

PRIORITISING HEARING HEALTH AND MENTAL WELL-BEING IN EUROPE'S AGEING POPULATION

In Europe, one third of people aged over 60 are living with a disabling hearing loss [1]. While the connection between ageing and hearing loss is well known, the associations between hearing loss and mental health conditions are not and are often not publicly or widely discussed.

This is despite the fact that mental health conditions such as depression are more than twice as common among people living with hearing loss compared to their hearing peers [2]. Studies also consistently report untreated hearing loss alongside higher rates of isolation and loneliness, as well as a lower quality of life [1, 3].

This has no doubt been exasperated by the COVID-19 pandemic.

With this in mind, we have brought together the latest research on these important topics to highlight their interconnectedness and call on policy makers to prioritise holistic hearing and mental health strategies.



WHAT IS MENTAL HEALTH?

According to GAMIAN-Europe, a leading mental health charity, "the term mental health refers to our emotional, psychological, and social wellbeing. It includes how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. We define good mental health as a state of wellbeing in which an individual is able to function in everyday life and is able to cope with normal life stressors."

(Nigel Olisa, Executive Director)



WHAT IS A DISABLING HEARING LOSS?

The World Health Organization states: "Disabling hearing loss refers to hearing loss greater than 35 decibels (dB) in the better hearing ear. Nearly 80% of people with disabling hearing loss live in low- and middle-income countries. The prevalence of hearing loss increases with age, among those older than 60 years, over 25% are affected by disabling hearing loss." [4]

UNTREATED HEARING LOSS AND MENTAL HEALTH

Following well documented peaks in mental ill-health during the COVID-19 pandemic, it is unsurprising that mental health has become a priority on the EU health agenda. Age UK [5] report that the proportion of people experiencing depression over 70 years has doubled since the start of the pandemic, and one in three (34%) older people stating that their anxiety has worsened over the same period.



**1/10
PEOPLE**

experience mental health challenges at any one time – in many cases hidden and untreated [6].

As a recognized comorbidity of hearing loss, mental ill-health among people with untreated hearing loss is a growing concern.

Poorer mental health, including stress and anxiety, depression, and behavioural and emotional disorders, is shown to be more prevalent among people living with hearing loss compared to those without [2] [7]. In fact, one study identified that hearing loss could increase the symptoms of anxiety and depression fourfold [3].



THE FACTS: HEARING LOSS IN EUROPE

- By 2050, 1 in 4 people are projected to have hearing loss, equivalent to 236 million Europeans [1]
- Less than 10% of those who could benefit from treatment for severe hearing loss receive it [8]
- In Europe, 10.9% of people aged 60-69 experience hearing loss. This prevalence reaches 42% of people aged 80-89 and more than 56% for the over 90 years old [1]

UNTREATED HEARING LOSS, SOCIAL ISOLATION AND LONELINESS

Individuals who self-report as feeling isolated or lonely face an increased risk of mental health conditions, as well as physical diseases such as stroke, cardiovascular disease, diabetes, and dementia [9-11]. According to the WHO, social isolation and loneliness also shorten the lives of older people, and affect quality of life [12].



**BETWEEN
20-34%**

of older people across 25 European countries have reported feeling lonely [13].

Those who live with a disability or sensory impairment such as hearing loss are at greater risk [9, 10].

“Social isolation and loneliness due to hearing loss can have important implications for the psychosocial and cognitive health of older adults. Lack of engagement and feeling lonely may mediate the pathway linking hearing loss and cognitive decline. Furthermore, both can contribute to worsened mental health, leading to experience of depression and distress.” [1]

Reports of fragmented communication due to hearing loss, the inability to fully participate in conversation, and social withdrawal are cited as factors that lead to increased social isolation in adults with hearing loss [2, 14]. The odds of experiencing loneliness was 2.2 times higher among older adults living with hearing loss compared to hearing peers, a study revealed [14].

TREATING HEARING LOSS POSITIVELY IMPACTS MENTAL HEALTH AND SOCIAL ISOLATION

Left untreated, hearing loss continues to contribute to social withdrawal, loneliness and depression. However, studies measuring the effect of cost-effective hearing interventions such as hearing aids and cochlear implants show significant benefits connected to mental well-being.

Following cochlear implantation, most patients report a significant increase in quality of life. This includes improved communication and social engagement as well as positive emotional, psychological, mental health and physical well-being. [15-18]. For older adults with severe hearing loss, cochlear implants are also shown to significantly reduce depressive symptoms at 6 and 12 months after treatment [19].

Research with hearing aids has demonstrated a positive effect on social, emotional and psychosocial functioning as well as symptoms of depression [20],[7].

THE ECONOMIC IMPACT OF HEARING LOSS AND MENTAL HEALTH

Untreated hearing loss and associated comorbidities such as mental health and social isolation place additional pressure on healthcare systems and are costly to the European economy. Hearing loss alone leads to an estimated cost of €213 billion each year to the EU and United Kingdom [21]. This stands at €45 billion more than the total EU budget in 2020 [22].

Considering additional costs of associated comorbidities, this sum increases further. According to the European Commission, mental ill health has a total cost of over 600 billion – or more than 4% of GDP – across the 27 EU countries and the UK [23] In the UK alone, a study estimated that loneliness resulted in additional health and social care costs of £11,725 per person over 15 years [24].



SPEND TO SAVE

- € Integrated hearing care can deliver a return of \$16 international dollars for \$1 invested [1]
- € In lower-middle-income settings, every international dollar invested in newborn hearing screening generates a return of \$1.67 international dollars [1]
- € Every international dollar invested in hearing screening for the over 50s generates \$1.62 international dollars in high-income settings [1]
- € Cochlear implants deliver a positive return on investment ranging from \$1.46-4.09 international dollars [1]

TAKING ACTION FOR HEARING HEALTH

To promote active and healthy ageing, European policymakers must advocate for an EU-wide Action Strategy that tackles hearing loss and its associated comorbidities, whilst also implementing aligned national health plans.

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 **Newborn Hearing Screening Programme** and **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 EU Member States.

To discuss hearing loss and mental health in your country, contact Hearing Health Forum EU at contact@hearinghealth.eu

REFERENCES:

1. World Health Organization, World Report on Hearing. 2021: Geneva.
2. EU, H.H.F., An Inclusive Approach to Europe's Hearing Health Challenges. 2019.
3. Blazer, D.G., Hearing Loss: The Silent Risk for Psychiatric Disorders in Late Life. *Clin Geriatr Med*, 2020. 36(2): p. 201-209.
4. World Health Organization, Deafness and Hearing Loss, in WHO Key Facts. 2020, World Health Organization.
5. AgeUK, The impact of COVID-19 to date on older people's mental and physical health. Age UK.
6. Group, W.B. and W.H. Organization, Out of the Shadows: Making Mental Health a Global Development Priority. 2016, World Bank Group and World Health Organization.
7. Jiang, F., et al., The relationship between mental health conditions and hearing loss in low- and middle-income countries. *Trop Med Int Health*, 2020. 25(6): p. 646-659.
8. D'Haese, P.S.C., et al., Severe Hearing Loss in the Aging Population Poses a Global Public Health Challenge. How Can We Better Realize the Benefits of Cochlear Implantation to Mitigate This Crisis? *Front Public Health*, 2019. 7: p. 227.
9. Cotterell, N., T. Buffel, and C. Phillipson, Preventing social isolation in older people. *Maturitas*, 2018. 113: p. 80-84.
10. National Academies of Sciences, E., and Medicine, et al., Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System. 2020.
11. Livingston, G., et al., Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *Lancet*, 2020. 396(10248): p. 413-446.
12. Organization, W.H., Social isolation and loneliness among older people: advocacy brief. 2021, World Health Organization.
13. Yang, K. and C. Victor, Age and loneliness in 25 European nations. *Ageing and Society*, 2011. 31.
14. Shukla, A., et al., Hearing Loss, Loneliness, and Social Isolation: A Systematic Review. *Otolaryngol Head Neck Surg*, 2020. 162(5): p. 622-633.
15. Crowson, M.G., et al., Quality of Life and Cost-Effectiveness of Cochlear Implants: A Narrative Review. *Audiol Neurootol*, 2017. 22(4-5): p. 236-258.
16. McRackan, T.R., et al., Meta-analysis of Cochlear Implantation Outcomes Evaluated With General Health-related Patient-reported Outcome Measures. *Otol Neurotol*, 2018. 39(1): p. 29-36.
17. Francis, H.W., et al., Impact of cochlear implants on the functional health status of older adults. *Laryngoscope*, 2002. 112(8 Pt 1): p. 1482-8.
18. Olze, H., et al., Rapid Positive Influence of Cochlear Implantation on the Quality of Life in Adults 70 Years and Older. *Audiol Neurootol*, 2016. 21 Suppl 1: p. 43-47.
19. Choi, J.S., et al., Association of Using Hearing Aids or Cochlear Implants With Changes in Depressive Symptoms in Older Adults. *JAMA Otolaryngol Head Neck Surg*, 2016. 142(7): p. 652-7.
20. Mulrow, C.D., et al., Quality-of-life changes and hearing impairment. A randomized trial. *Ann Intern Med*, 1990. 113(3): p. 188-94.
21. Shield, B., Hearing Loss - Numbers and Costs: Evaluation of the social and economic costs of hearing impairment. *Hear-IT AISBL*, 2019.
22. Union, C.o.t.E. EU budget for 2020. [Website] 2020 11/09/2020 [cited 2020 12/02/2021]; Available from: <https://www.consilium.europa.eu/en/policies/the-eu-budget/eu-annual-budget/2020-budget/>
23. Union, O.E., Health at a Glance: Europe 2018: State of Health in the EU Cycle. 2018: OECD Publishing, Paris/ European Union, Brussels,.
24. Fulton, L. and B. Jupp, Investing to tackle loneliness: a discussion paper. *Social Finance*, 2015.