Hearing Screening in Europe

France

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Association

FrancePresbyacousie
Hearing Screening in Europe
France

• Our organization: Association FrancePresbyacousie
• Our field: Seniors’ physiological deafness: i.e. presbyacusis
• Our approach: Hearing screening

• Our 1st campaign: l’Audiobus
• Our 2nd campaign: Phone-based Hearing Screening test
Presbyacusis affects 2 Functions: Hearing AND Understanding

- **Hearing disfunctioning:**
  - Alteration of hearing threshold
  - Reduced hearing-range
  - Reduced frequency discrimination

- **Consequences:**
  - Alteration of speech understanding
  - Delayed information processing
  - Difficulties for sound localization
  - ...

- **The overall consequence = Reduced communication with psychological side effects...**
Hearing Screening for Adults: Why?, Why not? Principles and reality

**Screening principles**: Medical screening is seeking for a disease or a risk factor for someone who does not complain of specific symptoms.

**Interests:**
- Highlight a risk factor can fix it to avoid the occurrence of a disease.
- Treat at an early stage disease.
- Treat the disease before consequences occur.

**In practice:**
- Selecting the item to be screened: its economical weight, the possibility of a change of practice, the knowledge base.
- The disease should be quite frequent. Indeed, tracing a rare disease would conduct to review too many people, would be very expensive for the final benefit of only few patients.
- The disease must be quite serious. Testing for benign disease has little interest, on an economical point of view.
Hearing Screening for Adults: Why?, Why not?

- No systematic prevention for Presbyacusis
- No targeted screening for elderly populations

**WHY NOT?**
- No evidence that revealing this pathology would cut in health costs
  - Obviously: providing hearing aids to 2/3 of French senior population would be very expensive.

**BUT**
- Deafness has a huge social cost:
  - Withdrawal from family and society
  - Loss of social links leads to exclusion
  - Loss of sensory stimulation may induce: depression and other pathologies at high medical cost (studies by Hear-it: "Evaluation of the Social and Economic Costs of Hearing Impairment", October 2006, Hear-it AISBL)

• GOALS: to set up targeted actions:
  – Developing early intervention methods so as to prevent or to delay diseases and disabilities

• To keep and to encourage socialization among the elderly
  – The improvement of the seniors’ quality of life is a societal challenge which justifies the setting up of strategies of prevention, screenings, and training for professionals.

• TARGET POPULATIONS: (retired) seniors, 50 -70 year old
France Presbyacousie
Non-profitable Association Loi 1901

Our association...

- To increase public awareness of presbyacusis
- To inform of potential consequences in social life.
- To expose the rehabilitation solutions

Meeting hearing-impaired people, face to face
“Drawing” a cartography (with bias) of hearing-impairment in France: L’Audiobus

- 2009
Reach as many people as possible:
Phone-based Hearing-screening test campaign
Our Partners and Sponsors

manufacturers, hearing dispensers, mutual insurance company

- Amplifon
- Audio 2000
- Audition Conseil
- Audio-infos
- EHIMA
- Médéric
- GN Resound (Resound, Beltone)
- Siemens Audiologie
- Sonova France (Phonak, Unitron)
- Starkey France
- Prodition (Oticon, Bernafon)
- Widex France
- ....
2005-2008 L’Audiobus

- 55 locations
- more than 6000 visitors
- Studies on
  - mean age,
  - precarity,
  - correlation between depression and hearing losses
- among seniors 55 year and older

- Locations do not reach all
- Heavy overhead= # 6 000 € / location

http://www.audiobus.fr/
Hearing screening test: the setting up

- In Europe: logical continuation of the HearCom project and the Audiobus campaign

- To get faster to a bigger audience.

- To increase public awareness of the hearing test benefits

- To reassure

- To offer a confidential, rapid, reliable test.

- To show the 1st symptom of presbyacusis: difficulty to understand speech in noise

- To participate to the 2007-2009 « Ageing Well Program »
Technical Means

- Phone-based Speech Audiometry
  - Signal/noise Ratio
  - Calibrated, reliable, validated

Test Technical Aspects

developed by K.U.Leuven and Hörtech in the frame of the HearCom FP6 project

• Mixing levels (noise + speech) from -12 dB to +2 dB i.e. for the bounds: 12dB more for noise and 2dB more for speech. Normal hearing is said to understand speech with a – 10dB SNR.
• 27 presentations of triplets ....5 1 6....
• The assessment is based on the determination of a threshold: average value of SNR of the last 22 triplets understood (calibration+++)
Media Campaign

- Naming: « HEIN? »
- “Quirky” Campaign, humor
- 2009 February 13th: « teasing » day on TV
- 47 spots on FR2, FR3, FR5. Unveiling of the phone number
- Website opening www.hein-test.fr
- Media Campaign: professional, senior, local and regional newspapers.
Conclusion: Expected Benefits

Data from the screening:

• Limits = recruitment bias, no hint about pathology, Age and gender are known.

• Caller’s interest: to know if his/her hearing is “all in all normal”

• Public Health Interest:
  – Awareness
  – Prevention
  – 12% less specialist’s consultations (estimate)

• European pooling:
  – Equivalent test distributed in several countries.
  – Opportunity to compare populations