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From HearOn: Introducing the HearOn Videos for Professionals and Caregivers

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An essential component of family-centred early intervention (FCEI) in Communication Sciences & Disorders is that support and educational materials should be offered to families in ways that are meaningful and useful to them.[1–3] To be of value to caregivers and professionals these materials should positively impact:

- Knowledge and skills;
- Empowerment: confidence and competence;
- Child and family well-being;
- Information sharing and shared decision-making;
- Relational understanding; and
- Improvements to loss-to-follow-up.

Another essential component to FCEI is that caregivers who choose for their child to be wearing hearing technology should understand that there are two very critical factors in achieving optimal language and literacy outcomes, well-fit and consistently worn hearing aids.[4] Moeller found that children who wore their devices more than ten hours a

day tended to have language outcomes within normal limits by kindergarten. In a large multi-site longitudinal study called the Outcomes of Children with Hearing Loss (OCHL; ochlstudy.org) the researchers showed that children with hearing loss are at risk for language and other delays.[5] They also found that children demonstrated the most optimal language outcomes when their hearing loss was identified at birth when they were fitted with hearing aids early, and when children wore their hearing aids regularly and for more than 10 hours a day.[6] This good news is tempered by the fact that many parents do not consistently put hearing aids on their young children. More than half of parents of children with permanent hearing loss were found to put hearing aids on their infants less than 5 hours a day.[7]

It was hypothesized that this disparity between recommended hours and actual hours of hearing aid use could be related to several factors: (1) caregivers may not be knowledgeable about the need for hearing aids all waking hours; (2) caregivers may not have the requisite skills to keep hearing aids on throughout the day; (3) information sharing between early intervention professionals and the family may have resulted in caregiver misunderstanding and/or feelings of being overwhelmed with information during the appointment, not retaining the information when they arrived home; and (4) parents may not feel confident and competent in understanding their child's hearing loss, reasons for audiologic assessment, and when to reach out to their audiologists for problem-solving.

To assist caregivers in achieving positive outcomes from their early hearing detection and intervention services, researchers in Western University's National Centre for Audiology, Family-Centred Early Intervention (FCEI) Lab have designed and developed several video-based interventions meant to address some of the factors associated with caregiver adherence to the 'all waking hours' recommendations. Led by David Sindrey, PhD Candidate, work on the videos has followed best practices in the design, development, and implementation of behaviour change interventions[8] and Mayer's theory of Multimedia Learning.[9] Also, we worked diligently to develop a tool that would be easy-to-implement, affordable, practical, effective, feasible, and acceptable and would meet caregivers needs for information repetition.[8] The HearOn Videos were developed in collaboration with professionals and policy-makers within Ontario's Infant Hearing Program. A video-based intervention was selected as the

method for delivery because it provides opportunities for relational communication during professional in-office appointments with caregivers and provides them with a way of revisiting the information at their convenience and in their home. It also provides a way for the caregiver to share the information with other members of the family, and importantly with other care providers (such as the daycare). Early anecdotal feedback from parents has been that they found the videos user-friendly, improved their knowledge about their child's hearing loss, the reason for an ABR appointment, and provided them with strategies to "Keep on Keeping On" their child's hearing aids. The most frequently watched videos to date are The First Audiogram (Moderate hearing loss); Your Child's Hearing; and Your ABR Appointment. Early anecdotal feedback from professionals is that it is being used by audiologists, speech-language pathologists, and family support workers. Many found it helpful to provide a specific video for parents to watch as 'homework' in-between appointments or to prepare them for appointments. For example, some service providers are having parents view the ABR video in preparation for their ABR appointment.

In 2017, David Sindrey was awarded the Canadian Academy of Audiology Student Poster Outstanding Research Award for this work.

All videos are provided with closed captioning and are currently being translated into French and other languages. More videos are being developed based on requests we have received and will be uploaded to our HearOn Videos channel as they become available. An evaluation of the videos will begin in September 2020. If you would like to participate, please contact Danielle DiFabio at ddifabio@uwo.ca

We are sharing our HearOn Video intervention handout for your use and to be included within any parent resource websites/binders that you have developed for parents. All videos are available for your clinical use and sharing at YouTube.com/HearOnVideos. If you find that the QSR codes included in the handout and reproduced here in the online production of this paper do not work, please contact us (sheila@nca.uwo.ca). We will send you a version of the handout with workable QSR codes. QSR codes allow professionals to direct-access a specific video using a caretaker's cellphone.

Download the HearOn handout here

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