




EARLY HEARING DETECTION & INTERVENTION

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GOAL OF EHD



- **identify, diagnose** and **treat** newborns and infants with disabling hearing loss as **early** as possible
- to **ensure optimum**, cost effective solutions
- enable persons to **communicate** effectively,
- allow them to **develop** to their maximum **potential**,
- to secure their **full participation** in, and **contribution** to, society and the country's economy.

EHDI PROCESS

	WHAT	HOW	WHO
PAEDIATRICIANS (& GP's)	Screening	OAE	Audiologists manage, train, screen
		AABR	Trained screeners (nurses etc)
	Diagnosis	Diagnostic audiological assessment	Paediatric Audiologists
		Medical assessments	ENT, Paediatrician, Genetics etc
	Intervention	Amplification - Hearing aids - Cochlear implants	Paediatric Audiologists
		Early intervention - Family-centred - Communication modes - Language	Early interventionists Speech-language therapists Audiologists

WHY Early Detection?



No. of infants with HL in SA

HEALTH SECTOR	PREVALENCE / 1000	ANNUAL RATE	DAILY RATE	SOURCES
Private (15%)	3 / 1000			Swanepoel, Ebrahim & Friedland, 2007; Olusanya, Somefun & Swanepoel, 2008; UNICEF, 2008; National Treasury Department, Republic of South Africa, 2005; Olusanya & Newton, 2007
Public (85%)	6 / 1000			
National (100%)	5.5 / 1000			

WHY Early Detection?

• Early detection is the first step to:



EARLY DIAGNOSIS & INTERVENTION
IMPROVED LANGUAGE OUTCOMES
IMPROVED COMMUNICATION
LITERACY
EDUCATION
VOCATION

SOCIO-EMOTIONAL
COST-SAVINGS

LEGISLATION REGARDING EHD

- Other countries (e.g. USA & UK)
- South Africa— no legislation yet, BUT:
- **White Paper** on **Integrated National Disability Strategy** (1997) calls for:

"early identification of impairments and appropriate interventions" & "free assistive devices and rehabilitation services... to all children under the age of six"
- Dept of Social Development (2006) guidelines for **early childhood development**

"all children with disabilities have right to inclusion, integration & mainstream facilities & all other benefits enjoyed by non-disabled peers"



STATUS OF EARLY DETECTION

- Hearing loss is not easily detected
 - **Invisible** and **silent** condition
 - **Routine examination** reveals nothing
 - **Developmental cues** only arise later
- Passive detection
 - Parents may report **suspicion**
 - Before NHS - average age of id in USA **30 months** (JCIH, 2000)
 - **Profound** losses may be identified **earlier**; mild and moderate losses may remain **unidentified** until school-age



STATUS OF EARLY DETECTION

South Africa (Van der Spuy & Pottas, 2008; Venter & Viljoen, 2008)

- Urban samples

	Western Cape	Gauteng
Ave age of diagnosis	23 months	31 months
Ave age of initial HA fitting	28 months	39 months
Ave age of enrollment into EI	31 months	43 months

EHDI RECOMMENDATIONS

- Recommendations** for optimal language outcomes approximating normal hearing peers (HPCSA, 2007; JCIH, 2007; AAP, 2007 etc):
 - ✓ **Identification** < 1 months
 - ✓ **Diagnosis** < 3 months
 - ✓ **Intervention** < 6 months

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EARLY INTERVENTION IN SA

AUDIOLOGICAL INTERVENTION

- Paediatric **hearing aids** and **assistive devices** fitted by audiologists (Private & public)
- Cochlear implantation** depends on severity and type – Team approach
- Regular follow-up and monitoring

EARLY INTERVENTION IN SA

- Speech & Language Therapy (Private & public)
- School/Centre-based intervention - modality specific
- Home-based Early Intervention

PHILOSOPHY OF EARLY INTERVENTION

- Begins **as close to birth as possible**
- Is **family-centered** (not just child-centered)
- Takes place in the child's **natural environment**
- Shares needed information with the family (**unbiased**)
- Results in a **partnership** between Parent Advisor and family
- Guided by 'Informed Choice'
- Believes that **communication & language** (in whatever mode is most appropriate for the child and family) are the heart of the program

WHY Early Intervention?



HI HOPES Early Intervention

- **Partnering** with families
- Weekly home-based visits (+/- 1 hour)
- **No cost** to family
- Information & empowerment (**informed choice**)
- **Unbiased**
- Family's active involvement in **decision-making** process
- **Multidisciplinary** team approach



EARLY INTERVENTION TEAM

PARENT ADVISOR

- Understands and Assesses Child Needs
- Understands Family and Family Concerns/Strengths
- Offers the Family Information, Support, and Encouragement

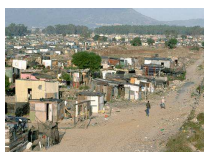
DEAF MENTOR

- Interacts with child
- Interacts with parents
- Teaches about Deaf Culture/ be a role model

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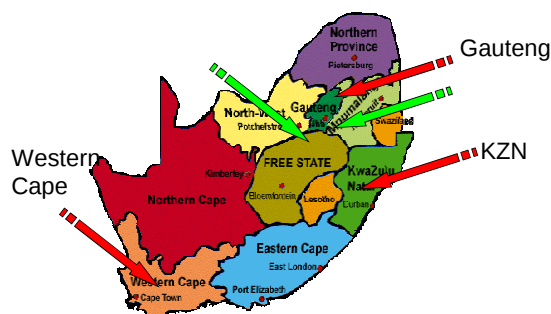
ADVANTAGES OF HOME VISITS

- ✓ Home visits make it possible to reach isolated families
- ✓ Ideal for learning firsthand about the conditions the family faces day after day
- ✓ Learn about family structure, roles, and interrelationships
- ✓ Family is on their turf, not a strange place
- ✓ Family doesn't have to dress up, get organized, drive to get to the appointment (especially if no transportation)
- ✓ The child is more comfortable in his or her own setting

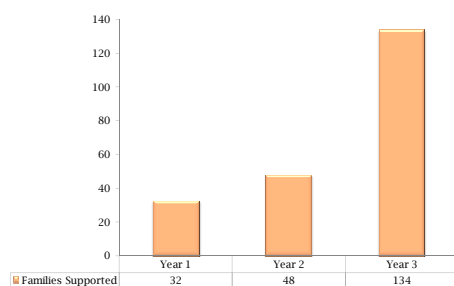


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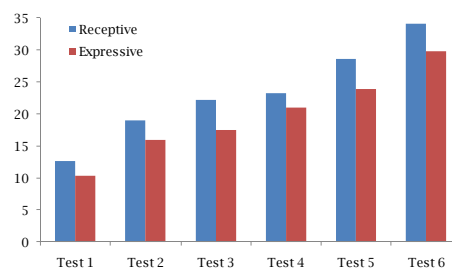
HI HOPES Services in SA



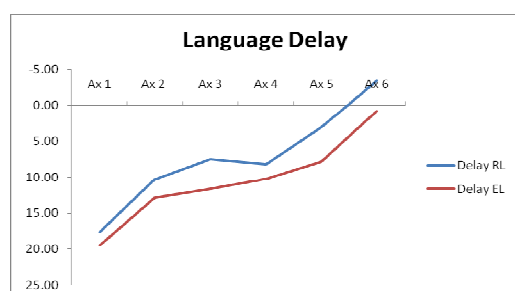
Programme Growth



Language Development



Language development



The Impact of HI HOPES

- Families are supported and **empowered**
- The aim of '**Typical Development**' is being achieved
- Children are **school ready** when transitioning into Education System
- Equipping & Empowering Local communities (**sustainability**)
- Employing a large workforce (demographically representative)
- Democratisation** in process

The outcome of Early Intervention

- A typical life....
Despite being a hearing loss



Resources:
www.ehdi.co.za