HEARING DOMAIN

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• Hearing is a sense that includes a number of specific functions – perception of loudness, pitch, discrimination of speech signals, and localization of sounds.
• Hearing is not a simple sensory function and a hearing loss is not easily rectified by the use of a hearing aid.
• Hearing is a body function classified under ICF
Questions tested

• Difficulty hearing with use of hearing aid
• Use of a hearing aid
• Hearing in noise
• Hearing in quiet
Conclusions from cognitive test results

• The first question was kept unchanged as it forms part of the WG Short Set of questions.
• The questions on use and frequency of use of a hearing aid were left unchanged.
• The two questions on hearing in noise and in quiet were reversed starting with ‘hearing in a quiet room’.
Field test questions

- **HEAR_SS** Do you have difficulty hearing, even when using a hearing aid? - *no difficulty, some difficulty, a lot of difficulty, cannot do at all*

- **HEAR_1** Do you use a hearing aid? – *yes, no, refused, don’t know*

- **HEAR_2** How often do you use your hearing aid(s)? - *all of the time, some of the time, rarely, never, refused, don’t know*
Field test questions

- HEAR_3 Do you have difficulty hearing what is said in a conversation with one other person in a quiet room [even when wearing your hearing aid(s)]? - no difficulty, some difficulty, a lot of difficulty, cannot do at all

- HEAR_4 Do you have difficulty hearing what is said in a conversation with one other person in a noisier room [even when wearing your hearing aid(s)]? - no difficulty, some difficulty, a lot of difficulty, cannot do at all
Field test questions

- HEAR_5 How old were you when the difficulty hearing began? - age in years, refused, don’t know

- HEAR_6 How much does your difficulty hearing limit your ability to carry out daily activities? - not at all, a little, a lot, completely, refused, don’t know
Field test results

HEAR_SS Across pilot test countries 90 percent of respondents reported “no difficulty” in hearing, Cambodia and Kazakhstan showed the lowest rate of “no difficulty” 87 percent.

Very few respondents use a hearing aid – 35 in total across all countries. Only 7 respondents reported using their hearing aid all the time, and 13 using it some of the time. A further 8 respondents rarely or never used their hearing aid.
Hear in quiet by HEAR_SS

### Table: Hear in quiet room (HEAR_3)

<table>
<thead>
<tr>
<th>HEAR_SS</th>
<th>no diff</th>
<th>some diff</th>
<th>a lot of diff</th>
<th>cannot do at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>no diff</td>
<td>5543</td>
<td>94</td>
<td>5</td>
<td>16</td>
<td>5658</td>
</tr>
<tr>
<td>some diff</td>
<td>272</td>
<td>246</td>
<td>11</td>
<td>0</td>
<td>530</td>
</tr>
<tr>
<td>a lot of diff</td>
<td>17</td>
<td>30</td>
<td>43</td>
<td>0</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>5833</td>
<td>373</td>
<td>59</td>
<td>16</td>
<td>6283</td>
</tr>
</tbody>
</table>

- More people have difficulty on HEAR_SS than in quiet (289 missed by quiet Q)
- 115 missed on HEAR_SS: hearing aid clause?
- 21 respondents with no diff on HEAR_SS but a ‘lot of diff’ and ‘cannot do’ on hear in quiet.
### Hear in noise by HEAR_SS

<table>
<thead>
<tr>
<th>HEAR_SS</th>
<th>no diff</th>
<th>some diff</th>
<th>a lot of diff</th>
<th>cannot do at all</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>no diff</td>
<td>5255</td>
<td>341</td>
<td>40</td>
<td>5</td>
<td>5648</td>
</tr>
<tr>
<td>some diff</td>
<td>64</td>
<td>357</td>
<td>99</td>
<td>9</td>
<td>529</td>
</tr>
<tr>
<td>a lot of diff</td>
<td>1</td>
<td>14</td>
<td>62</td>
<td>13</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>5321</td>
<td>714</td>
<td>203</td>
<td>27</td>
<td>6272</td>
</tr>
</tbody>
</table>

- Hear in noise picks up more people (386 people missed by HEAR_SS)
- 65 people missed on hearing in noise that are picked up by HEAR_SS (other aspects of hearing – e.g. tinnitus)
Impact of age on hearing difficulties

Age categorised

- HEAR_SS
- hear quiet
- hear noise

- 0-16 yrs
- 17-59 yrs
- 60-79 yrs
- 80+ yrs

- no diff
- some diff
- a lot of diff

0%
20%
40%
60%
80%
100%
120%
### Impact of hearing difficulty on daily activities

<table>
<thead>
<tr>
<th>HEAR_SS</th>
<th>not at all</th>
<th>a little</th>
<th>a lot</th>
<th>completely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>no diff</td>
<td>229</td>
<td>151</td>
<td>10</td>
<td>1</td>
<td>391</td>
</tr>
<tr>
<td>some diff</td>
<td>214</td>
<td>278</td>
<td>31</td>
<td>4</td>
<td>527</td>
</tr>
<tr>
<td>a lot of diff</td>
<td>18</td>
<td>27</td>
<td>41</td>
<td>3</td>
<td>89</td>
</tr>
<tr>
<td>cannot do at all</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>463</strong></td>
<td><strong>460</strong></td>
<td><strong>90</strong></td>
<td><strong>12</strong></td>
<td><strong>1025</strong></td>
</tr>
</tbody>
</table>

- No and some difficulty on SS = no impact
- A lot of diff --> no impact = ? Effect of noise (false positives?)
- 162 have an impact but no diff on HEAR_SS – Impact of other domain difficulties?
- Cannot do + a little impact = Deaf people?
Main findings for Hearing

• Intent of questions are understood
• Hearing in noise is more difficult activity than hearing in quiet
• HEAR_SS is somewhere in between
• Some but relatively small confusion with hearing aid clause
• No major differences between countries of the pilot testing
Recommendation

• Retain the three questions, but possibly change the order where the question about using a hearing aid is asked as the first question

• The revised extended set of questions for hearing include two options
Proposed extended set for hearing: Option 1

- HEAR_1  Do you use a hearing aid? *(If yes, use h/aid clause in subsequent questions)*

- HEAR_2  How often do you use your hearing aid(s)?

- HEAR_SS  Do you have difficulty hearing [even when wearing your hearing aid]?
Proposed extended set for hearing: Option 1

- HEAR_3  Do you have difficulty hearing what is said in a conversation with one other person in a quiet room [even when wearing your hearing aid(s)]?

- HEAR_4  Do you have difficulty hearing what is said in a conversation with one other person in a noisier room [even when wearing your hearing aid(s)]?
Proposed extended set for hearing: Option 2

- **HEAR_1**  Do you use a hearing aid? *(If yes, use h/aid clause in HEAR_SS)*

- **HEAR_2**  How often do you use your hearing aid(s)?

- **HEAR_SS**  Do you have difficulty hearing [even when wearing your hearing aid]?
THANK YOU FOR YOUR ATTENTION

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