

ABSTRACT BOOK

**1st International Virtual Symposium
toward the Next Audiology Generation**

**A Collaboration Between
Ankara Yildirim Beyazit University and Polytechnic Institute of Porto**

ABSTRACT BOOK

4th June 2023 I Virtual

About the Symposium:

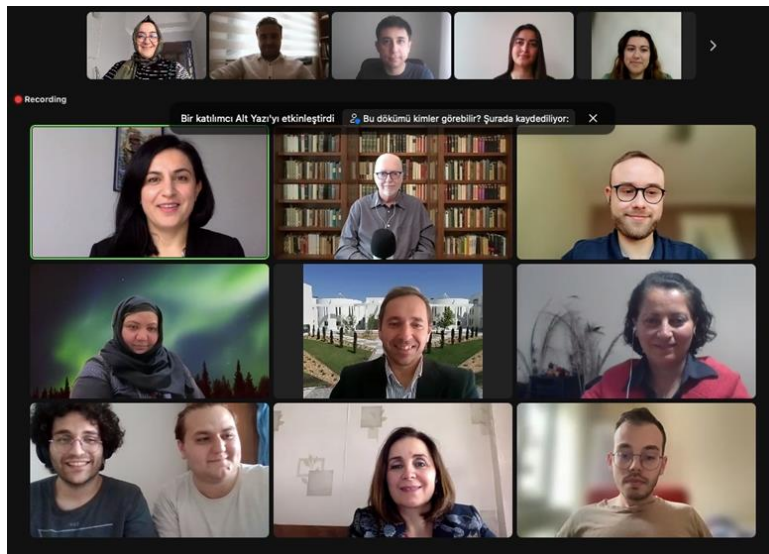
As a collaboration between Ankara Yildirim Beyazit University (AYBU) and Polytechnic Institute of Porto, 1st International Virtual Symposium toward the Next Audiology Generation has been successfully conducted online on June 4th, 2023. The event was hosted by AYBU Department of Audiology and supported by Department of Graphic Design, DILMER and Department of Translation and Interpretation of AYBU. Admission was free and Turkish and English simultaneous translation was provided. As a total of 300 (upper limit of the digital platform) participants registered and attendees from 8 different countries were welcomed. The meeting was completed flawlessly.

Voice of Attendees:

"This symposium provided a wonderful platform to discuss trans-disciplinary management in Hearing Loss. There was so much to learn from the experts. I'm looking forward to attending again next year!"

"The organization of the symposium was excellent. The speakers were knowledgeable, and the presentations were highly impactful. The timetable and the content of the program also was satisfying. I hope to see more events like this organized more frequently."

"One of the best symposiums I've attended. The topics, the sessions and, the speakers... allowed me to gain a wealth of knowledge about Trans-Disciplinary Interventions in Hearing Loss Management. Thank you!"



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Symposium Schedule

Admission is FREE

Venue is Online (Zoom Meeting)

Language: Turkish and English. Simultaneous translation is provided.

Pre-registration is required.

4th June 2023

(TR TIME)

4:00 pm - 4:20 pm

OPENING CEREMONY

4:20 pm - 5:10 pm

KEYNOTE LECTURES: "Transdisciplinary Intervention in Hearing
Loss Management"

Moderator: David TOMÉ, PhD

Speakers:

Pelin PISTAV AKMESE, PhD

Banu MUJDECI, PhD

Gonca SENNAROGLU, PhD

5:10 pm - 5:30 pm

BREAK

5:30 pm - 6:30 pm

ROUND TABLE DISCUSSION: "From Science to Practice: From
Professionals of Today to Tomorrow's Audiology"

Moderator: Sule CEKIC, PhD

Speakers:

K. Todd HOUSTON, PhD

António Pedro MOTA, BSc

Shaza SALEH, PhD

6:30 pm - 6:45 pm

CLOSING

*Speakers are listed in alphabetical order by surname

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OPENING SPEECH

Esteemed Colleagues and Dear Students,

It is our great pleasure to invite you to join us at the 1st International Virtual Symposium toward the Next Audiology Generation, which will be held on June 4th, 2023, virtually. A signature event of the collaboration between Ankara Yildirim Beyazit University and Polytechnic Institute of Porto, the symposium will bring together distinguished speakers, young audiologists, and audiology students from different countries.

This year, the symposium will be hosted by Ankara Yildirim Beyazit University to discuss "TRANSDISCIPLINARY INTERVENTIONS IN AUDIOLOGY" under two significant panels. A panel on "Trans-disciplinary Interventions in Hearing Loss Management" and a round table discussion titled "From Science to Practice: from Professionals of Today to Tomorrow's Audiology." will inspire young audiologists and audiology

students. We are proud to lead such an important discussion and share our knowledge with the Next Audiology Generation. We know that having a multidisciplinary specialty background provides the speakers with the privilege for success in their field, and we want to highlight this to inspire all young colleagues and students. This symposium presents a unique opportunity to exchange ideas and experiences and will contribute to the development of our profession and lead to better outcomes for the patients. Accordingly, our invitation is extended to all audiologists, researchers, and clinicians interested in the field to join us in this exciting event.

We proudly announce that this collaboration marks the beginning of a series of events in the future, and look forward to welcoming you to the 1st International Virtual Symposium toward the Next Audiology Generation on June 4th, 2023.

Best regards,

On behalf of the organizing committee

Sule CEKIC, PhD

General Chair of the Symposium

David TOMÉ, PhD

General co-Chair of the Symposium

KEYNOTE LECTURES: "Transdisciplinary Intervention in Hearing Loss Management"

Moderator: David TOMÉ, PhD

Assoc. Professor, Department of Audiology, Center for Rehabilitation (CiR), School of Health, Polytechnic of Porto (ESS-P.Porto),
Porto, Portugal.

The 1st International Virtual Symposium - toward the Next Audiology Generation, was held on June 4th, 2023, virtually. A signature event of the collaboration between Ankara Yildirim Beyazit University and Polytechnic Institute of Porto. The symposium brought together distinguished speakers, young audiologists, and audiology students from different countries (Turkey, Portugal, Saudi Arabia, United Kingdom, and United States of America). The symposium was hosted by Ankara Yildirim Beyazit University to discuss under two significant panels.

The first panel was on Transdisciplinary Interventions in Hearing Loss Management. The three speakers were Prof. Pelin AKMESE, Prof. Banu MUJDECI and Prof. Gonca SENNAROGLU. They addressed approaches to hearing loss and hearing disorders, according to

background. Diagnosis protocols were presented and discussed for all types of hearing loss.

The overall discussion revealed the importance of an early diagnosis, for a better rehabilitation and development of children with hearing loss. Since 2015, sign language is taught in schools of Turkey, the bilingual education system (auditory and visual) is of utmost relevance for cognition.

Moreover, the 1st panel presentations also highlighted the importance of empathy in all sessions of the process, from diagnosis to rehabilitation. The need of audiologists in hospitals but mainly in schools and primary care (prevention, screening, and early diagnosis) seems to be transversal to all countries presented and a primary goal for the next audiology generation. Closer to the most needed areas (primary care and school-based audiology).

Diagnosis of Hearing Loss with Transdisciplinary Approach

Speaker: Banu MUJDECI, PhD

Professor, Department of Audiology, Faculty of Health Sciences, Ankara Yildirim Beyazit University,
Ankara, Turkey.

Key words: Cross check principle; Diagnosis; Hearing loss; History; Holistic approach

Hearing is the ability to perceive sounds. Hearing loss is a loss of recognition and perception of sounds. Hearing loss causes communication disorder, social isolation and loss of self-confidence. Early diagnosis of hearing loss is very important. Audiologist, otolaryngologist, pediatrician, neurologist, geneticist, radiologist, public health specialist, relevant specialists in people with additional disabilities family, teachers and employers can serve in the diagnosis process of hearing loss. During the diagnosis appointment, it is very important to inform the patient and/or the patient's relatives and to ensure the patient's suitability for the test. Knowledge of anatomy and physiology, detailed story, observation, questionnaire and scales, selection of correct test, application of tests, interpretation of test results, reporting, holistic approach, audiological diagnosis/referral to relevant doctor are very important in the diagnosis process of hearing loss.

Patient history and observation, facilitates obtaining information about the child's cognitive status and motor development, estimating the results of the tests to be performed, and choosing the right audiological test.

Pure tone audiometry, speech tests, behavioral tests of hearing, tympanometry, acoustic reflex measurement, otoacoustic emission (OAE), auditory brainstem response (ABR), other diagnostic audiological tests, questionnaire and scales are assessments used in the diagnosis of hearing loss. In the interpretation of test results and reporting phase, the cross check principle and holistic approach is important. Empathy is very important during the reporting of the test result to the patient and/or their relatives/family. It should be kept in mind, that the evaluation of auditory processing disorder and vestibular evaluation may be necessary in people with auditory complaints.

Lastly, the audiologist's following the literature and current publications will not only contribute to the principle of lifelong learning, but also facilitate correct decision-making in difficult cases.

Clinical Management of Hearing Loss with Transdisciplinary Approach

Speaker: Gonca SENNAROĞLU, PhD

Professor, Department of Audiology, Faculty of Health Sciences, Hacettepe University,
Ankara, Turkey.

Key words: Clinical management; Hearing loss; Transdisciplinary approach

Sharing of knowledge, experience and practices in the field of health enables to determine the problem with a more in-depth, multidimensional and holistic approach, to find more effective solutions and to support patients holistically, providing important contributions for their benefit. There is also interdisciplinary role sharing; specialists can combine assessment and treatment practices to fulfill each other's responsibilities. For example, speech capacities, communication skills and psycho-social interaction skills of a person presenting with a complaint of hearing loss can be examined simultaneously and have a combined plan to offer solutions for all these aspects. There are many solutions for hearing loss: medical treatments and ear surgeries, hearing aids, hearing implants and hearing rehabilitation process.

The role of the Audiologist in hearing loss management: identifying the patient's communication needs, to provide effective and

functional hearing, providing rehabilitation support, identifying additional barriers and needs and providing support/direction for their resolution.

Transdisciplinary approach brings Power. It is in-depth perspective, all the needs of the patient related to communication skills can be determined more effectively. Coordination of decision processes (such as directing in terms of hearing aid, cochlear implant or brainstem implant) for the solution of the determined auditory need can be easily achieved. Decisions are much easier to communicate and articulate (for audiologists with many different specializations). Collaboration with different professionals becomes easier, so there is no need for family to have several appointments with different professionals.

Our goal is to increase the patients and their families' quality of life standards and contributing to public health by transferring from an

interdisciplinary approach (which is already common) to a transdisciplinary approach.

Audiologist must answer the following questions when they are managing hearing loss: Do you have knowledge enough about the disorders, patients, solutions etc...? Do you have interdisciplinary perspectives? Do you have an unbiased, but correct foresighted approach? Do you present your point of view in all circumstances?

My last comment for audiologist is: “Remember, your approach will directly affect the entire course of treatment.”

Transdisciplinary Educational Intervention in Hearing Loss

Speaker: Pelin PİSTAV AKMESE

Assoc. Professor, Department of Audiology, Faculty of Health Sciences, Ege University,
Izmir, Turkey.

Key words: Children; Education; Hearing loss; peers.

Getting started with the auditory intervention, first of all, a case history should be taken, overall developmental assessment, assessment of functional hearing and language and speech development should be evaluated. The purpose of educational assessment in hearing loss is to determine whether the current situation of the child with hearing loss is a suitable candidate for cochlear implant or brainstem implant. If the child uses a hearing aid, cochlear implant or auditory brainstem implant, these children should be followed up at regular intervals. During the follow-up period, the child should be evaluated in order to obtain information about all developmental areas (auditory perception/hearing thresholds, language and speech skills).

Intervention targets are determined by results of the evaluations. In order to give information about the readiness of the preschool-aged child with hearing loss, a detailed evaluation is made in order to

determine the future career choice and competence in the advanced school years. It is important to consider educational assessment, auditory perception skills, receptive and expressive language, cognitive and academic skills, child-family interaction.

Formal evaluation (norm-referenced tests and criteria-referenced tests), informal evaluation (observation, interview, scales and surveys) and alternative evaluation (observations and game based evaluations) approaches should be used in educational evaluation of hearing loss. Educational intervention should be initiated following this.

In the last 30 years, cochlear implant surgeries have been frequently applied in severe and profound hearing loss, and important steps have been taken to enable these children to communicate orally via intensive auditory-verbal therapy from the early period. Several studies suggest that children with cochlear implants before the 2 years old, following

early diagnosis, performed similarly to their peers in areas such as receptive language, expressive language and vocabulary.

Children with hearing loss can achieve similar achievements and educational opportunities with their peers only by being diagnosed at the appropriate and earliest period, and by accessing the appropriate education program.

Implementation of intervention programs prepared according to detailed evaluation results increases language acquisition, speech development, academic and social skills of children with hearing loss. Thus, having similar educational opportunities to their hearing peers. In cases where hearing loss is accompanied by additional problems, detailed evaluation of general development, support of all developmental areas, intensive educational intervention and transdisciplinary intervention are required.

As a result, the main goal in the education of children with hearing loss, developing verbal communication skills appropriate for their

chronological age and following an academic process that can catch up with their peers and to provide them with educational opportunities similar to their hearing peers.

II- ROUND TABLE DISCUSSION: "From Science to Practice: From Professionals of Today to Tomorrow's Audiology"

Moderator: Şule ÇEKİÇ, PhD

Assoc. Professor, Department of Audiology, Faculty of Health Sciences, Ankara Yildirim Beyazıt University, Ankara, Turkey.

The second panel of the symposium proceeded in the form of questions and answers. We discussed pre-defined questions with Professor K. Todd HOUSTON from United States, Dr. Shaza SALEH from Saudi Arabia, and Antonio Pedro MOTA from United Kingdom. Young audiologists and audiology students listened to experiences of the distinguished speakers with different and rich background. We are sure that they inspired the participants in many ways. The questions discussed in the panel are below.

1) Tell us a little bit about your work today. When you were a student, did you imagine being in your today's position?

2) Could you please describe your meeting with an undiagnosed patient with hearing loss at the first session in your clinic? How and based on what do you plan ahead? Tell us about the level of detail in your action plan.

3) Have you ever had a difficult time in your professional life? How did you overcome it?

4) We are living in a world with a high use and sometimes dependence on technology as we never seen before. The way health sciences (more specifically Audiology) is taught is quite different from just 20 years ago. Regarding your country's reality, what skills would you advice audiology students to acquire/develop?

5) We just got out of a pandemic situation. In your opinion what will be the main challenges for health sciences (specifically Audiology) in the next 10 years, in clinical practice and as a science?

We believe that the answers of very experienced speakers from different countries and different disciplines to these questions were highly instructive for the next audiology generation. The summary of the speeches is provided below.

Speaker: K. Todd HOUSTON, PhD, CCC-SLP, LSLs Cert. AVT

Professor, School of Speech-Language Pathology and Audiology, College of Health and Human Sciences,
University of Akron
Akron, Ohio, United States.

Key words: Challenges of the future; Collaboration; Speech-Language Pathology; Teamwork

Individuals with hearing loss, from birth through adulthood, require audiologists, speech-language pathologists, and other service providers who have the knowledge, skills, and, most importantly, the competencies to provide patient specific diagnostic and treatment services. Collectively, as the world moves forward from the recent COVID-19 pandemic, hearing health professionals face new frontiers in diagnosing and treating hearing loss. In the next 10 years, Audiology will encounter multiple hurdles that require careful planning, adaptation, and execution of new models of service delivery. This speech explores the potential challenges in Audiology, Speech-Language Pathology, and related services and offers insights into recommended skills for future practitioners to thrive in an ever-changing and technology-driven world. Additionally, it delves into a hypothetical first session with an undiagnosed generic patient,

providing an overview of the assessment process and the subsequent formulation of an action plan.

The future of Audiology, Speech-Language Pathology, and related services present several potential challenges that that new and more seasoned professionals will address. Those challenges will include but are not limited to: Post-Pandemic Effects, Aging Population, Technological Advancements, Access to Care, Mental Health Considerations, Evidence-Based Practice, Interprofessional Collaboration, Global Health Challenges

As the world faces the above challenges, current students and recent graduates in Audiology, Speech-Language Pathology, and related services must develop the following skills and mindsets to navigate this global hearing health landscape: Technological Proficiency, Critical Thinking and Problem-Solving, Communication and

Interpersonal Skills, Cultural Competence, Research Literacy, Collaboration and Teamwork, Professionalism and Ethics, Lifelong Learning.

When encountering an undiagnosed generic patient with hearing loss during the first session at a clinic, a comprehensive approach is necessary to gather crucial information, conduct evaluations, and formulate an effective action plan or interventions: Case History, Communication Assessment, Audiological Evaluation, Interpretation of Test Results, Counseling and Education, Treatment Recommendations, Follow-up and Monitoring.

When meeting an undiagnosed patient with hearing loss, it is essential to follow a systematic and patient-centered approach, which will differ if the patient is an infant versus an adult. By conducting a thorough evaluation, providing personalized counseling and education to the patient or the child's parents or caregivers, and developing an action plan tailored to the individual's or family's needs, audiologists can guide patients (or parents) on their journey towards improved hearing health and communication success. Regular follow-up and monitoring ensure ongoing support and enable adjustments to the hearing technology and/or the

intervention plan to optimize outcomes. Through this comprehensive approach, audiologists can enhance the patients' or the child's and family's quality of life and well-being.

As hearing healthcare professionals, especially those in Audiology and Speech-Language Pathology, face the challenges of the future, they must adapt, equip themselves with essential skills, and address the evolving needs of patients across the lifespan. The ability to navigate technological advancements, ensure access to care, and incorporate evidence-based practices will shape themselves and the services they provide. By fostering the recommended skills and embracing a commitment to patient-centered care, professionals can contribute to advancements in hearing healthcare and help to ensure their patients' overall success and well-being.

Speaker: Antonio Pedro MOTA, BSc

Senior Audiologist, Royal Berkshire NHS Foundation Trust,
United Kingdom.

Key words: Artificial Intelligence; Protocol for early hearing testing; Virtual testing

I was thrilled to receive an invitation to speak at the 1st International Virtual Symposium Toward the Next Audiology Generation, a collaboration between the Ankara Yildirim Beyazit University and my esteemed alma mater, Polytechnic Institute of Porto. This event aimed to provide Audiology students and young audiologists with an opportunity to share in the experience of professionals from other countries, in order to inspire them for their future practice.

The panel I participated in was titled “From Science to Practice: From Professionals of Today to Tomorrow’s Audiology”, where I was honored to share my experience as a Clinical Audiologist in the National Health Service England, where my main focus lies primarily on routine and complex adult rehabilitation as well as vestibular assessments. Furthermore, I also shared my clinical path, from finishing my degree at the Superior Health School of Porto in Portugal to my Erasmus+

project into the UK which catapulted me into this great adventure. This, of course, did not come without its challenges and rough patches, but it is important for all individuals to be able to grow with adversity and achieve professional and individual happiness. It was a wonderful experience to be able to transmit my knowledge to the audience, and it was equally rewarding to hear from other colleagues from around the world share in their clinical practices and journey within the field of Audiology.

It was a highly constructive conversation, where we were also able to delve into the current and upcoming difficulties that Audiology faces in a post-pandemic world, such as a backlog of patients, impact on mental health and socioeconomic challenges. Additionally, we also explored the exciting possibilities and resources that technological advancements may provide us in the future, namely virtual testing and rehabilitation,

better protocols for early detection of hearing loss, the benefits of a transdisciplinary approach with other specialities, as well as the dawn of Artificial Intelligence and its role in our practice in the years to come.

This Symposium provided all of us with invaluable knowledge and insights, and hopefully it will become an established annual event in the world of Audiology, where I would always be very happy to return to, and I am pleased to congratulate both faculties on a very successful event.