

# Inspired and inspiring audiologists in Oslo

Motivation, follow-up, training of health personnel and users, research, projects... An audiologist in Norway has so much to do! Jorunn Solheim and Ann Kristin Egge told us about all the aspects of their work in the office and out in the field.

Ann Kristin Egge and Jorunn Solheim are audiologists in Oslo, Egge in a private ENT-clinic and Solheim in a hospital.



“We distribute about 700 hearing aids per year.”

Two inspired and inspiring audiologists and ex-colleagues, but still good friends, had a chat with us in Oslo. One works in a hospital and the other in a private ENT-clinic, but their work also extends outside the walls of their offices.

Jorunn Solheim is an audiologist with a 50% position in research, and a PhD, at Lovisenberg Diakonale hospital, with 30 years of experience in the field, and according to Ann Kristin Egge, audiologist at the the Linderud Øre, Nese ENT-clinic in the area Grorudalen in Oslo, Jorunn is the person who convinced her to choose to become an audiologist back in the 1980's.

Even though their settings are quite different: Solheim's office is in a hospital, and Egge has hers in the ENT-clinic within a shopping mall - their

activities are similar. The ENT-specialist has an operating agreement with the municipality and so the patients that Egge meets pay nothing, or the same as they would at a hearing clinic in a hospital. “Here in Oslo most of the hearing impaired are treated at private clinics who have this agreement. At my clinic we distribute around 700 hearing aids per year, and the average number of appointments for adjusting a hearing aid is 4.2. The charges are regulated by the municipality,” Egge explains. Neither one of them treat children, as all children in Oslo are treated at Rikshospitalet (the National hospital), the same goes for all special cases including Cochlear Implant cases. When it comes to adults, almost everyone is treated in private ENT-clinics, and the rest at Lovisenberg Diakonale hospital. In 2012 they treated 315, and 736 hearing aids were fitted.

## Motivation before fitting

What is the typical patient? At least 2/3 of patients are over 60 years old, the majority being between 70 and 90, with an age-related hearing loss. After a referral from their physician and an appointment with the ENT-specialist, they meet with the audiologist for the first time.

The first meeting with a new patient consists of measuring the hearing and taking the imprint of the ear canal, but equally important is the discussion around the hearing loss, what the patient is expecting and wanting, and establishing the patient's motivation. Both audiologists agree that motivation is the key. “I spend more time on establishing the patient's motivation for using hearing aids, than earlier. If there is a lack of motivation I often plan a second appointment and I am reticent with commencing the fitting of hearing aids. The patient cannot come “dragged by his tie” by a relative. I inform them what this really is, that it is a real commitment and that it won't work by itself,” explains Ann Kristin Egge. “I agree. We can do everything in our power to succeed, but the user must do a lot himself,” says Jorunn Solheim.

Despite the idea that some have that only wearing the hearing aids when they go out is enough, this isn't the case. The patients must understand that getting used to the new aid and sound takes time. This is why during the fitting process, both audiologists spend a lot of time explaining but also focus on doing, as in doing themselves.

“The user should be able to do everything on his own, switching between programs, changing batteries, disassemble the dome and device and cleaning it,” explains Solheim.

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## Involving the family

“I try to get the patient to come with a relative, because I see how much it makes them relax and it improves the dialog. Everyone says there is a lot of information and two heads remember more than one, the relative may even memorise more than the patient. This is also a perfect occasion to inform the relatives about the hearing aids and that putting on a hearing aid does not make you hear normally. People around the hearing impaired must understand this,” emphasizes Egge.

Studies have shown that the patients forget a lot of what is said during a doctor's appointment: 40 - 80% of the information provided by clinicians is forgotten immediately by patients. Furthermore, 50% of the information remembered is incorrect, according



The book Hør Her is for free, and is a tool for helping patients register the name of their audiologist, hearing aid, batteries and other important information.





Jorunn Solheim has a 50% position as researcher, and has performed various studies and projects.

### The hearing aid notebook

Jorunn Solheim works on various projects, one of them concerning the above problem. Following the study, she received funding from the Extra Foundation in Norway to create a book that is handed out to patients.

“The book “Hør Her” (Hear here) includes forms for filling out the name of the hearing aid model, the programs, domes, batteries, receivers, the name of the manufacturer, where to send the hearing aid in case of need for repair. The book has been sent out to hearing clinics all over the country and to receive more books, they can contact Signo Rycon. The book is free of charge, but the receiver must pay the postage and expedition costs. Lovisenberg Diakonale hospital

donated 160,000 Norwegian kroner for printing the books and we have an inventory of 3,000 books at the hospital”, explains Solheim.

The book also includes a list of tips for people who communicate with people with hearing aids.

### Technology and miniature devices

It is a challenge for the audiologists that “all” the patients want the tiny hearing aids and a lot of accessory devices. Besides the fact that technology has come far, and that the possibilities are numerous, one must have a certain level of technical interest and knowledge to be able to use and make use of these hearing aids and technical devices.

“I guess I am quite conservative when I choose a hearing aid for a user who is in the 80+ age group. We must look at the level of motor skills, vision, mental age and look ahead. I often choose a hearing aid that is easy to simplify, for example by changing a thin tube with a thicker one. When the patient asks about one of those hearing aids that work with a phone or a remote control, I ask them what type of Mobile phone they have. If they have a smartphone, then it is fine, but if they are not used to using a Mobile phone, then we should limit that kind of accessory. Small problems can stop a person from using his hearing aid, so if we send the patients home with a bag full of devices and manuals it is hopeless and discourages the patients,” says Egge.

Even younger patients are often not sure about the different programs that are available in their hearing aids. The two audiologists recommend starting simple, and then progressively developing

the use. It is also a good argument for making the patient come back for control visits. Another thing that they would recommend is to start out with a light amplification, to create a softer transition, and then turn up the amplification later.

“Then they come back to us and ask us to turn up the volume. They are happier with the result,” Solheim explains.

### Then there’s the follow-up...

Without a doubt, quite a number of hearing aids are left unused, as Solheim’s study also showed. Not necessarily because of the hearing aid, nor because someone did a bad job. Maybe the user was not conscious about the follow-up? Both Egge and Solheim wonder. They claim that the problems occur, not during the trial period, but later on, when the dome is filled up, when the filter should be changed, months after the fitting.

“It is important to know who to contact when these problems occur, and that was the reason why the book “Hør Her” was created. Not only for the elderly who can’t remember who they talked to, but to have it written down for any hearing aid user, and their relatives or employees at nursing homes, so they can easily look up on how to clean the hearing aid, how to do basic things, and where to send the hearing aid for repair,” explains Solheim. The people who order the book are also the hearing impaired themselves,

who then can bring the book to their appointments, and there are small plastic pockets for storage of the hearing aid manual and other information as well. “The hearing aid manuals, now that’s another chapter...” the two agree, and describe the problem of one manual for all the versions of the same device, manuals that change, that have gone missing...

### Nursing homes lack knowledge

Another issue is the difficulty with having a contact person with elderly users without family. Solheim performed a small study in Oslo and Bergen, where she sent out a questionnaire to nursing homes about hearing aids.

“The results were discouraging. The employees are the elderly’s closest persons when they live in a nursing home and most of them had no idea about the battery life for a hearing aid battery. They couldn’t believe it should be changed every week! Even after 30 years in the job. 22% answered that they had received some training in hearing and the use of hearing aids, nearly 80% said that the users needed help to use the hearing aids, and 75% said that the users were socially isolated due to their hearing loss” resumes Solheim. In order to thank them for answering her questions, Solheim travelled to the nursing homes and offered to give the employees information and training, which they were very happy about. An audio pedagogue, a nursing home physician, an audiologist and two nurses also participated on the study. In addition to informing the nurses at the nursing homes, they also received important feedback from the nurses. Solheim and Egge agree that training of the nursing home employees in hearing aids and the use of the prosthetics is important, and Solheim is working on a course that would be open for the nurses, and others who would be interested, that will be free of charge and held once a month, with the hope of creating one or more key persons in the various nursing homes who can share the knowledge with their colleagues.

“The value of a hearing aid to an elderly person is underrated. Not long ago, a quite confused woman came with a relative who wanted her to get hearing aids and when she came back a month later she was transformed and able to communicate again. Hearing loss can also be related to anxiety and some are thought to be suffering from dementia, when the actual problem is the hearing,” says Egge. In August Solheim will hold



Ann Kristin Egge gives courses to hearing aid users in addition to her work at the ENT-clinic.

*“Never speak to a hearing impaired without eye contact.”*

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to the article “What did the doctor say?” by Rao et al 2007. At Lovisenberg Diakonale hospital, all patients are given a card with the direct telephone number to their audiologist, for any questions or adjustments. The goal is to make it easier for the patient to contact the audiologist, without having to call the secretary and ask for the right person, then they can come for an adjustment, free of charge. At Egge’s ENT-office, they do it differently. The secretaries have been trained in use and maintenance of hearing aids, in order to help patients who stop by the clinic with questions, or the cleaning of hearing aids, changing tubes and batteries.

### All the little things...

“It is those small problems that can put a stop to the use of hearing aids. We did a study here at the hospital and found that ¼ of the patients we received who already had a hearing aid had almost not used the previous hearing aid. The resourceful patients are the ones who come back and ask for help, the others put the hearing aid in a drawer,” says Solheim. The study found that this concerned 22% of the patients, which all over means a loss equivalent of 90 million Norwegian kroner in hearing aids. Similar results are found in other countries. In Denmark it is assumed to be around 40%, according to a thesis by Anette Lykke from 2011. The patients go home with their hearing aid, manual, information, but when they need to speak to their audiologist again they have often forgotten the name of the person at the hospital, the type of hearing aid they have, and which manufacturer produced it.

the first free course for nurses and hearing aid users, in the Training and mastering centre at the hospital. It will include the presentation of hearing aids and someone from the user organisation will also be present to talk about the time after the hearing aid fitting.

### User-courses

Ann Kristin Egge also give courses for hearing aid users. Her last one was a 9 hours-long course split into three evenings, “I have been working together with the HLF user organisation, and taught groups of users there. It has been fun and it increases the knowledge among users. Some are very active and from the various Facebook pages I can see how they share this knowledge by answering questions from other users. It is important to have a dialog with the users,” says Egge. During this course, entitled “Modern hearing aids”, Egge talks about hearing, explains what a hearing loss is and how the speech understanding can be degraded with the hearing loss. She talks about new functions in the latest hearing aids and also what they cannot do about directional microphones, noise suppression, etc. “I think that this makes them more able to explain eventual problems with their hearing aids to their audiologists,” says Egge.

### The process after fitting

Dialog is an important word. Hearing rehabilitation is a process that does not end after the first appointment or the fitting of the hearing aids. As the hearing changes with time, so does the user’s needs, and with age both motor skills and vision can be diminished, which again affects the handling of hearing aids. Solheim and Egge agree that there is too little knowledge in our society about hearing and hearing loss and one of the consequences is that people expect the hearing impaired to be hearing normally once they are fitted with hearing aids. “I tell the relatives that one should never speak to a hearing impaired without eye contact, and that in general it is not polite to speak to people’s backs. They should think about how they behave with people with hearing loss,” emphasizes Egge. However, the audiologist is not the only person who participates in the rehabilitation process. Audio pedagogues are often in touch with the patients as well, after the hearing aid is fitted, helping with technical equipment at home for example, teaching sign language and lip-reading, or simply continuing the rehabilitation after hearing aid fitting. Then there is the Norwegian organisation for the hard of hearing, HLF. “I give all my patients a registration form for HLF. It is very useful to be

attached to the organisation, they offer various courses and also have a great insurance deal for hearing aids included, in addition to their own magazine,” says Egge. HLF also have a peer-service, where a volunteer from HLF helps other hearing impaired with their hearing aids.

### Less of a taboo to be hearing impaired

Solheim and Egge have the impression that having a hearing loss is not something people are ashamed of, at least not to the same extent as they used to. They even receive patients who have smaller hearing losses, before hearing aid fitting is necessary. Especially among the younger patients, having hearing aids is not such a big deal. “The young don’t have barriers anymore,” says Solheim, and remembers a Goth patient she had who only dressed in black and wanted her hearing aids all black, tubes and everything. Another patient of hers is a boat enthusiast who wanted the hearing aid on starboard side in green and on port side in red. “The elderly are more sceptical and wish to hide them, while the younger ones show them off with strong colours,” complements Egge. Skin colours are rare, the two agree, while grey and metal are bestsellers.

### Success factors

It is still a challenge to ensure that the equipment handed out by the audiologist is being used. That’s why the two audiologists focus on the motivation prior to the hearing aid fitting, and on the follow-up after. Solheim arguments as to why this is so important:

“In a previous study, I looked at the ones who succeed and use their hearing aids: what was the success factor? I found two distinct factors: 1. They experienced that they needed a hearing aid and were therefore motivated, and 2. They received good follow-up from the hearing clinic. The size of the hearing loss had nothing to do with it.”

Ann Kristin Egge agrees that follow-up is important, and that being available is a key.

“Our patients live in the apartment buildings around us. There is a low level of difficulty for stopping by the office, which is next to the optician and over the cafeteria.”

Ann Kristin Egge and Jorunn Solheim are still extremely happy with their work, after more than 30 years in audiology.

“It involves pedagogy, psychology, medicine, technology, the whole spectre!”

“It is fun, diversified, so much happens – almost too much!” ■

**Text: Mari Vold Lexander**