Early Sign Language Exposure and Cochlear Implantation Benefits

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Responses Comments 15 August 2017 RE: Seeing Voices and Cochlear Implants

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Geers and colleagues, in a meticulously executed study, reported a delay in speech acquisition in patients using sign language prior to cochlear implantation (1). We fear that this may discourage parents from using sign language with unintended negative consequences.

Hellen Keller describes how blindness only separates the blind from things, but deafness separates people from people (2). Oliver Sacks in his fascinating book, 'Seeing Voices' describes the fate of the hearing impaired before 1780 when the "congenitally deaf or 'deaf and dumb' were considered 'dumb' (stupid)" (3). Without language they were cut off from fellow humans, culture and information, no matter how good their native capacities.

In the 1780s deaf schools manned by deaf teachers began to become popular and sign language came into its own. Soon after this we had "deaf writers, deaf engineers, deaf philosophers and deaf intellectuals" which was inconceivable previously.

According to Sacks the tide turned again in the 1870s when it became popular to think that sign language cut the deaf from the general population and that they should be taught lip reading and speaking. Sign language was proscribed. The teaching of speech took five to eight years of intensive tutoring leaving little time for transferring information, culture and anything else, such that child ended up 'a functional illiterate who had, at best, a poor imitation of speech'(3).

Even for infants with hearing, infant signs - symbolic gestures which can be used to represent objects, actions, requests, and mental state, are intentionally taught/learned and this helps parents and infants to communicate specific concepts earlier than the children's spoken language(4).

Humphries et al describe the potential harm of proscribing sign language (5). They suggest that " because of brain plasticity changes during early childhood, children who have not acquired a first language in the early years might never be completely fluent in any language. If they miss this critical period for exposure to a natural language, their subsequent development of the cognitive activities that rely on a solid first language might be underdeveloped, such as literacy, memory organization, and number manipulation."

We submit that the emphasis on teaching speech and cochlear implants comes from a medical model of disability in which the person with an impairment is considered to have a problem, a disease or deficit, which needs to be 'fixed' so that the person becomes 'normal'. This is distinct from the rights based approach of the UN convention on Rights of People with disability (UNCRPD) and the accepted 'social model' – a framework in which the barriers placed by society on participation are given equal attention as the cause of impairment.

We recognize that we are ourselves not qualified to 'speak' for the hearing impaired. 'Nothing about us without us" is the guiding principle of the disability movement. It will be useful for Pediatricians to recognize this and consult with those with hearing impairment, before we enforce speech recognition to the exclusion of sign language.

References

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