Education in Audiology

Objectives of meeting (Jan Wouters), see slides
- Define role of EFAS: facilitator, providing good-practice guidelines
- Technical, medical and educational/clinical/. approach to audiology ➔ multidisciplinary training
- Role of EFAS: guidelines for common European, interdisciplinary university education in audiology. Set the standards for curricula, coordinate across existing program, information for potential (exchange) students, accreditation of new study programs, PR and lobbying for Education in Audiology

Summary of outcomes of Bad Zwischenahn meeting (Birger Kollmeier), see slides
EFAS concept for “professional audiologist” in Europe:
   Bachelor (3-year program), leads to general audiologist
   Master level (2-year program) leads to specialized audiologist
   PhD. Certification levels
Supervised practical/clinical work
Bachelor in Audiology ➔ master program in Audiology, to certification training, specialized audiologist
Person with medical degree, bachelor of Science degree or bachelor of Arts degree, need an adaptation phase before starting Master Program in Audiology.
EFAS should play a more active role in developing common standards, enabling, and creating a ‘market’ of study programs across Europe.
Study programs should give more exact specifications for each respective response category, should better adhere to EU standards (ECTS, Ba/Ma system) take advantage of (limited) exchange programs.

Rene Dauman: how do other professions react to proposed schema? Birger Kollmeier: head of dept often remains medical doctor, while technical person (eg physicist) is head of group

Inventory, observations, analysis (Heleen Luts)
Goal: inventory of audiology education, 17 dimensions
130 programs in 18 countries; inventory incomplete
Presentation is limited to bachelor and master programs
High variability: for example, Finland: training in medical audiology, 2 yrs, for medical doctors.
Switzerland: certificate of advanced studies in Acoustics and Audiology 1 semester. Turkey: audiometry courses.
Division into components: Basic& Applied Physics (PH), Anatomy and Physiology (A&P), Pathology and diagnosis of auditory disorders (Aud), Communication (Com), Research methodology (RM), Clinical (CT), Research training and thesis (RT), other (O, eg ethics)
Interesting exercise!
Variation of content across programs: technical versus general
Analyses are based on the name of course. The contents and the level of specialization are not known. Would be good to know which courses are given in English? Complete the overview: which information to add or delete. From some countries the situation remains unclear (eg France, Spain) Is it useful to know the specific courses of each program? What can we do with this information? Is it useful to categorize the difference courses in to a number of principal components? Do the 9 components cover the different subjects? Do we want a certain degree of similarity between the programs? Can we identify common denominator? Do we want variability? Can the information facilitate exchange? For more information see notes ‘Discussion Education in Audiology’ (see separate slides)

Remark Rene Dauman: limited number of ENTs in UK, which is why shortage of audiologists in UK

Short presentations of audiology teaching programs:
UK, Sweden, Belgium, Israel, Germany, Poland, Turkey (see slides)

Audiology specification at the level of European Union for medical specialists (René Dauman)
Main difference with the UEMS ORL-HNS training program: sub-speciality. Only for ENT, very long track! To be audiology 6 years for MD, 5 years for ENT, 2 years for speciality= 13 years! Fields of interest include adults and children, hearing and balance, auditory communication disorder. ENTs are asking for training (Similar model for Czech Republic, see slides) Hearing aid dispensers are greatest opponents to independent Audiology program

Audiology and e-learning (Joseph Attias)
See individual slides
What we can gain for e-learning?
J Attias: Create a question bank in audiology for difference courses and level. Each of 6 participants gives 150 questions in his language (900 questions in total). Others must use and experience the QSIA. Guidance remotely.
Interested in collaboration: 95% yes, 5% no
e-learning in your program? 49% (yes) , 51(% no)
For examinations? n=10
For defining minimum end terms? n=10
For setting a full education program? n=14
Problem based solving? N=25%
Something more outcome process, not process driven
Audiometric training programs (Arjan Bosman)
Basic, advanced, special training, case simulation
See individual slides

Short presentations of audiology teaching programs: Denmark, Portugal, Norway, Czech Republic, Finland, France, Ireland, the Netherlands
See individual slides.
No slides:
René Dauman: bachelor Hearing Aid Acousticians (select and fit Hearing Aid, prevention noise exposure, CI fitting), ORL: 5 yrs of training in Audiology
Rob Drullman: no program in the Netherlands. New program Clinical Technology (Bachelor), Master (major in Electrophysiology, specialization in Audiology). 30 audiology centers for multidisciplinary service, private settings as well, at the topic: clinical physicist Audiology (about 80 persons in the Netherlands). Different track for hearing aid dispensers (2 yrs program)

Discussion, questions, future directions (moderator Birger Kollmeier, Jan Wouters)
What can EFAS do with this information?
Interesting to know how many courses are offered in English? Erasmus programs are also possible.
Turkey: exchange based on the ‘strong sides’ of individual programs (eg clinical practice)
Birger Kollmeier: language is one point, level of program (ba, ma) another point. Should we classify the programs?
René Dauman: variability is great. First select some courses we should share with all? In clinical direction (common denominator).
Jan Wouters: Profile approach. Look at average and standard deviation principle components. Pick out those components with high variability is highest. Pick out those to organize a summerschool.
Liat Rabin: advanced course: use the strengths of the different programs (technology audiology), with specific target on audiology. Determine common denominator to make a golden standard. Difficult to determine golden standard (because of differences in policy)
Ahmet Atas: need to decide ‘who is the audiologist’
Robert Fourie (Cork): shared folder? add info on legislation, add learning outcomes, add modules?
Jan Wouters: inventory of 17 dimensions, 2 yrs, already difficult to handle!
Theresa Pitt: Developing course materials in English (need assistance from person proficient in English). Very welcome!
Valerie Vandenbroek (VIVES): we need to refine components. Decided that not more than 10 components is feasible for analyses.

Do you want profile of institution available on the EFAS website? 78%
Should input data be available? Only available for institutions that contributed? (50%), on the web? (50%)
What kind of exchange is feasible for you? Follow a number of courses (n=14)? Clinical training (n=18)? Research training/thesis (n=19)? Exchange of lectures/teaching (n=20), not interested (n=3)
What kind of exchange is most interesting? Courses (28%), clinical training (18%), research training (26%)
EFAS academy?: yes (79%)
What is the format? See slides.
EFAS academy for students at bachelor and master level: Madalina Georgescu, Marleen Desloovere, Liat Rabin, Ozlem Konukseven, Theresa Pitt, Joseph Attias, Margarida Serrano

e-learning and EFAS: future directions (moderator Joseph Attias)
See slides
Participation QSIA: René Dauman (Lyon), Arne Vik (Norway), Songul Aksoy (Hacettepe, Turkey), George Tavartkiladze (Russia), Margarida Serrano (Coimbra), Valerie Vandenbroeck (VIVES, Brugge, Belgium)
Göteborg (Sweden): withdrawn, due to too tight schedule
Each participant must provide knowledge item, focus on the content

Simulation, training and EFAS: future directions (moderator Arjan Bosman)
Apart from pure-tone audiometry which other tests should be included? Otoscopy, speech audiometry, tympanometry, acoustic reflex threshold and decay, OAE, ABR, None. All responses approximately: n= 16
Is automatic evaluation of results, necessary (78%)? Optional?
Evaluation of results. Sent by an email? Can be uploaded to a website? Even responses
Exercises are necessary (76% ), optional
Evaluation of complex cases is necessary (89%)
Sound output demonstrating the various tests is necessary (40%, 60% optional)
On-line of the program is necessary (moderate responses)
Are you willing to contribute to…: (n=11, translating program), generating new patient cases (n=7)
Who wants to help me translate?: Patrick Verheyden (Brussels), Daphne Ari-Even Roth (Israel), Margarida Serrano (Coimbra), Madalina Georgescu (Romania), Ahmet Atas (Turkey)
Generating new patient cases? Paula Lopes (Porto), Leuven

Closing remarks (Jan Wouters)
Information of profiles will be distributed.
Reports of different working groups at next EFAS meeting,