

Getting the numbers right on Hearing Loss Hearing Care and Hearing Aid Use in Europe

A Europe Wide Strategy

Joint AEA, EFHOH, EHIMA report

June 2020 (edition)

“Getting the numbers right on Hearing Loss, Hearing Care and Hearing Aid Use in Europe”

Joint AEA_EFHOH_EHIMA report

Mark Laureyns*, Nikolai Bisgaard***, Marcel Bobeldijk** and Stefan Zimmer***.

AEA (European Association of Hearing Aid Professionals), **EFHOH (European Federation of Hard of Hearing People), *EHIMA (European Hearing Instrument Manufacturers Association).*

The European Associations for **Hard of Hearing People (EFHOH)**, **Hearing Aid Professionals (AEA)** and **Hearing Instrument Manufacturers (EHIMA)** join forces in this article to “Get the numbers right”.

When discussing the number of people with hearing loss, the impact of professional hearing care and the usage of hearing aids, there are numerous definitions used, which makes comparisons between reports very difficult. **Hard of hearing people are not likely to look for professional help, if they do not perceive to have any hearing problems.** Choi JE, et al.2019, used data from the fifth Korea National Health and Nutrition Examination Survey (KHANES) to investigate discrepancies between self-reported hearing difficulty and audiometrically measured hearing loss. The study shows self-reporting as being an effective measure of the true numbers of people with disabling hearing loss. The authors conclude that also age, tinnitus, occupational noise exposure, hypertension and depression should be incorporated into the evaluation of hearing loss in clinical practice.

In EuroTrak, all participants are asked whether they experience any hearing difficulties. If they confirm they have hearing difficulties, they are identified as people with self-reported hearing loss. If they answer positively, they will be administered more detailed questions such as:

- Do you experience hearing difficulties in one ear or both ears?
- How would you describe the degree of your hearing difficulty? (Mild, Moderate, Severe, Profound, don't know)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise (for instance, while several people are talking at the same time)? (Extremely difficult, Quite difficult, Somewhat difficult, Slightly difficult, Not at all difficult).

Introducing “EuroTrak”

EuroTrak was designed and executed by Anovum (Zurich) on behalf of the European Hearing Instrument Manufacturers Association (EHIMA). This survey was based on a representative sample of the population in each country (> 12.000 people per country – weighted in age, gender, education level, region etc ...). For each country they have a sample of at least 1000 people with self-reported hearing loss.

In this article, we use the latest EuroTrak results for 11 European countries. In total 158.180 people were interviewed and 14.306 people with self-reported hearing loss were included in this overview. Furthermore, we use the information from EFHOH, AEA and EHIMA to make the best estimates on the number of hearing aids sold and used in Europe.

How many people are hard of hearing in Europe?

How many people self-report to have hearing difficulties in Europe? When comparing the EuroTrak results on self-reported hearing loss with the EuroStat data on the population 65 years or older we observe a very strong correlation. The higher the percentage of the population that is 65 years of age and older, the higher the percentage of the population that experiences hearing difficulties. Based on the latest EuroTrak studies, 53,4% of the 65 years and older population self-reports to have hearing loss. This observation can be used to estimate the proportion of people that would self-report a hearing loss in the countries where no EuroTrak survey have been made. Table 1 shows the number of people in 30 European countries that would self-report a hearing loss. Some are results from EuroTrak others are estimated. An asterisk in the country name indicates that the value is estimated. No asterisk indicates a country with EuroTrak data

Country	Eurostat Age>65 %	Self Rep Hloss %	Self Rep Hloss Mill	Country	Eurostat Age>65 %	Self Rep Hloss %	Self Rep Hloss Mill
EUROPE 27 +Norw Swiss UK	20,0	10,7	58,5	EUROPE 27 +Norw Swiss UK	20,0	10,7	58,5
Austria*	18,8	10,0	0,89	Latvia*	20,3	10,8	0,21
Belgium	18,9	9,6	1,10	Lithuania*	19,8	10,6	0,30
Bulgaria*	21,3	11,4	0,80	Luxembourg*	14,4	7,7	0,05
Croatia*	20,6	11,0	0,45	Malta*	18,7	10,0	0,05
Cyprus*	16,1	8,6	0,08	Netherlands	19,2	10,1	1,75
Czech Republic*	19,6	10,5	1,11	Norway	17,2	9,3	0,50
Denmark	19,6	10,3	0,60	Poland	17,7	15,1	5,73
Estonia*	19,8	10,6	0,14	Portugal*	21,8	11,6	1,20
Finland*	21,8	11,6	0,64	Romania*	18,5	9,9	1,92
France	20,1	10,0	6,70	Slovakia*	16,0	8,5	0,47
Germany	21,5	12,2	10,13	Slovenia*	19,8	10,6	0,22
Greece*	22,0	11,7	1,26	Spain	19,4	11,3	5,30
Hungary*	19,3	10,3	1,01	Sweden*	19,9	10,6	1,09
Ireland*	14,1	7,5	0,37	Switzerland	18,5	7,7	0,66
Italy	22,8	12,1	7,30	United Kingdom	18,4	9,7	6,47

Table 1: Data from Eurostat on the percentage of the population over 65 years of age, the percentage of people with Self-reported hearing loss as well as the total number of people in millions with Self-reported hearing loss.

An asterisk in the country name indicates that the value is estimated. No asterisk indicates a country with EuroTrak data. (Source of basic data: Ehima-Anovum EuroTrak 2016-2020 & EuroStat 2019)

The average is **11,1% of the population of Europe* or 58,5 million people self-reporting hearing loss** where 20% of the population is 65 years or older. This is 6,5 million people more than in the earlier report we made in 2016, since the European Population has expanded (*EU 27 + Switzerland, Norway & UK) from 522 million in 2015 to 527 million in 2019 and has aged, from 18,5% 65 years and older in 2015 to 20% in 2019.

Ireland is at the lower end with a prevalence of self-reported hearing loss of 7,6% and a percentage of the population 65 years or older of 14,5%.

Italy has the highest percentages of the 65+ population (23,1% of the population) and the second highest prevalence of self-reported hearing loss (12,2% of the population).

In the graphical overview of fig. 1 the correlation between the aged population and self-reported hearing loss is obvious with the exception two outliers Poland and Switzerland.

Poland has a much higher prevalence of self-reported hearing loss, relative to what one would expect based on the percentage of the 65+ population. This is now the second EuroTrak survey where one can observe the same higher prevalence. Based on the 65+ population percentage (17,7%), it would be expected that 9,5% would report hearing problems, but this was 15,1% in the 2019 and 16% in the 2016 EuroTrak survey.

Switzerland has a lower prevalence as projected, they have 18,5% of the population which is 65+ of age and it would be expected that 9,9% of the population would self-report hearing problems, while this is only 7,7% in the latest 2018 EuroTrak survey.

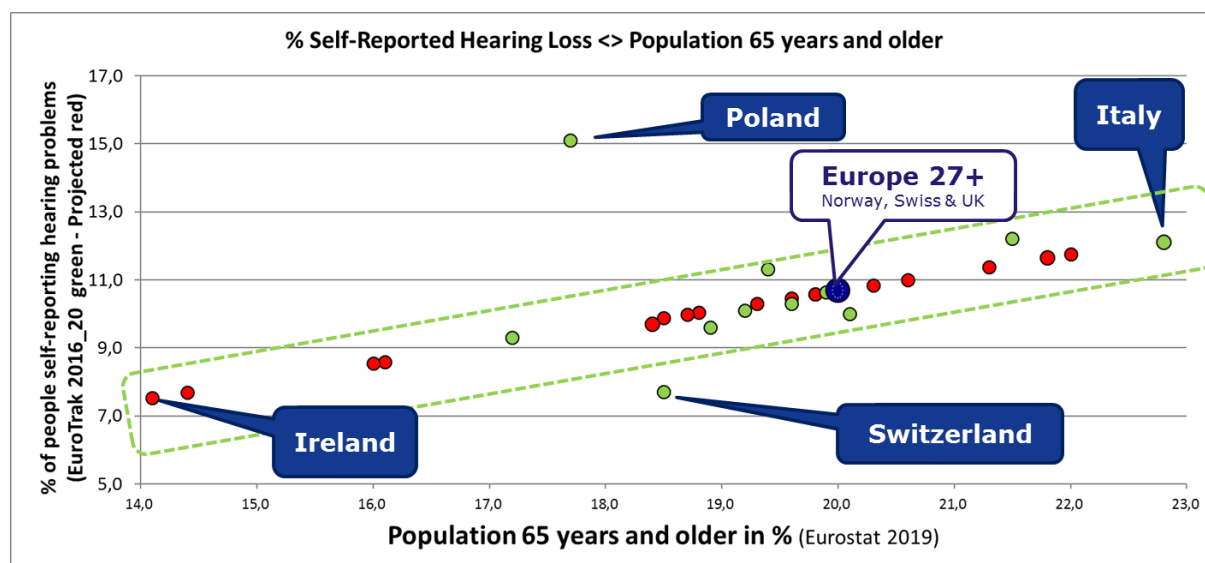


Fig1: The relation between the % of people self-reporting hearing difficulties and the Eurostat data on the % of the population aged 65 or older. (EuroTrak data in green, projected data in red and the European average in blue) (Source of the basic data: Ehima-Anovum EuroTrak2016_2020 & EuroStat 2019)

The value chain – getting access to professional hearing care

The first step is to create awareness, to ensure that hard of hearing people acknowledge that there is a problem, but accept it, so they can seek professional help. Hearing screening and awareness campaigns are essential tools to allow for this invisible condition to emerge.

Based on the latest EuroTrak surveys in eleven countries (Belgium, Denmark, Germany, France, Italy, Norway, Poland, Spain, Switzerland, The Netherlands and UK – 14.006 people with self-reported hearing loss) we notice the following go to action behaviour.

Once the condition is recognised, i.e. the people report to have hearing difficulties, 75% consult a medical professional (mostly their general practitioner or ENT specialist) for their hearing problems.

The medical professionals refer 70% of these people to a hearing care professional.

And finally, 73% of the people with hearing care referral start using hearing aids.

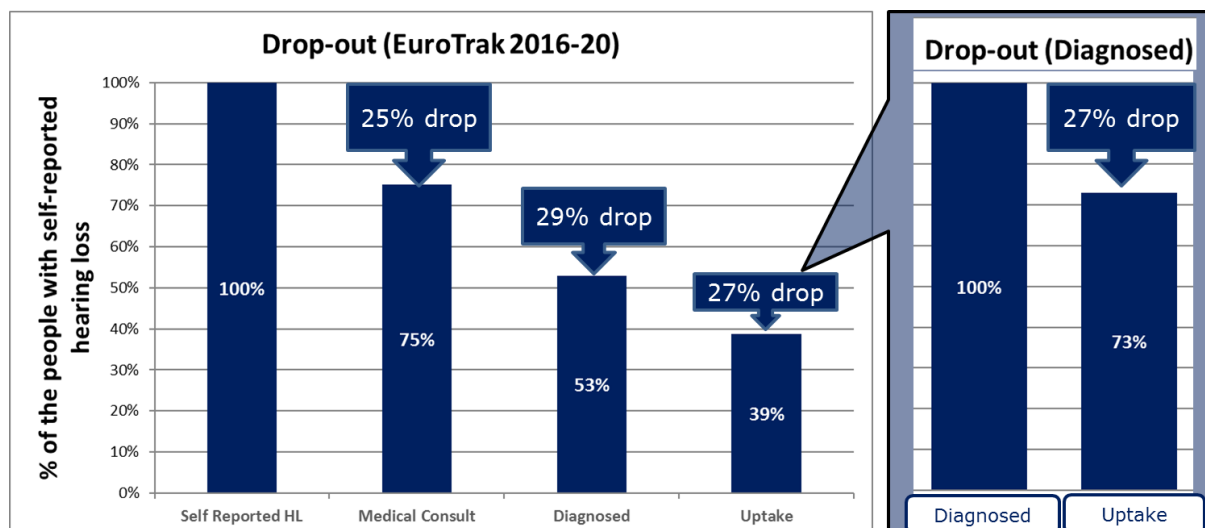


Fig2: The drop-out table based on the average EuroTrak results for 11 countries. The first bar represents all the people with self-reported hearing loss. The second bar shows the percentages that consult a medical practitioner for their hearing loss. The third bar is the % of those who were diagnosed they need to visit a hearing care professional. The fourth bar is the % of people that then acquire hearing aids. And finally, the disconnected bars at the right are the number of people diagnosed to need hearing care that acquire hearing aids. (Source of basic data: Ehima-Anovum EuroTrak 2016-20)

Hearing Aid Uptake by People self-reporting to have hearing problems.

We noticed in the latest 11 EuroTrak surveys, that of all the people with self-reported hearing loss, 53% are diagnosed to be hearing aid candidates and are referred to Hearing Care Professionals and in total 39% start using hearing aids. We call this uptake.

Based on the best estimates of all our associations we were able to establish this overview of Uptake of Hearing Aid by people with self-reported hearing problems in 30 European Countries. The European average is 33% uptake. Twelve countries have more than 30% uptake. Eleven countries have less than 20% uptake.

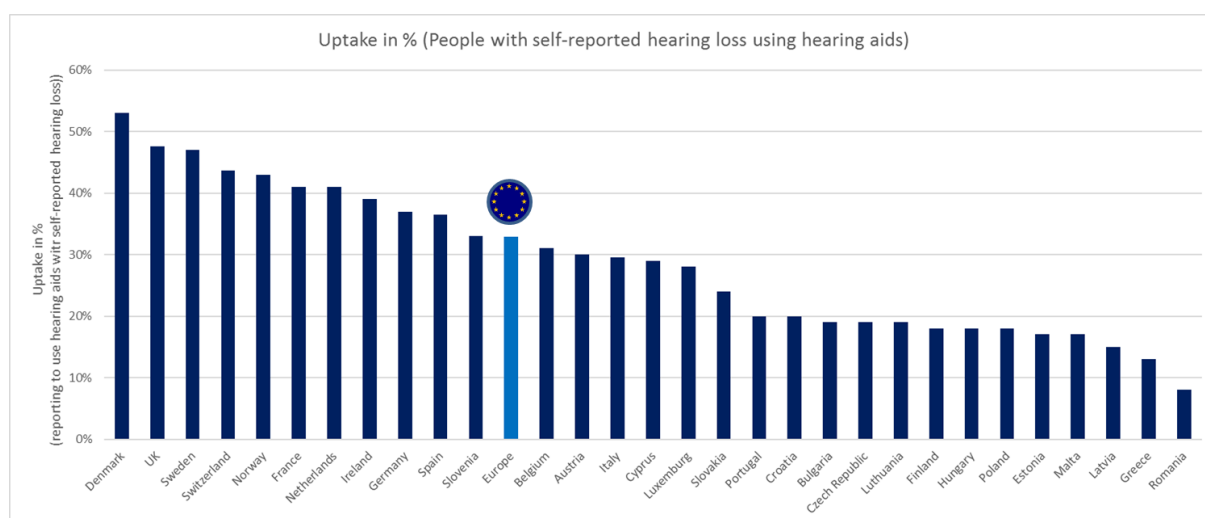


Fig3: Uptake of Hearing Aids in by people with self-reported hearing problems in all 30 European Countries. The European average is 33% uptake (light blue bar). (Source of basic data: Ehima-Anovum EuroTrak 2016-2020, EuroStat 2019, AEA&EFHOH reports)

“Myth” or “Reality” about Hearing Care and Hearing Aids

• People wait 7 years before they start using hearing aids	yes/no?
• More than 20% of the hearing aids end-up in the drawer	yes/no?
• People wear their hearing aid on average 8 hours per day	yes/no?
• 4% of the users say their hearing aids do not increase quality of life	yes/no?
• Most people are not satisfied with their hearing aids	yes/no?
• Most people get hearing aids partially or fully reimbursed	yes/no?

People wait 7 years before they start using hearing aids – **Wrong** ❌

In many articles and brochures, we read that once people notice they have hearing problems, they wait seven years before they start using hearing aids. Is this really so?

This is contradicted in the EuroTrak 2015-2020 data. When asked how many years had passed between the time people became aware of their hearing loss and the moment, they acquired hearing aids, on average, **49% responded they waited 2 years or less**.

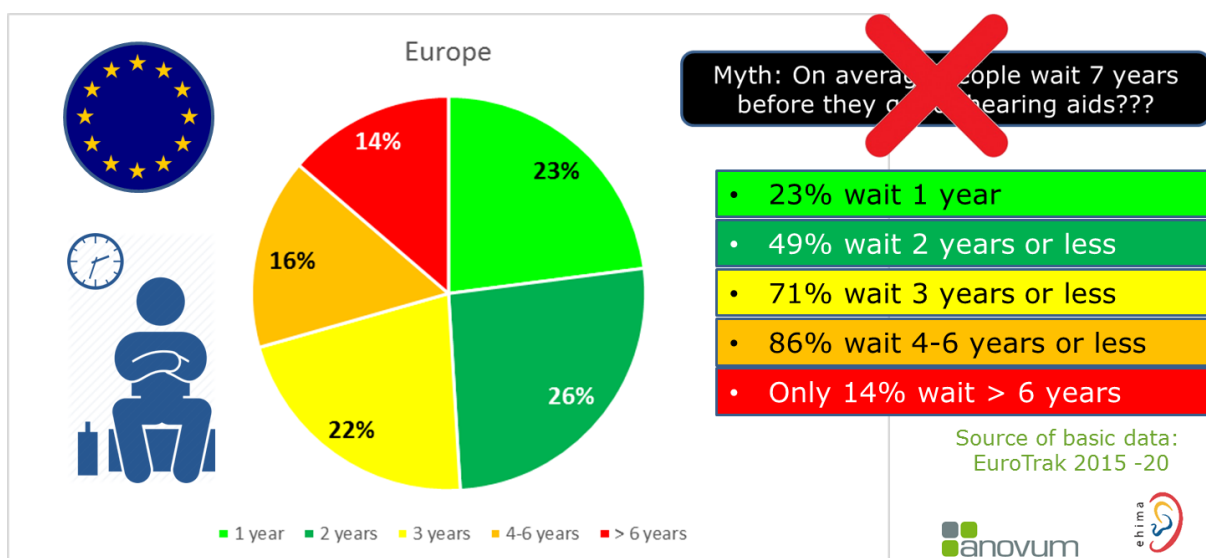


Fig4: Graph of the number of years that people waited between the moment they became aware of their hearing loss and the time they acquired hearing aids for 11 countries. (Source basic data: Ehima-Anovum EuroTrak2015-2020)

More than 20% of the hearing aids end-up in the drawer – **Wrong** ❌

A lot of hearing aids end up in the drawer is an often-heard comment. Is this really so?

On average 6% of the people who have hearing aids, don't use them (between 5 and 8%) in the 11 EuroTrak studies. This is much less than people with chronic diseases not taking their medication, which is according to the latest meta-analysis published in BMJ (British Medical Journal) in 2018, 50% for long-term therapy for chronic illnesses.

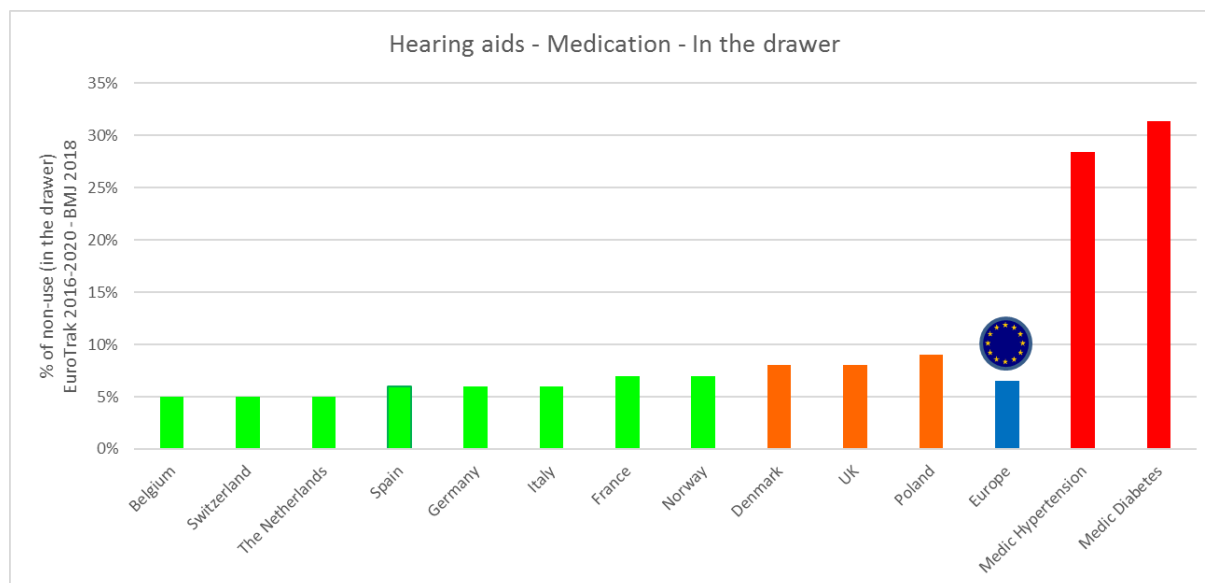


Fig5: Graph of the percentage of hearing aid owners who report not to use their hearing aids for 11 countries and percentage of people with chronic diseases not taking their medication. (Source basic data: Ehima-Anovum EuroTrak2016-2020 - meta-analysis published in BMJ (British Medical Journal) in 2018)

People wear their hearing aid on average 8 hours per day – Correct ✓

Yes, this is correct, on average people wear their hearing aids 8,4 hours per day. In 5 of the 10 countries in EuroTrak, the average use time is 9 hours or more!

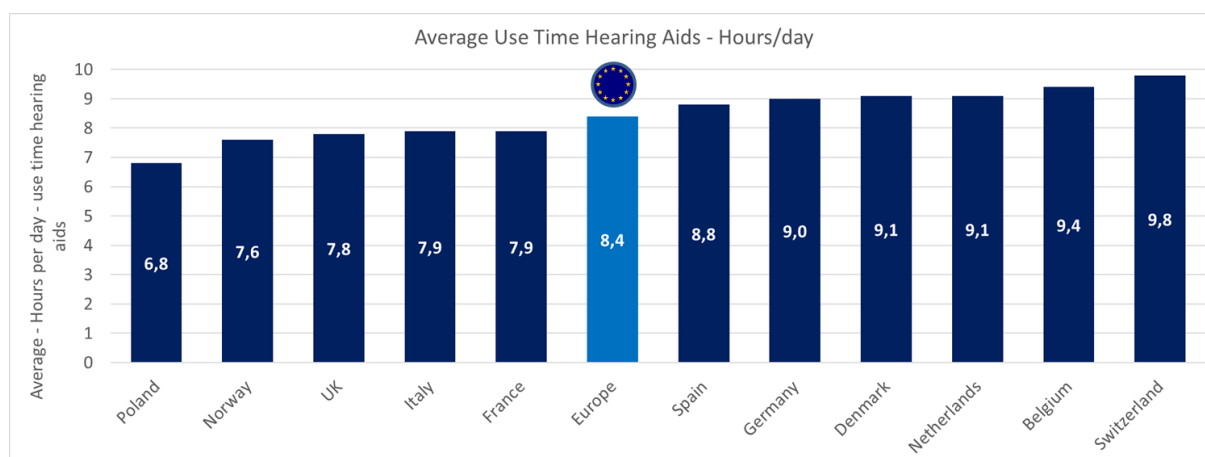


Fig6: Graph of the average hearing aid use-time per day for 11 countries. (Source basic data: Ehima-Anovum EuroTrak2016-2020)

Only 4% of the users say their hearing aids do not increase quality of life – Correct ✓

In the evaluation of the cost-effectiveness of health-related interventions, the impact of the intervention on quality of life is an important aspect. Only 4% of the hearing aid users do not experience a positive impact on their quality of life (the spread is between 7% and 1%).

The World Health Organisation states that the use of hearing aids is shown to be cost-effective, especially when the use is continuous and accompanied by audiological rehabilitation.

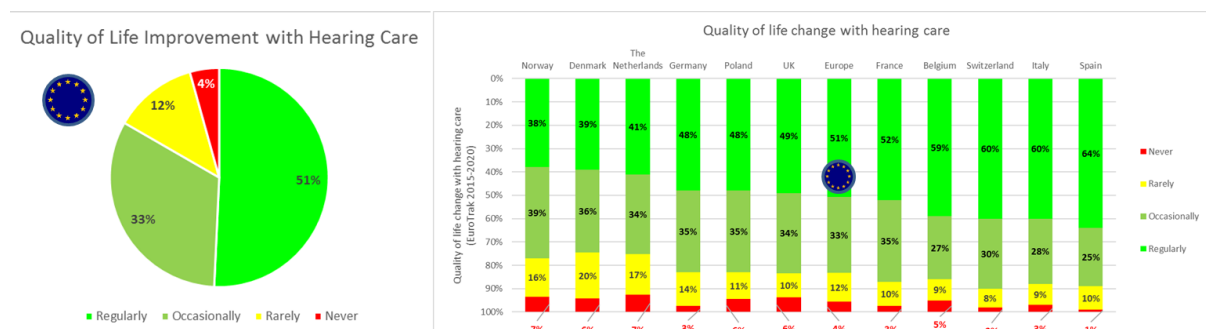


Fig7: Graph of the percentage of hearing aid users stating how the use of hearing aids improved their quality of life for 11 countries. (Source basic data: Ehima-Anovum EuroTrak2020)

Most people are not satisfied with their hearing aids – Wrong ✗

Although the public opinion on hearing aids can be negative, this is not the way hearing aid users report satisfaction of their hearing aids in the 11 EuroTrak studies.

77% of the users report to be satisfied about their hearing aids. The highest satisfaction is found in countries with high freedom of choice (hearing solution or hearing care provider), with the lower rating countries have reduced freedom of choice.

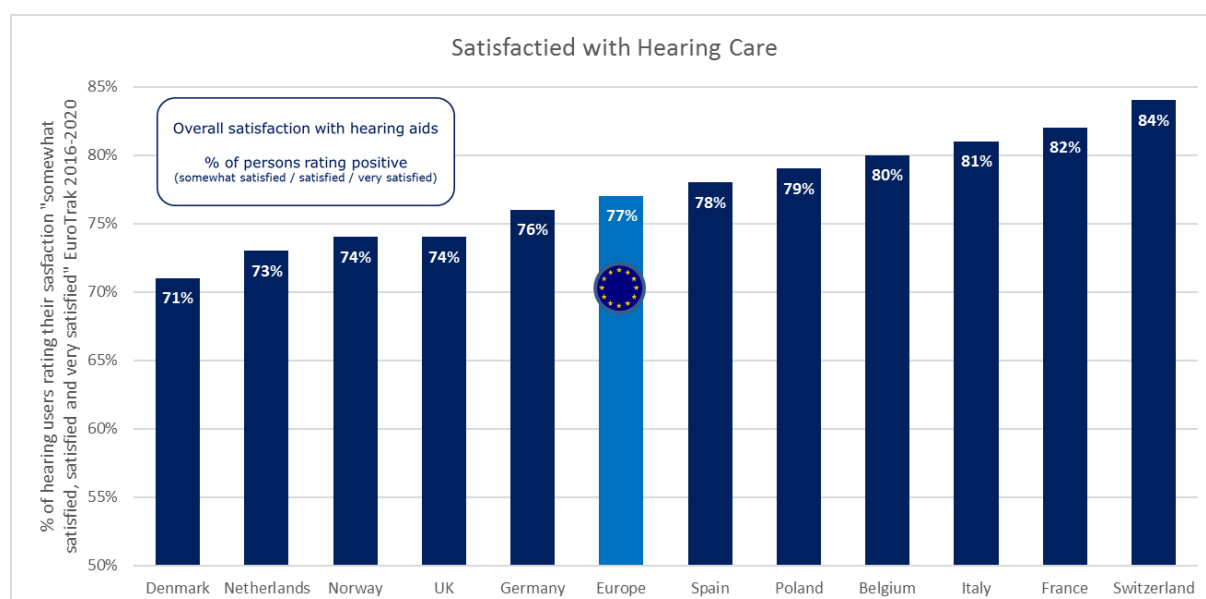


Fig8: Graph of the percentage of hearing aid users stating to be satisfied with their hearing for 11 countries. (Source basic data: Ehima-Anovum EuroTrak2016-2020)

Most people get hearing aids partially or fully reimbursed – Correct ✓

Here we see a huge difference between the reality, which is known by the hearing aid users, that in the 11 EuroTrak studies on average 79% of the respondents receive their hearing aids fully or partially covered by the health insurance. This is in contrast with the knowledge of people with self-reported hearing loss, that do not use hearing aids, where on average only 34% think that there is coverage!

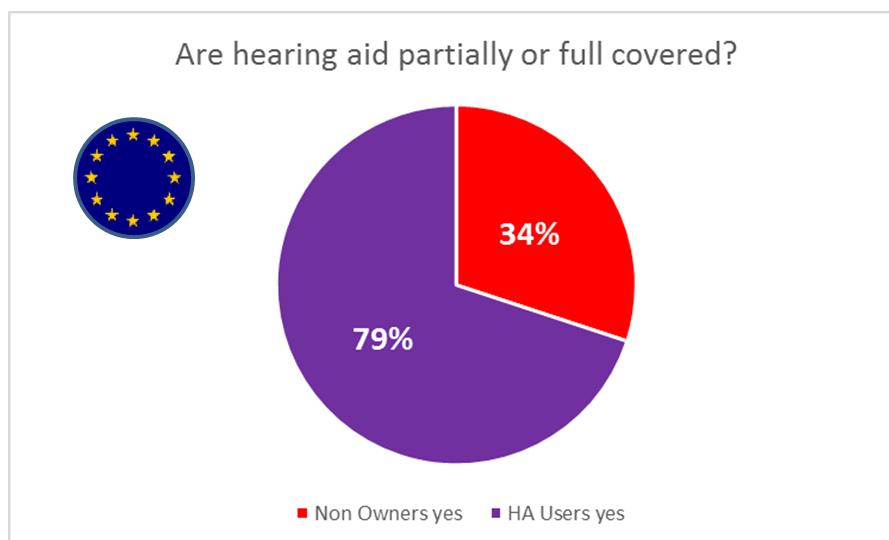


Fig9: Graph of the percentage of the people who report that hearing aids are covered by 3rd party payment (in red – people with hearing loss, not using hearing aids // in purple hearing aid users) for 11 countries. (Source basic data: Ehima-Anovum EuroTrak2016-2020)

On average 44% of the people with self-reported hearing loss, are unaware if the expenses for the hearing aids are covered or not ... in Belgium this is 62% and in Switzerland this is only 24%.

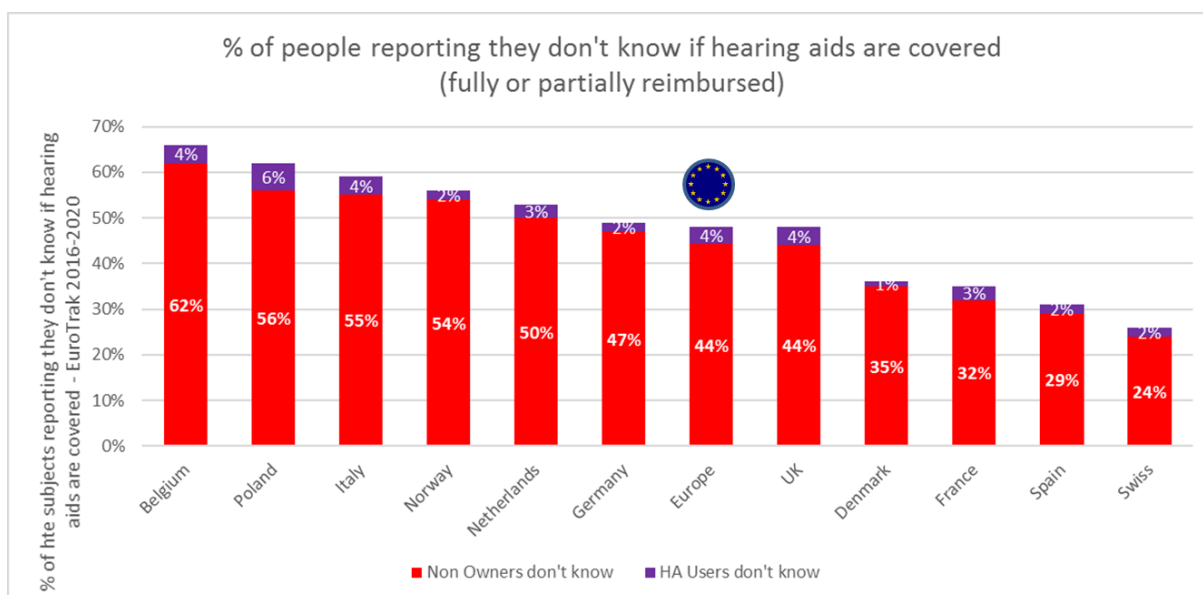


Fig10: Graph of the percentage of the people who are unaware if the expenses for hearing aids are covered by 3rd party payment (in red – people with hearing loss, not using hearing aids // in purple hearing aid users) for 11 countries. (Source basic data: Ehima-Anovum EuroTrak2016-2020)

Conclusions:“Myth” or “Reality” about Hearing Care and Hearing Aids

• People wait 7 years before they start using hearing aids	No <input checked="" type="checkbox"/>
• More than 20% of the hearing aids end-up in the drawer	No <input checked="" type="checkbox"/>
• People wear their hearing aid on average 8 hours per day	Yes <input checked="" type="checkbox"/>
• 4% of the users say their hearing aids do not increase quality of life	Yes <input checked="" type="checkbox"/>
• Most people are not satisfied with their hearing aids	No <input checked="" type="checkbox"/>
• Most people get hearing aids partially or fully reimbursed	Yes <input checked="" type="checkbox"/>

References:

Bisgaard N & Ruf S. Findings From EuroTrak Surveys From 2009 to 2015: Hearing Loss Prevalence, Hearing Aid Adoption, and Benefits of Hearing Aid Use. American Journal of Audiology 2017 Oct 12;26(3S): p451-461.

Bisgaard N. Hearing aid coverage across the world – models, results and consequences. Presentation at HEAL 2018, June 2018, Cernobio, Italy.

Choi JE, et al. Discrepancies between self-reported hearing difficulty and hearing loss diagnosed by audiometry: prevalence and associated factors in a national survey. BMJ Open 2019;9:e022440.

Cutler et al, Economic impact of medication nonadherence by disease groups: a systematic review. BMJ Open 2018;8:e016982

EuroStat 2019 data retrieved at: <http://ec.europa.eu/eurostat>

EuroTrak 2015-2020 reports retrieved at: <http://www.ehima.com/documents/>

Laureyns M, Best L, Bisgaard N and Hougaard S “Getting our numbers right on Hearing Loss, Hearing Care and Hearing Aid Use in Europe” - Joint AEA, EFHOH and EHIMA report 2016 - Available at:

https://www.ehima.com/wp-content/uploads/2016/09/Getting-our-numbers-right-on-Hearing-Loss-and-Hearing-Care-26_09_16.pdf

<https://efhoh.org/wp-content/uploads/2017/04/Getting-our-Numbers-Right-joint-paper-EHIMA-AEA-EFHOH.pdf>

Laureyns M, Best L, Bisgaard N and Hougaard S “Getting our numbers right on Hearing Loss, Hearing Care and Hearing Aid Use in Europe” - Joint AEA, EFHOH and EHIMA report 2017 - Available at:

https://www.aea-audio.org/portal/index.php/aea-action-plan/awareness/item/download/107_6944fd26fc9bd4097df24acbdbb10a8c

Shield B. Evaluation of the social and economic costs of hearing impairment - A report for Hear-It AISBL. 2019 – retrieved at: <https://www.ehima.com/wp-content/uploads/2019/03/HearitReportHearingLossNumbersandCosts.pdf>

WHO – Global costs of unaddressed hearing loss and cost-effectiveness of interventions. retrieved at: <http://www.who.int/pbd/deafness/world-hearing-day/CostOfUnaddressedHearingLossExecSummary.pdf>.