STRATEGIES TO IMPROVE ACCESS OF HEARING HEALTH CARE AND ASSISTIVE TECHNOLOGIES

ROUND TABLE

- Moderator: B. FRAYSSE
- Panelists: S. ARCHBOLD
  A. AL SHAIKH
  F. ALZOUBI
  M. LAUREYNS
  M. KAMESWARAN

DUBAI
March 2019, 28-29-30
Hearing loss is one of the major problems in public health due to:

- Prévalence
  - The rankings of Y.L.D. due to hearing loss change from 11th in 2010 to 4th in 2015

- Consequences
  - Neurocognitive function in adult and children

- Cost

[Image of World Health Organization logo]
PREVALENCE EURO TRACK 2018

6 millions

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9.7 %</td>
</tr>
<tr>
<td>Total 18+</td>
<td>11.6 %</td>
</tr>
<tr>
<td>74+</td>
<td>19.2 %</td>
</tr>
<tr>
<td>65-74</td>
<td>11.5 %</td>
</tr>
<tr>
<td>55-64</td>
<td>6.8 %</td>
</tr>
<tr>
<td>45-54</td>
<td>6.2 %</td>
</tr>
<tr>
<td>35-44</td>
<td>3.6 %</td>
</tr>
<tr>
<td>25-34</td>
<td>3.6 %</td>
</tr>
<tr>
<td>15-24</td>
<td>3.6 %</td>
</tr>
<tr>
<td>&lt;=14</td>
<td>2.4 %</td>
</tr>
</tbody>
</table>

BIAP

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage</th>
<th>Loudness Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>20%</td>
<td>21 – 40 dB</td>
</tr>
<tr>
<td>Moderate</td>
<td>55%</td>
<td>41 – 70 dB</td>
</tr>
<tr>
<td>Severe</td>
<td>22%</td>
<td>71 – 90 dB</td>
</tr>
<tr>
<td>Profond</td>
<td>3%</td>
<td>&gt; 91 dB</td>
</tr>
</tbody>
</table>
Complex cases would require hearing health professional constitute less than 15%.
How much priority hearing loss is in your country and did you have a National strategic plan?
What are the barriers for early identification and prevention and how this barriers can be overcome?

- In newborn screening
- Adolescent *(make listening safe)*
- Adult hearing screening
WHO PROGRAMME FOR EAR AND HEARING CARE
WHO STRATEGIC AREAS OF WORK FOR 2018-2021

- Undertake effective evidence-based advocacy for prioritization of ear and hearing care
- Gather and collate data to drive action for hearing loss
- Support strategy development and implementation in WHO Member States.
- Develop and promote the ‘Make Listening Safe’ initiative
Adult Hearing Screening: Can we afford to wait any longer?

Brian Lamb OBE, Sue Archbold PhD

Report and research supported by a grant from Advanced Bionics. The report is the work of the authors.
ACCESS TO HEARING REHABILITATION

- Medical and surgical management
- Hearing devices and auditory implant
- Sign language and speech therapist
Human resources

Accessibility

Based evidence

Cost/effectiveness
President Trump Signs OTC Hearing Aid Legislation into Law

Published on August 19, 2017

On Friday, President Donald Trump signed into law the Food and Drug Administration Reauthorization Act of 2017, legislation that includes the Over the Counter Hearing Aid Act designed to provide greater public accessibility and affordability of OTC hearing aids.

The OTC Hearing Aid Act is designed to enable adults with perceived mild-to-moderate hearing loss to access OTC hearing aids without being seen by a hearing care professional. The new law, which was introduced in March by Senators Elizabeth Warren (D-Mass) and Chuck Grassley (R-Iowa), was passed by the US House on July 13 and the US Senate on August 2. It also comes on the heels of the elimination of the “hearing examiner” system which had required consumers first to seek a physician for a medical evaluation or sign a waiver prior to obtaining a hearing aid.

The new legislation will require the FDA to create and regulate a category of OTC hearing aids to ensure they meet the same high standards for safety, consumer labeling, and manufacturing protection that all other medical devices must meet. It mandates the FDA to establish an OTC hearing aid category for adults with “perceived” mild-to-moderate hearing loss within 3 years.
To inform primary care physicians and patients to a new generation of self-fit hearing aid between $200 and $400

<table>
<thead>
<tr>
<th>Bean T-Coil</th>
<th>CS-50+</th>
<th>Tweak Focus</th>
<th>Soundhawk</th>
<th>Songbird</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>$349/each; $599/pair</td>
<td>$349</td>
<td>$224.99</td>
<td>$349.99</td>
</tr>
</tbody>
</table>
Preferred profile for hearing-aid technology suitable for low- and middle-income countries
This recommendation has been given for hearing loss in the range 31 to 80 dBHL in better ear (frequencies 500Hz to 4 KHz)

- Digital technology
- Behind the ear
- Gain 42/70dB
- Frequency response 200 to 4000Hz
- Self fitted
- Long battery life
Supporting GP engagement in primary care to manage hearing loss in adults
Pathway redesign in audiology services using telepractice
Model of service delivery:
- Hearing screening
- Teleotoscopy
- Hearing aid fittings
- Remote cochlear implant
- Rehabilitation and remediation
Ms. Agnes Buzin, French Minister of Health
ACCESS TO HEARING AID

- United States: 30%
- Europe: 29%
- France: 41% (EuroTrak 2018) 2015: 34% 2009: 30%

Countries:
- Danemark
- France
- U.K.
- U.S.A.
- Europe
- Grèce
- Roumanie
Advocacy: 100%
Medical education: 79%
Quality of prescription: 58%
Hearing aid dealer: 48%
Positive advice: 44%
Buy an hearing aid: 41%
Access and affordability of cochlear implant
COST UTILITY (DALY/QALY vs GDP)

- DALY: Disability Adjusted Life Years
- QALY: Quality Adjusted Life Years
- GDP: Gross Domestic Product

- 3 x GDP per capita: Too expensive
- 2 x GDP per capita: Acceptable
- 1 x GDP per capita: Efficient
GDP Matters: Cost Effectiveness of Cochlear Implantation and Deaf Education in Sub-Saharan Africa

*†Susan D. Emmett, ‡Debara L. Tucci, §Magteld Smith, ||Isaac M. Macharia,
||Serah N. Ndegwa, ¶Doreen Nakku, **Mukara B. Kaitesi, ††Titus S. Ibekwe,
‡‡Wakisa Mulwafu, †Wenfeng Gong, *Howard W. Francis,
and §§James E. Saunders

![Graph showing CER/GDP vs. Device Cost (USD) for various countries, with the WHO threshold for cost effectiveness indicated.]
How can improve this mission in education taking in account the diversity of practice around the world?
Thank you for your attention