

HOW CAN THE SITUATION AT WORKING PLACES BECOME BETTER AND EASIER FOR PERSONS WITH HEARING LOSS?

# The user's experienced benefit by using Comfort Digisystem

By Anna K Lejon, December 2013

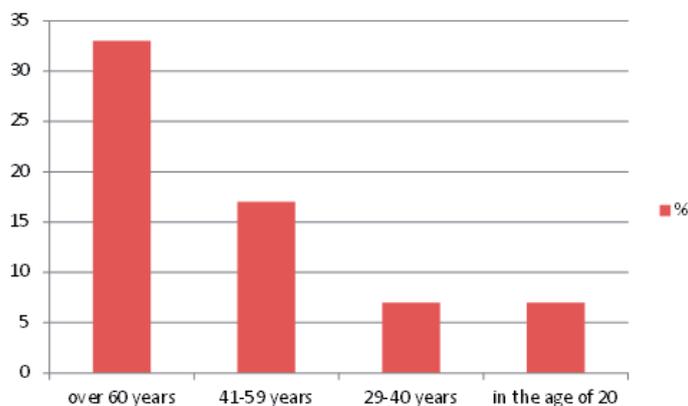
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**Abstract:**

In Sweden hearing loss is the most common disability, in general figures we can say that about 10% of the population has a hearing loss. The value is of course different in different age groups; according to Kochkin ([www.betterhearing.com](http://www.betterhearing.com)) 3 in 10 people over age 60 have hearing loss; 1 in 6 baby boomers; 1 in 14 Generation Xers already have hearing loss.

The problems with hearing loss seems to grow bigger, in 2008 1% of recruitants in the Armed Forces initial training in Norway had a hearing loss, in 2012 7% had a hearing loss. These persons are in the age 20 years and below.



The graph is showing how many in each age-group who has a hearing loss.

Early retirement or sick leave is higher in the group with hearing loss than in average, 15% of the persons with hearing loss in working age in Sweden have an early retirement. That is twice as common as for normal hearing persons according to HRF "Sanning eller konsekvens" 2005, the annual report from the society of hard of hearing in Sweden.

To have a person on early retirement or sick leave is expansive cost for the society, as an example hearing loss is estimated to cost 9 billion Norwegian crones

(1.068.060.000 € Euro/ 1.468.950.000 US\$) per year, in Norway, a country with five million inhabitants, [www.forskning.no](http://www.forskning.no) "En generasjon av hørselsskadde" Numbers for other countries have been difficult to find.

How can the situation at working places become better and easier for persons with hearing loss?

**"Handle my work without Comfort Digisystem? No!"**

At Comfort Audio we all have stories about what great benefit the users have by using Comfort Digisystem in their daily life, both at their working place and at other settings. But how can the results be shown and evaluated?

We at Comfort Audio often get the feeling that in many situations a hearing aid is not enough, and to prove that for a fact and to visualize it to others we have initiated a way to evaluate a Comfort Digisystem fitting/installation.

**The questionnaire**

To gather facts and evaluate Comfort Digisystem's fittings/installation a questionnaire was developed. The questionnaire used in this study is based on the APHAB (Abbreviated Profile of Hearing Aid Benefit). The APHAB self-assessment inventory in which patients report the

amount of trouble they are having with communication or noises in various everyday situations. Benefit is calculated by comparing the patient's reported difficulty in the unaided condition with their amount of difficulty when using amplification. For more information about the basic questionnaire: <http://www.harlmemphis.org/index.php/clinical-applications/aphab/>

The version that is used here consists of 14 questions, eleven that is verified and three that is created to find out more about specific situations using the Comfort Digisystem. Instead of comparing unaided and aided conditions, as the APHAB is intended to, the user is asked to compare a situation with using only hearing aid/cochlea implant with the same situation using hearing aid/cochlea implant in combination with Comfort Digisystem according to the following rating.

- A Always (99%)
- B Almost always (87%)
- C Generally (75%)
- D Half the time (50%)
- E Occasionally (25%)
- F Seldom (12%)
- G Never (0%)

### Test subjects

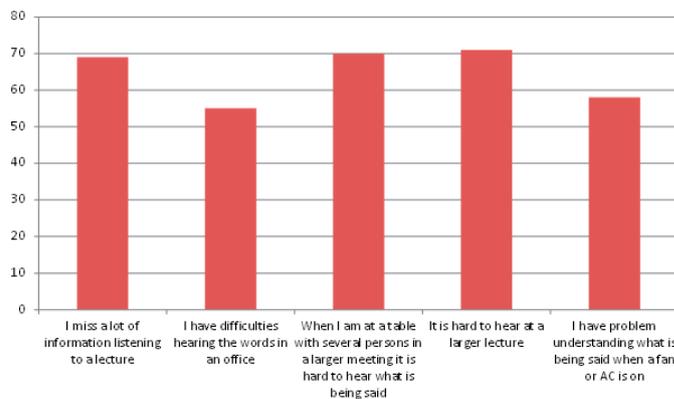
The questionnaire was sent out to 64 users of Comfort Digisystem, the criteria was that the test subjects should have been a user of the Comfort Digisystem for at least a year and that they used a Conference Microphone DC20. The test subjects got a questionnaire sent home with a prepaid envelope for returning the questionnaire to us. The questionnaire was sent out in August 2013 and the last answer came back early November 2013. 24 test subjects returned the questionnaire. There was no reminder sent out in this questionnaire trial. The user could choose if they wanted to answer the questionnaire anonymously.

Submitted answers:
10 men
8 women
6 anonymous

The table above is showing distribution of answers

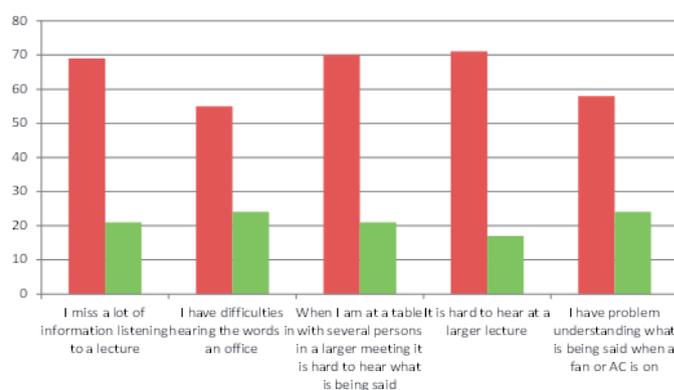
### Result

According to the answers in the questionnaire these five situations are the ones where hearing aids/Cochlea Implant has the least benefit for the user. The result is shown in % and average what the test persons have answered.



The graph is showing the five situations where the test person (in average) indicates that they struggles the most with using only hearing aids/cochlea implant.

The answers for using only hearing aid/cochlea were compared to the answers using hearing aids/cochlea implant in combination with Comfort Digisystem.



The graph is showing the answers for comparing using only hearing aids/Cochlea implants and using hearing aids/Cochlea implant in combination with Comfort Digisystem.

### Discussion and Conclusion

Hearing aids have during the last 10 years been getting better and better. What was big news in a hearing aid in the late nineties, like noise reduction and directional microphones are today something that is expected in hearing aids. Even if the hearing aids are better today than ever before, the users are often not satisfied with them. In situations that are crucial for a successful working experience such as lectures, small talks in an office environment, discussions or understanding when there is a soft background noise users think that they have problems and struggle most of the times to cope with these situations.

The users in this study have taken the step to use hearing products in their working life, so they have something to compare with, the result could have been different if they were first time users. What brand of hearing aids the users used are unknown, what is

known is that it is probably BTE hearing aids with telecoil since the users are wearing either the Receiver DH10, a neck loop receiver, or the Micro Receiver DT20. The majority of the hearing aids is listed in the tender offered by the Swedish state.

The question to be answered after the result of this study is why not more of hearing aid users in working life are using hearing products considering the benefit a Comfort Digisystem can do for the user;

- Is it we, as audiologist, that does not give the information about hearing products at the right time?
- The audiologist does not know the benefit of hearing products.
- Are the users not ready for more products after a hearing aid fitting?
- Are hearing products unknown for the users?

Many questions that still needs to be answered, and at Comfort Audio we try hard to find these answers. If you as an audiologist want to use the questionnaire in your fittings/installation for Comfort Digisystem please send us an e-mail to get the questionnaire in PDF, available in English and Swedish.