

Hearing Impairment - Central Auditory Processing Disorders

Hearing Impairment simply means loss of hearing. A pupil who is suffering from a severe hearing loss is unable to use hearing to understand speech and will use vision as a means for learning and communicating.

3 types of hearing loss are:

- **Conductive hearing loss.**
This may be due to excessive wax and can be treated.
- **Sensorineural hearing loss**
This is a permanent loss of hearing and is not correctable.
- **Mixed hearing loss**
This is a combination of both conductive and sensorineural.

The causes for loss of hearing may be due to:

- **Hereditary**
for eg. Premature births or those born with the impairment,
- **Illnesses**
for eg. Throat infection, Jaundice, Rubella and Measles
- **Injury**
due to accidents or noise pollution

A child who is not attentive in class, seemingly has language development problems or difficulty with reading, may simply be suffering from a loss of hearing. Hence the hearing test should be administered first before any other. Teachers play a role here in early intervention. The problem needs to be surfaced to the parents and the child should be referred to the ENT specialist to check his hearing disability, if any. Only if he/she clears the initial diagnosis (and the problem is not his hearing), should we proceed to refer the child for other tests to address other possible disability.

Characteristics of Hearing Impairment

1. Difficulty in hearing especially soft voice or noise
2. Unclear speech or mumbling
3. Requests to repeat what others have said
4. Finding group conversations a challenge
5. Inattentiveness during conversations
6. Cannot speak loudly or tend to shout
7. High reliance on visual cues
8. Delay in the acquisition of speech and language skills

Overtime, the child may have problems in reading and writing and hence, poor academic performance.

Example of Support Programme (Canossian School for the Hearing Impaired):

Early Intervention:

Between infant to preschool age, parents get their child's condition verified by an audiologist followed by regular consultation with therapist to help child with speech development at home.

Individual Conversation Programme:

A child from preschool to primary school going age is provided with a one-to-one individual conversation with a teacher. This is targeted at developing the child's listening, verbal and interactive skills.

Integration Programme:

Pupils are provided with integration opportunities to allow pupils to assimilate into mainstream education.

Cochlear Implants:

The cochlear implant is recommended for an individual who is severely hearing impaired and will not be better off with a hearing aid. This device allows electrical stimulation of the hearing nerve that makes a deaf person 'hear' sounds. However, this is a last resort treatment with reference from an ENT specialist. The child will be assessed for suitability as a CI candidate. After surgery, the child will be closely monitored and he/she will continue to attend listening skills sessions with the rehabilitationist and audiologist.

Reference Materials & Websites:

<u>Government & Organisations</u>	
Singapore Association for the Deaf (SAD)	http://www.sadeaf.org.sg/
Singapore School for the Deaf (SSD)	http://www.ssd.edu.sg/
Canossian School for the Hearing Impaired	http://www.cshi.com/
National Council of Social Services	http://www.ncss.gov.sg/
Community Chest of Singapore	http://www.comchest.org.sg/
Deaf & Hard-of-Hearing Federation (S'pore)	http://www.dhhfs.org.sg/index.html
<u>Information & Research</u>	
Deaf Education Website	http://www.deafed.net/
Special Education Resources on the Internet	http://www.seriweb.com/
An Educator's Guide to Hearing Disability Issues	http://rs.ed.uiuc.edu/wp/access/hearing.html
American Speech-Language-Hearing Association	http://www.asha.org/public/hearing/disorders/
Animations of Processes within the Ear	http://www.neurophys.wisc.edu/animations/
Disability Portal	http://www.disability.org.sg/hearingdisability/index.asp
Teens Health	http://kidshealth.org/teen/diseases_conditions/sight/hearing_impairment.html
<u>Books</u>	
For Adults (Parents & Teachers) I want to speak like you Kay Thomsett & Eve Nickerson Gallaudet University Press, 1993	Synopsis This book encourages families to give HI children the same linguistic experiences and lessons as a child with normal hearing.

<p>617.8 THO – [HEA] Hear what you’ve been missing: how to cope with hearing loss Donna S Wayner Chronimed Publishing, 1998 617.8 WAY – [HEA] <u>For Children</u> A Button in her Ear Ada B.Litchfield Albert Whitman, 1976 J 362.4 LIT Moses goes to School / Moses goes to a Concert Isaac Millman Farrar, Straus and Giroux, 1998 JP MIL</p>	<p>Audiologist Wayner outlines the tools and strategies available to overcome the effects of hearing loss, the causes and treatment and hearing loss, hearing aid and other assistive listening devices.</p> <p>A young girl, Angela, shares her experience of how her hearing improved when she started wearing a hearing aid, which she calls a ‘button’ in her ear.</p> <p>Follow Moses, a boy with HI, as he goes to his first day of school (the first book) and his first concert (the second book). Read about how he enjoys both experiences with his classmates.</p>
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