Joy Rosenberg, Mary Hare with University of Hertfordshire
Claire Gamon, Hertfordshire
Graham Groves, Telford & Wrekin and Shropshire

Introduction

Forum discussions between Heads of Sensory Services (HOSS) have highlighted differences of approaches to provision of Educational Audiology (Ed Aud) service. This poster researches developments that improve joined-up working into the future between partners who serve children and young people who are deaf (CYPD) and their families. Though there are many, space limits our focus here to training, hearing instruments and complex needs.

Value of the Ed Aud Role

Ed Auds serve as an expedient bridge, linking up listening life between CYPD and their families, school and clinic; filling roles and competencies defined by British Association of Educational Audiology.. Expanding these benefits, for the first time ever in 2019, Ed Auds (both new graduates and experienced practitioners) have begun registering pro-Fessionally with the Registration Council for Clinical Physiologists. Also in 2019 at Mary Hare partnered to University of Hertfordshire, stand-alone modules (one residential weekend and one assignment) for CPD became available on the Ed Aud course to Teachers of the Deaf (ToDs) or Clinicians to top-up CPD or sample Ed Aud training. Early adopters have reported significant benefit (Rosenberg and Bull, 2020) from this interprofessional learning remarking that:

- *Powerful learning opportunities exist in the shared experiences of educationalists and clinicians learning together.*
- *We are developing ways to improve each of our services in conjunction with the others, learning a fair bit about the work of other professionals.*
- *I really appreciated the opportunity to build and share knowledge, to just drop in and learn and contribute and chat with such a welcoming and found the interactive nature of the classes stimulating and engaging.*

Early Verification and validation

In Shropshire and Telford & Wrekin the Ed Aud jointly delivers all hearing instrument (HI) reviews for 0-5 year-olds as commissioned by the Clinical Commissioning Group, supporting the process of verification and validation. Verification is the objective clinical measure that determines whether an HI meets a particular standard. This process is informed by the work of the Ed Aud alongside ToDs and families. The Ed Aud uses various tools related to developmental acoustic phonetics, to consider if a child is producing (and therefore likely perceiving) an appropriate repertoire of speech sounds at an appropriate time. This may indicate the child`s access to specific frequency components of speech which is fed back to clinical audiologists who may consider the frequency response of any device, thus complementing the clinical verification p rocess.

In Shropshire, this information sharing is accomplished via an agreed HI review feedback sheet that is available to clinicians at the time of HI appointment. It details information such as response to environmental and to Ling sounds, developmental stages, overall communication and feelings about listening. This forms a key element of the verification and the wider validation process of the HI fitting allowing the team to consider the fit in real-world terms.

Clinical teams report:

- Joint delivery of HI reviews *'offers a clear and consistent link between the two services to provide a joined-up programme'.*
- Feedback sheets are referred to before a review *'always'*; and inform clinical judgement *'often or always'.*
- Ed Aud input *'offers a deeper understanding and broader knowledge of school and home-based needs'.*

Impact on CYPD with Complex Needs

To support special schools for profound and multiple learning difficulties (PMLD) with inclusion of CYPD, in addition to regular visits from ToDs, the Ed Aud and Specialist MSI Teacher in Hertfordshire offer audiology reviews, collaboratively working with parents and key workers to assess and manage children's listening. The service includes the following with case examples supplied:

Earmould impressions: A 7-year-old girl, profoundly deaf since birth with additional social and communication needs and new to the UK, had never worn hearing aids consistently. In clinic, severe distressed behaviour prevented ear mould impressions being taken; but once settled in school with teacher and TA, she eventually calmly complied and the Ed Aud was able to take impressions. *Outcome:* Hearing aids were sent to school and successfully fitted by Ed Aud.

Observations informing onwards referral: A 4-year- old girl with history of conductive hearing loss but no further information was observed not responding to name called at 80dBA. The Ed Aud observed her responding (stilling and smiling) to low, medium and high-pitched musical distraction toys at 70dBA, 85dBA and 80dB respectively, but had no responses to these sounds at 60dBA, 75dBA and 70dBA respectively. *Outcome:* Clear evidence could be provided by Ed Aud for onwards referral. Child could not access spoken language without amplification, visual communication was essential and further clinical investigation (ABR under sedation) was needed.

Bone anchored hearing aids (BAHA): A child with Down Syndrome who previously had post aural hearing aids, based on newborn ABR, was not attending clinical audiology appointments. Otoscopic investigation by the Ed Aud found both ears had compacted wax, cloudy ear drums suggesting glue ear and extruded grommets. *Outcome:* The Ed Aud negotiated with the audiology clinic and fitted a bone conduction hearing aid at school. Staff fedback that the child immediately responded to environmental and spoken sounds, writing *Thank you so much for your support in getting a 'hearing band' for this young lady.*

Using imagination to obtain responses: A child aged 7, diagnosed at birth with a severe hearing loss bilaterally, was later diagnosed with blindness, social and communication difficulties and hypersensitivity. He didn't like touch or anything near his ears. *Outcome:* The Ed Aud worked closely with a team to establish access to sound via stetoclip linked to power hearing aid, via direct input lead, and more recently to an Assistive Listening Device. Team feedback: 'W*e so appreciate your support as we are keen to move forward with this little man! He is doing so well … and we are really excited about developing his use of hearing.*

Conclusion

These examples demonstrate that the work carried out by an Ed Aud complements the precision of a clinical audiologist whilst allowing for flexibility in real-life settings with ToDs and families, linking up listening life for the CYPD served. As one HOSS wrote, 'I do feel that having a specific Educational Audiology role really supports staff but at the same time doesn't take away from the development and operational use of their expertise. I can't imagine not having one!' (Peters 2019)

References

British Association of Educational Audiologists (2020) http://www.educational-audiologists.org.uk/documents.php [accessed 1 Feb 2020]

Mary Hare Postgraduate Courses (2020) https://www.maryhare.org.uk/professional-courses/postgraduate-courses [accessed 1 Feb 2020]

Peters J (2019) HOSS forum. NATSiP.

Rosenberg J and Bull L (2020) What's New in Educational Audiology?. *BATOD Magazine,* March Edition.

Contact Details

Claire Gamon, Lead Practitioner (Hearing Impairment) and Educational Audiologist, SEND Specialist Advice & Support, Hertfordshire.
Claire.Gamon@hertfordshire.gov.uk
Graham Groves, Joint Team Leader and Educational Audiologist, Sensory Inclusion Service, Telford & Wrekin and Shropshire.
Graham.Groves@telford.gov.uk
Joy Rosenberg, Principal Lecturer, Mary Hare affiliated to Uni of Herts. And Training Officer, BAEA *J.rosenberg@maryhare.org.uk*