't work very well. Modern hearing aids are super discreet, in fact they are almost invisible and provide a really high-quality, high tech experience.

Globally, 50 million people are living with dementia, a figure set to triple by 2050. In the absence of a cure prevention is key. Thankfully the potential for prevention is high.

The most up-to-date research indicates that modifying 12 risk factors could delay or prevent 40% of dementia cases.

The Lancet Commission report published in 2020 identified untreated hearing loss in mid-life as the largest and most consequential of these risk factors.

The other risk factors are less education, traumatic brain injury, mid-life hypertension, drinking more than 21 units of alcohol per week, obesity, smoking, depression, social isolation, physical inactivity, air pollution and diabetes.

Mild hearing loss can double an individual's risk of dementia, moderate hearing loss can triple that risk and severe hearing impairment can increase the risk fivefold.

The link between hearing loss and dementia is not yet fully understood but a number of theories have emerged.

One suggestion is that the loss of sensory stimulation experienced may lead to less activation of certain neural regions of the brain that may disrupt the production of the brain's neurotransmitters impacting on cognitive function.

It is also possible the difficulty perceiving speech that accompanies hearing loss impacts on the allocation of brain resources.

When a person with hearing loss strains to figure out what someone is saying, areas of the brain involved in short-term memory and executive functions (e.g. problem solving and attention) have to work harder than

normal. While this can result in less decline in these functions, it can bring about greater decline in the types of memory that we rely on to recall facts, words, ideas concepts (semantic memory) and the type of memory that allows us to recall our previous experiences and episodes from our lives (episodic memory).

Another idea is that hearing loss and dementia share some sort of common cause such as a broad physiological decline or a decline in the body's vascular system.

In all likelihood, multiple factors, including other modifiable lifestyle factors, influence the relationship between hearing loss and dementia.

For example, hearing impairment may make people less inclined to socialise because their hearing loss makes conversing challenging or because they fear embarrassment in public settings.

Social withdrawal deprives the brain of the mental stimulation of conversation and socialising which is essential for a healthy brain. Individuals may become depressed by their loss of hearing.

Social isolation can also lead to depression and both can independently contribute to risk for dementia and loss of cognitive ability.

Social isolation and depression

can, in turn, increase the likelihood that we engage in unhealthy coping behaviours like excessive alcohol consumption, smoking and overeating which can, in turn, lead to obesity, diabetes or cardiovascular issues that compromise brain health and increase dementia risk.

All of this could be prevented by prioritising hearing health by getting your hearing checked regularly and by wearing aids if needed.

With hearing loss predicted to affect nearly 2.5 billion people globally by 2050, the Lancet Commission also recommend that we protect our ears from exposure to excessive noise.

Unfortunately, noise-induced hearing loss is permanent so prevention is key. That means turning down the volume on your headphones, avoiding situations with excessively loud music and wearing ear defenders when working with noisy machinery or in noisy environments.

Noise-induced hearing loss can affect anyone at any age. Almost half of people operating loud machinery or farm vehicles do not use hearing protection, thereby not only exposing themselves to the risk of permanent hearing loss but also increasing their risk of dementia.

Age-related hearing loss generally begins after the age of 60 with one in three people aged over 65 experience disabling age-related hearing loss.

Studies indicate that age-related hearing loss precedes clinical dementia by five to 10 years.

A study that followed 3,777 people over 65 for 25 years confirmed an increased dementia incidence in people with self-reported hearing problems except in those using hearing aids.

A study that tested over 2000 people aged over 50 for 18 years found that memory recall deteriorated less after hearing aid use.

A study that found that hearing aid use was the largest factor protecting from decline, performed statistical analysis that confirms that hearing aid use is protective rather than the alternative explanation that those already developing dementia are less likely to wear hearing aids.



There are also additional benefits to wearing hearing aids. A recent study on behalf of Hidden Hearing revealed that treating hearing loss has benefits for mental health, relationships and even happiness.

For those with hearing loss, hearing aid wearers in Ireland are almost three times happier than those with untreated hearing loss.

One in four hearing aid wearers report having better relationships, and they are twice as likely to report improved mental health too.

If any of the following statements sound familiar get your hearing checked as soon as possible:

- I can't follow conversations.
- Everyone is mumbling.
- Everyone is telling me to turn down the TV.
- I can't tell where sounds are coming from.
- The buzzing in my ears is driving me mad.

If you haven't experienced any of these symptoms, commit to loving your ears by protecting them from loud noises, reducing the volume on your headphones, getting your hearing checked regularly and by wearing hearing aids if needed.

Due to ageism and stigma it's not unusual to feel resistant to wearing aids but try not to fall victim to your own prejudices and misconceptions about people with hearing loss.

It's ironic that a common reason cited for not want to wear hearing aids is because they don't want to be seen as cognitively impaired.

Don't let vanity get in the way of healthy hearing, healthy brain function or a happy, socially connected life.

■ Dr Sabina Brennan is an ambassador for Hidden Hearing, see hiddenhearing.ie

'Reduce the volume of your headphones to protect the ears'

'Untreated mild hearing loss can double the risk of dementia'



Dr Sabina Brennan with Hidden Hearing ambassadors Una Walsh and former Irish rugby player Tony Ward launch the Love Your Ears event

