HEARING LOSS IS THE NUMBER ONE MODIFIABLE RISK FACTOR FOR DEMENTIA

With the global population expected to reach 9.9 billion by 2050[1], the challenges for healthcare systems are well documented[2]. However, as the population ages, this adds a further layer of complexity. The United Nations note that the number of people over 70 years will double over the same period[3]. This brings into sharp focus the impact of age-related disease burdens, including hearing loss and dementia.

HEARING LOSS AND DEMENTIA

COMORBIDITIES

One in four people believe that nothing can be done to prevent dementia[4] despite a growing body of evidence that recognizes the elimination of 12 potentially modifiable risk factors which could prevent or delay up to 40% of dementia cases[5]. Importantly, the primary modifiable risk factor is hearing loss in midlife, which reduces the risk by 8%. This is followed by depression (4%) and isolation in later life (4%), both of which frequently accompany untreated hearing loss[5].

PREVALENCE

The WHO estimates that 1.5 billion people worldwide, or nearly 20% of the population, are living with disabling hearing loss, and this figure is expected to increase to 2.5 billion by 2050[6]. The data for those living with dementia are equally as stark – globally 55 million people are living with the disease, at a cost of US$ 1.3 trillion. The number of people affected is expected to almost triple by 2050[7]. These rapid increases are a clear and early warning.

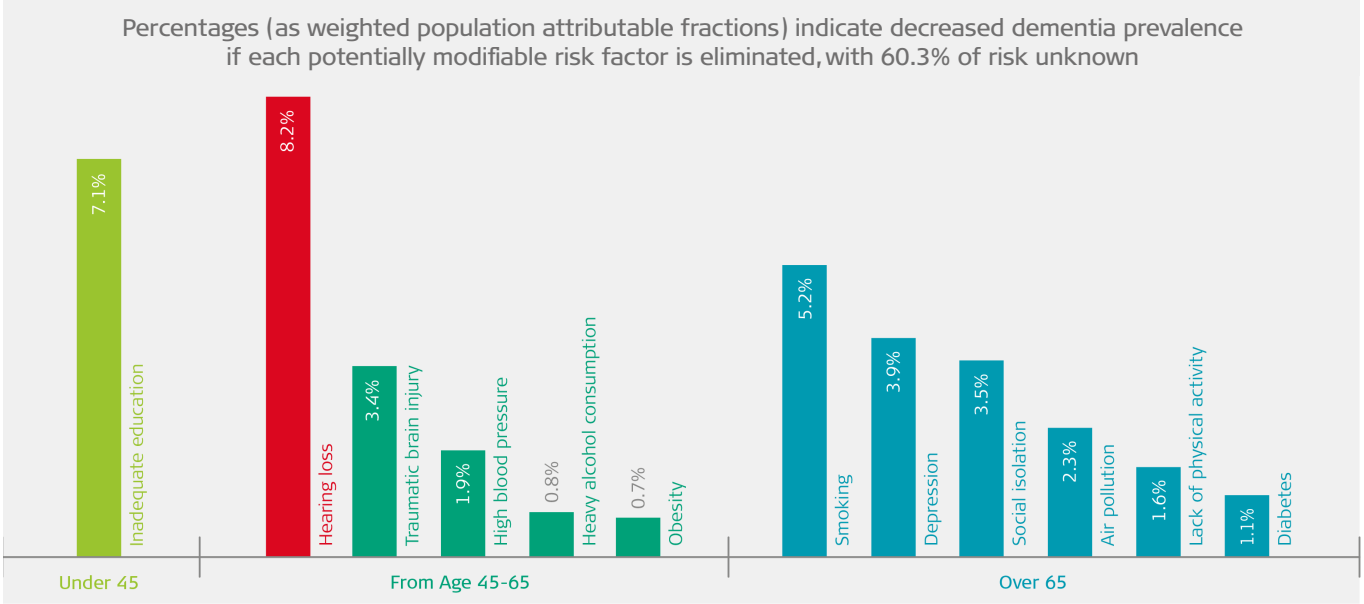
EVIDENCE OF HEARING LOSS AND DEMENTIA

Research proves that untreated hearing loss leads to structural and functional atrophy within the brain as a result of deprived auditory stimulation and an increase in the cognitive load required to process environmental sounds, speech, and music[8-10]. A study on a large population (n=347) concluded that for every 10 dB of hearing loss, the rate of cognitive decline increased. Those living with untreated hearing loss experienced an accelerated rate by as much as 30-40% compared to their peers with normal hearing[11].

The rate of cognitive decline increases for every 10 dB of hearing loss[11].

MODIFIABLE RISK FACTORS OF DEMENTIA

The WHO identifies being able to contribute to society and relationship development as two of the five functional abilities that contribute to healthy aging[12]. Multiple papers report hearing loss as a barrier to these crucial functional abilities, and a correlation between hearing loss and both fragmented communication and diminished social engagement has been observed[13, 14]. Limited social networks, often associated with withdrawal, isolation, and loneliness, are shown to increase the risk of dementia by more than 50%[15].



Source: Data from Livingston, G., Huntley, J., Sommerlad, A., Ames, D., Ballard, C., Banerjee, S., Brayne C., (...), & Mukadam, N. (2020) Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. The Lancet. 396(10248), 413-446. doi:10.1016/S0140-6736(20)30367-6

HEARING LOSS INTERVENTION

Adults with hearing loss regularly wait up to ten years before seeking treatment[16]

Despite hearing loss being the third most prevalent chronic health condition for adults and the proven links to cognitive decline, isolation, depression, and increased health and social care needs, research shows that adults with hearing loss wait too long before seeking treatment.

Adults living with severe to profound hearing loss who use cochlear implants were found to have improved cognitive outcomes compared to those waiting to receive a cochlear implant[18]. It is believed that the outcomes are supported by a reduction in cognitive load, along with increased brain stimulation as people reengage in verbal communication across social connections or working environments[8]. Additional outcomes related to improved cognitive function and quality of life, as well as reduced depression, have also been reported[19].

The WHO recommends regular hearing screenings[20].

50+ years > hearing screening every 5 years

65+ years > hearing screening every 1-3 years[20]

COST EFFECTIVENESS OF COCHLEAR IMPLANTS

Conservative estimates suggest that regardless of national income settings, investment in cochlear implants delivers a positive return on investment ranging from 1.46-4.09 international dollars for every dollar invested[6].

The cost effectiveness of hearing inventions including cochlear implants for severe to profound hearing loss in children and adults is well documented[21-23]. Considering wider economic factors, the net cost saving to society for paediatric cochlear implantation is over $53,000 per child over a lifetime[24].

THE HEARING HEALTH FORUM'S RECOMMENDATIONS

Our members and partners call for the inclusion of the below policy recommendations to facilitate hearing loss prevention, diagnosis, treatment, and care:

- Raise awareness of the importance of hearing health, the impact of hearing loss, and the benefits of hearing loss treatment among the public and healthcare professionals.
- Promote the need for robust national hearing health strategies including diagnosis, rehabilitation, service, and maintenance.
- Introduce a national Over 55 Hearing Screening Programme.
- Acknowledge access to professional hearing care as a right.
- Promote access to effective treatments including hearing aids, bone conduction devices, and cochlear implants.
- Explore and invest in effective methods of prevention and rehabilitation for hearing loss.
- Share best practices among the EU Member States.

Further Hearing Health Forum EU topic papers can be found on hearinghealth.eu.
To discuss healthy ageing with regards to hearing loss in your country, get in touch via contact@hearinghealth.eu

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