

Cochlear Implant Advocacy: Implications of the World Report on Hearing, 2021

“Cochlear implant is one of the most successful of all neural prostheses developed to date.”
(WRH, page 100)

“Hearing technology, such as hearing aids and cochlear implants are effective and cost-effective and can benefit children and adults alike”
(WRH, Executive Summary, page 6)

The World Report on Hearing (WRH) 2021, provides a great resource for increased advocacy activities for Ear and Hearing Care, including cochlear implantation, and provides evidence for:

The global and personal impact of hearing loss and deafness

“If unaddressed, hearing loss can negatively impact many aspects of life: communication; the development of language and speech in children; cognition; education; employment, mental health; and interpersonal relationships.” (WRH, page 10)

“Language is essential not only as a means for communication, but also as contributor for cognitive development, a tool for education, and the basis for social relationships.” (WRH, page 45)

“When deaf infants are unable to access language stimulation early in life, it poses a challenge for their overall development.” (WRH, page 45)

“Hearing loss is the largest potentially modifiable risk factor for age-related dementia.” (WRH, page 46)

“Overall, adults with hearing loss have increased odds of unemployment or underemployment.” (WRH, page 46)

“People with hearing loss commonly have higher rates of depression and report lower quality of life compared with their hearing peers.” (WRH, page 47)

In 2019 age-related hearing loss was the third largest source of global Years Lived with Disability and the leading cause for adults older than 70 years of age.

For tackling stigma around hearing loss:

“Raising awareness on hearing loss and reducing associated stigma through:

- *communication campaigns that provide accurate and accessible information.*
- *strengthening associations of people with hearing loss.” (WRH, page 181)*

The financial impact of hearing loss and deafness to society and individual

“Unaddressed, hearing loss imposes a global cost of more than \$ 980 billion annually.” (WRH, page 1)
Including health, education, lost productivity and societal costs.

The effectiveness, including cost-effectiveness, of today’s hearing technologies, including specifically cochlear implants

“Cochlear implants are electronic devices, especially useful when a conventional hearing aid has little or no benefit or cannot be used.” (WRH, page 98)

“In children, timely intervention with hearing aids and implants leads to better hearing, spoken communication and quality of life, which further translates into better educational outcomes.” (WRH, page 103)

“In adults, the use of hearing aids and cochlear implants improves listening abilities and quality of life.” (WRH, page 103.)

WHO shows that for every dollar invested there is a return of 2.59 dollars using international dollars for high income settings and 1.46 for lower-middle income settings.

The variability in access to cochlear implantation and rehabilitation, in spite of proven effectiveness:

“With cochlear implants, there is limited research and data on access and factors limiting their use (41). However, as with hearing aids, issues such as high costs, and shortages of trained workforce and rehabilitation services, have resulted in their restricted accessibility to countries other than those in high-income groups – with considerable variation even within these.” (WRH, page 179)

The evidence for screening programmes in adults and children, to ensure early intervention and early CI

“There is ample evidence to demonstrate that children benefit significantly when newborn hearing screening is coupled with early intervention programmes, ... and that effectiveness increases the earlier the child (and family) is identified and rehabilitation starts.” (WRH, page 85)

It is essential to provide active screening services for older adults in an easy and accessible manner, followed by suitable interventions.” (WRH, page 90)

Advocates should routinely point to the cost benefits for health systems where there is a benefit of 6.53 International dollars for every 1 dollar invested in hearing screening in newborns

Advocates should routinely point to the cost benefits for health systems of 1.62 International dollars for every 1 dollar invested in hearing screening in high income settings as well as improvements in life chances and quality of life for adults of screening.

The importance of rehabilitation for both adults and children to ensure maximum effectiveness of cochlear implantation

“Rehabilitative therapy is essential to ensure that people benefit from the use of their hearing aids and implants. Such rehabilitation improves the acceptability, effectiveness and cost-effectiveness of these devices.” (WRH, page 111)

The Report also makes clear that cochlear implantation must only take place “where the supportive infrastructure for rehabilitation therapy exists.” (WRH, page 100)

Cochlear implant provision should be part of the people-centred approach to Ear and Hearing Care

Moving towards people-centred care means: *“ People in communities are viewed as partners in shaping both health policy and the services to be delivered through health systems.” (WRH, page 226)*

WHO also suggests that users need to be included in the development and design of technologies such as cochlear implants by ensuring:

“Research and innovation in design and delivery of hearing aids and cochlear implants to suit the unique requirements of countries, as well as development of user-driven hearing technologies that reflect the diverse needs of individuals with hearing loss.” (WRH, page 181)

The need to drive down costs of CI and rehabilitation in innovative ways

“Reducing costs by adopting measures such as waving import duties or taxes; pooled procurement; use of solar-powered batteries and locally-sourced materials; and innovative reimbursement schemes.” (WRH, page 181)

The use of telehealth in the delivery of services.

The need to integrate hearing health care costs into government health care/ insurance plans

“Annually, US\$ 1.33 per capita additional investment is required into the health system to scale up the identification, treatment, and rehabilitation of ear and hearing problems. Over a 10-year period, this promises a return (or gain) of nearly US\$ 16 for every 1 dollar invested.” (WRH, page 215)

“Cochlear implants should be included as priority assistive products made available as part of government-led services, and their use promoted.” (WRH, page 181)

“Tailored communication and advocacy can be effective drivers for policy formulation. Such advocacy has to be undertaken at global, regional and national levels and be based on facts and figures supported by evidence.” (WRH, page 186)

CIICA is led by users and family groups, working closely with professional organisations, experts in the field of CI and other stakeholders to increase access to cochlear implantation and lifelong support for those who could benefit from them. The World Report on Hearing supports this agenda.

World Report on Hearing 2021 is at: www.who.int/publications/i/item/world-report-on-hearing

We have put the relevant page numbers of the report: if you go to the report you will be able to find the evidence on which these points in the report are based.

This paper supported by grant from Cochlear.

The work is the responsibility of the authors:
Sue Archbold PhD, Brian Lamb MSc



www.ciicanet.org