

## Auditory Habilitation in Scandinavia – Change of Perspectives and New Challenges



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## Learners Outcome

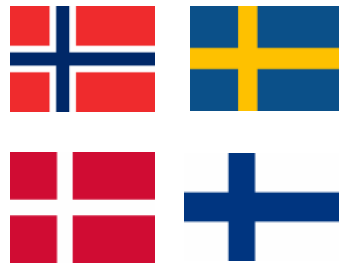
- Auditory Habilitation in Scandinavia
  - Historical background from the 1980's – 2012
    - Change of Perspectives
    - New Challenges

## Scandinavia



## Scandinavia

- Sweden (9,5 million inhabitants)
- Norway (4,9 million inhabitants)
- Denmark (5,5 million inhabitants)
- Finland (5,4 million inhabitants)



- Swedish, Norwegian, Danish = same linguistic background (Finnish= Finno-Ugric language + Finnish-Swedish minority population)
- Close historical and sociocultural background but still many differences!

## **Newborn Hearing Screening**

Newborn hearing screening (NHS) was first introduced in one center (Linköping) 1995 and fully established 2007 in Sweden

Denmark implemented NHS 2005 in the system

Norway and Finland established NHS in 2009 after some pilot periods

As a consequence of early identification and diagnosis of hearing loss, the proceeding intervention have faced new challenges

## **Bilateral Implantation**

Dr Eva Karltorp at Karolinska University Hospital, Stockholm, individual parents and the parent organization Barnplantorna promoted bilateral implantation in Sweden in 2003

Norwegian and Danish parents paid themselves in the beginning for a second CI and came to Sweden for the operation before it was established in their countries as well some years later (2005)

Finland started to operate bilaterally 2009

## **Goal 2012**

Every child with CI or HA should be given the opportunity to develop listening and spoken language ability as far as possible depending on her/his individual potential

Heterogeneous group!

30-40 % additional disabilities (Möller, 2009)

## **Background Cochlear Implant Programme in Sweden**

- 1991, first postlingually deafened child operated
- 1995 mean age of operation 3 y.o.a in Sweden
- Totally 1600 CI users (800 children) - 6 centers (2012)
- Goal: Early Hearing Aid Fitting (3 months)
- Early operation (from 6 months)
- Bilateral operations or bimodal hearing (CI + HA)
- The Government pays for HA & CI-intervention, follow-up and habilitation

## **Intervention Background - Scandinavia**

1980-90: Sign language was the only choice for parents with NH and deaf or hard-of-hearing children

2000: Bilingual approach (First develop sign language and then written language and maybe spoken language)

From 2005: More auditory habilitation options in Sweden, Norway and Denmark – higher expectations in spoken language outcome together with NHS and CI

2012: Parents with NH want their child to develop spoken language first – many are open and want to include sign language or supported signs later when the child has learned some spoken language

## **Similarities – Scandinavian countries**

- Society structure and culture; equality, socioeconomy, early daycare services
- Government pays for operation, hearing technology and habilitation
- Sign language well established in society (interpreters, parent education, school system)
- Some deaf schools are closing down or becoming resource centers because they are losing pupils, most children are mainstreamed
- Segregated parent organizations (children with HL, deaf children, children with CI)

## **Differences – Scandinavian Countries**

- Denmark have less far distances within the country and therefore centralizes habilitation resources
- Difficulties to have up-to-date intervention options in rural areas (Norway, Sweden, Finland)
- Finland started later than the other Scandinavian countries to operate young deaf children and to operate bilaterally
- Finland have less immigrants
- Partly different types of intervention programs, even if the focus today is on auditory verbal approaches for most children/families in Scandinavia

## **Auditory habilitation in Scandinavia – background/history**

- Oral approach - 70's (no NHS, less developed HA technology, no CI)
- Early 80's from oral to manual education and communication
- Swedish sign language = national language for deaf people in Sweden 1981
- Better services and support for deaf people, financial support for Swedish families with deaf & hearing impaired children
- Limited family-centred support for spoken language options

### **Auditory habilitation in Scandinavia - 1991**

- First postlingual deafened child operated in 1991 (Sweden)
- No deafborn children were operated in the beginning
- Sign language was the first language for all children
- Extensive sign language education for parents
- No or very little auditory habilitation options for hard of hearing children and their parents
- The majority of deaf children went to preschools and schools for deaf and hearing impaired children

### **Auditory habilitation in Sweden – 2001**

- Low expectations in a child's auditory-verbal development, many children part-time users and some non users of CI
- Bilingual approach (sign language/written & spoken language)
- No deaf parents choosed to operate their child
- Poor auditory-verbal habilitation options and education of parents regarding spoken language development
- Late diagnosis of additional disability – "wait and see"
- Majority of children attended special preschools/schools for deaf or hearing impaired
- Parents started to ask for SLP support
- Majority of parents attended sign language courses

”We don’t sing because she’s deaf”

### **Professional Education and Training in AVT**

Intensive training programme (Warren Estabrooks, Learning to Listen Foundation, Canada)

- Sweden: 2 years 2004 – 2005, Norway: 1 year 2005
- Denmark 1 year 2006

Expectations of the programme:

Develop better skills as therapists regarding AV habilitation and train other professionals after the programme, Introduce AVT as a new option in Scandinavia. Increase knowledge about AVT and raise the bar regarding listening and spoken language development in children with HA/CI

Challenges: Prejudice and resistance among professionals regarding AVT, Established bilingual approach, Socio-cultural differences regarding how children are brought up and how therapists work with parents as partners



### **Outcome of AVT-programme in Sweden and Norway**

- AV practice is established as one option in the habilitation system in many parts of the countries
- The majority of families request auditory and spoken language training regardless of communication choice
- Larger interest in AV practice from other professionals – less prejudice due to increased knowledge
- National Education Program in Auditory-Verbal Practice for Early Interventionists in Sweden

### **Sweden and Norway - AV Education programs for professionals**

One year long distance education in Auditory Verbal Practice (theoretical and practical approach)

Goal:

Educate professionals who work with young children with hearing loss and their families from all parts of the country in up-to-date AVP

Provide the same opportunities in the whole country for parents to choose AVP

## **Auditory Verbal Practice in Sweden 2012**

- Three LSLS Cert AVEd in Scandinavia (Sweden)
- One year programme in AVP for SLP's and Teacher's of the Deaf
- Education of audiologists and preschool teachers
- Workshops for parents and professionals
- Close cooperation with the AV group in Norway

## **National Education Program in Auditory-Verbal Practice for Early Interventionists in Sweden**

- The NEPAVP was introduced in 2005
- Prospective participants were Teachers of the Deaf and Speech and Language Pathologists who worked with children with hearing loss and their families
- The one-year long program include both theory and practice about early listening and language development

## **NEPVAP**

- 6-12 participants per course
- 16 whole day seminars during one year
- Theoretical seminars connected to recommended literature
- A-V Practice with 1-2 families/participant supervised by a certified LSLS Aved
- Practical exercises of A-V techniques and strategies
- Guidance of participants in smaller groups
- Monthly Assignments, Oral and written examination

## **Results of introduction of NEPAVP**

The NEPAVP has contributed to the availability of a new intervention option that goes in line with early detection and identification of hearing loss

Many habilitation centers across the country can now offer Auditory-Verbal Practice for children with hearing aids and cochlear implants

Over the years a number of shorter education programs and workshops for other professions have also been introduced

43 people have fulfilled the NEVAVP in Sweden since 2005

### **Auditory habilitation in Scandinavia – 2012**

- Newborn Hearing Screening (OAE) and Early Hearing Aid fitting established in the whole country – BUT not all parents have individual E.I. support during the period of diagnosis – which sometimes take long time!
- Early and bilateral (if possible) implantation, preferably before 12 months
- Better and more advanced hearing technology (HA/CI)
- Children operated after 2000 – No non-users of CI
- Auditory Verbal Practice available as an option for more parents in Sweden, Norway and Denmark

### **Auditory habilitation in Scandinavia – 2012**

- Higher expectations in a child's auditory-verbal development
- Most parents choose to use only spoken language(s) or spoken language with supported signs
- Deaf parents also choose CI for their child
- Early auditory-verbal habilitation options and education of parents
- More awareness of special needs for children with additional diagnosis

### **Smörgåsbord of opportunities for Swedish and Norweigan families with deaf and hearing impaired children**

- Early individual auditory verbal practice for 1-2 years (moderate-severe HI and deaf children with HA or CI) and later follow-up
- Traditional SLP-work with older children
- Group activities/Courses (for parents and children)
- Close partnership with parents, responsible preschoolteachers, local SLP's & teacher of the deaf – Network approach
- Sign language or supported sign courses for parents who want to combine different ways of communication

### **Denmark - Centralizing AV habilitation**

All families of children with CI are today offered early individual auditory verbal practice for at least 1 year at the two Cochlear Implant Centres in Denmark; Copenhagen and Århus.

Close cooperation with local SLP's and Teachers of the Deaf

## **Finland – traditional SLP habilitation**

Children with CI or HA in Finland get individual traditional SLP support – sometimes private options but paid for by the government

Workshops and short courses for parents and professionals with up-to-date information about different intervention options like AVP

Sign language education for parents and courses in sign-support

## **New Challenges**

- Provide methods emphasizing on spoken language development through listening for ALL families irrespective of where they live or socioeconomic status
- Provide bi- and multilingual and specialized intervention approaches for specific subgroups; children with deaf parents, children who are immigrants & children with additional disabilities
- Provide good sign language support and environments for children who are deaf without any technology, for children with HA or CI who need sign language and for families who choose this option

### **Future goals and visions**

- Language & Communication Coach for ALL families with children 0-6 yrs (use telemedicine options, educate more professionals, develop parent-partnership competence)
- Provide better support for families with schoolage children (assistive hearing technology, smaller groups, continued language training, network approach, include the child in the process)
- Evaluate existing intervention programs!
- Develop better and closer partnership with parents within the habilitation system (educate and train professionals, parent to parent mentorship, cooperate with parent organizations etc)
- Scandinavian & Global networking among professionals and parents!

### **What have we learned during the process**

- Different generations – different opportunities & needs!
- Different individuals and families – have different needs and demand individual solutions!
- Parent partnership, education of professionals and up-to-date intervention is essential!
- Communication and social wellbeing comes first and this is achievable if families get early and individualized intervention from *a team of professionals who cooperate!*

## What have we learned during the process

- Benefits of establishing routines of collaborative work (within the country and inbetween countries) - share information, experiences and knowledge
- Heterogeneous groups needs a *flexible and broad habilitation system* with different high quality & effective intervention options
- Focus should always be on the specific needs of *each unique child* and the individual family's preference of support instead of diverse opinions/views from professionals
- Socio-cultural differences require *open-minded solutions!*