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Landmark consensus on treating adult hearing loss with a cochlear implant published by new alliance of international hearing experts

- World-first consensus published today in *JAMA Otolaryngol Head Neck Surgery* recommends 'international standard of care for cochlear implantation', including diagnosis, referral, treatment and aftercare for adults living with severe to profound sensorineural hearing loss[1]
- New global alliance of 31 ear nose and throat surgeons and audiologists, and seven hearing organisations calls for improved standards in adult hearing care
- Landmark consensus provides optimism for up to 53 million people worldwide living with the severe to profound hearing loss[2] and clear guidance for hearing health professionals[1]

Chicago, USA – 27.08.2020: The first ever global consensus on the use of cochlear implants for the management of adults living with hearing loss was published today in *JAMA Otolaryngol Head Neck Surgery.*[1] The paper was authored by a new alliance, including 31 hearing experts from surgical and audiology backgrounds, and seven representatives from patient and professional societies representing more than 13 countries.[1]

According to Professor Thomas Lenarz, Co-Chair of the Steering Committee and Head of Laryngology, Rhinology and Otology Clinic, Hannover Medical School, Germany, the consensus paper is a major landmark in the treatment of hearing loss.

"Before now, there has never been an international agreement on the best way to diagnose and treat severe to profound hearing loss in adults," Professor Lenarz said. "This paper outlines the first ever global consensus on how we can optimise care for adults with severe to profound hearing loss. The recommendations for surgeons, audiology experts and healthcare providers are crystal clear."

The consensus paper included 20 statements covering seven categories for adults with severe, profound, or moderate sloping to profound hearing loss in both ears. Each statement was agreed upon by the panel members following consultation with a Consumer and Professional Advocacy Committee (CAPAC). Categories included:

1. Level of awareness of cochlear implants
2. Best practice clinical pathway for diagnosis
3. Best practice guidelines for surgery
4. Clinical effectiveness of cochlear implants
5. Factors associated with post-implantation outcomes
6. The relationship between hearing loss and depression, cognition and dementia
7. Cost implications of cochlear implants.

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Professor Lenarz added, "these recommendations could eventually be developed into clinical practice guidelines. Such guidelines could increase access to cochlear implants worldwide, address disparities in care and lead to improved hearing and quality of life in adults living with hearing loss who are eligible for a cochlear implant."

Co-Chairs of the CAPAC, Ms Barbara Kelley, Executive Director of Hearing Loss Association of America, and Dr Harald Seidler, Former President of the German Hard of Hearing Association (1996-2019) and cochlear implant user, praised the potential for the consensus paper to help adults living with hearing loss.

"Hearing loss globally is under-recognised. Millions of people worldwide could benefit from the use of a life-changing hearing device, such as a cochlear implant. However, due to low awareness and inconsistent standards, up to 95 per cent of adults could be missing out on life-changing technology," said Ms Kelley.

"This is the first ever international partnership dedicated specifically to improving care for adults who could benefit from a cochlear implant. The expert knowledge of surgeons and audiologists, combined with the voices of adults living with hearing loss, will go a long way to helping people to better hearing and quality of life outcomes," added Dr Seidler.

In many countries, adults do not have their hearing assessed as part of regular health check-ups. Of those who receive hearing checks and are diagnosed with severe to profound hearing loss*, few are referred to a hearing specialist to examine whether an implantable hearing device could be the most beneficial treatment option.[3,4]

While cochlear implants are an effective medical treatment for many adults living with severe to profound sensorineural hearing loss[5], conservative estimates suggest that no more than 1 in 20 adults who could benefit from a cochlear implant have one.[6,7]

Professor Lenarz concluded, "This consensus paper could be a tipping point. However, there is much more we need to work on to ensure that adults receive the best care for their hearing loss. It's up to surgeons, audiology experts, primary care professionals and healthcare organisations to work together and make these standards a reality."

To view the consensus paper, including the full methodology and consensus statements, click here https://jamanetwork.com/journals/jamaotolaryngology/article-abstract/2769941

About the consensus process[1]

The consensus process was initiated by a systematic review to identify relevant studies in the subject area. These were used to inform the development of evidence-based draft consensus statements. The draft statements then entered the Delphi voting process, which involved three anonymous voting rounds.

All members of the steering committee and the Delphi consensus panel, except the Chair, were able to vote in the consensus process. Voting on the draft consensus statements took place over three rounds. At each voting round, the statements were voted on anonymously using an online

questionnaire. Consensus was defined as agreement by a least 75 percent of respondents. During this process, all panel members had access to a report of the evidence from a systematic literature review, including the results of the quality assessment of included studies.

About the authors

The Delphi consensus process on unilateral cochlear implantation in adults with bilateral severe, profound, or moderate sloping to profound sensorineural hearing loss was guided by a non-voting Chair, Dr Craig Buchman, Head of Otolaryngology – Head & Neck Surgery, Washington University School of Medicine, St Louis, U.S. The Chair was supported by four steering committee members who were able to vote: Professor René Gifford, Vanderbilt University, Nashville, U.S.; Dr David Haynes, Vanderbilt University, Nashville, U.S.; Professor Thomas Lenarz, Hannover Medical School, Germany and Professor Gerard O'Donoghue, University of Nottingham, UK.

The Delphi panel comprised an additional 26 experts in the field of cochlear implant use, including audiologists and ear, nose and throat specialists from across 13 countries.

In addition, a Consumer and Professional Advocacy Committee (CAPAC) of international cochlear implant user and professional advocacy organisations was involved in the development of the consensus statements.

*Hearing loss severe enough to have great difficulty hearing and taking part in conversations in noisy environments.

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