Appendix A

Table A1: Risk, family, education and employment factor prevalence

Syndromes and additional developmental conditions identified	% (n)	Risk factors identified	% (n)	Family, educational and employment factors identified	% (n)
Syndromes		**Prenatal risk factor**		**Family factors**	
Any syndrome diagnosed (including syndromes listed below)	5.1 (5/89)	1 or more prenatal risk factor present	20.6 (20/97)		
Ushers Syndrome	3.1 (3/89)	Family history of permanent childhood hearing loss	17.0 (16/94)	Marital status	
Osteogenesis Imperfecta	1.0 (1/89)	Rubella	3.2 (3/94)	Married	47.5 (47/99)
Leopard Syndrome	1.0 (1/89)	Twin/triplet	1.1 (1/94)	Single	47.5 (47/99)
				Divorced	2.0 (2/99)
Additional disabilities		**Natal risk factor**		Partner, not married	3.0 (3/99)
1 or more condition present	10.4 (10/96)	1 or more natal risk factor present	6.5 (6/92)		
Visual impairment	5.2 (5/96)	Birth trauma	3.3 (3/92)	**Educational and employment factors**	
Cerebral palsy	2.1 (2/96)	Rh incompatibility	2.2 (2/92)		
Learning disability	2.1 (2/96)	Prematurity	2.2 (2/92)	Highest educational qualification	
Emotional/ behavioural disability	1.0 (1/96)	Anoxia	1.1 (1/92)	Secondary education (Grade 12) completed	47.3 (43/91)
Epilepsy	1.0 (1/96)			Tertiary qualification (University)	29.7 (27/91)
		Postnatal risk factor		Tertiary qualification (other)	18.7 (17/91)
		1 or more postnatal risk factor present	33.7 (31/92)	Primary/ high school (< Grade 12)	4.4 (4/91)
		Meningitis	8.7 (8/92)		
		Noise exposure	7.6 (7/92)	Employment status	
		Trauma	5.4 (5/92)	Employed	67.4 (64/95)
		Viral infection (unspecified)	3.3 (3/92)	Retired	14.7 (14/95)
		Neonatal jaundice/ hyperbilirubinemia	3.3 (3/92)	Unemployed/ not working	7.4 (7/95)
		Measles	2.1 (2/92)	Current educational/ training setting	8.4 (8/95)
		Mumps	2.1 (2/92)		
		Neonatal jaundice with blood transfusion	1.1 (1/92)	School type attended	
		Neonatal jaundice Kernicterus	1.1 (1/92)	Mainstream school	73.0 (65/89)
		Ototoxic drugs: aminoglycosides	1.1 (1/92)	School for the Deaf (Sign Language mode of communication)	11.2 (10/89)
		Ototoxic drugs: cerebral malaria treatment	1.1 (1/92)	School for the hard-of-hearing (oral mode of communication)	11.2 (10/89)
				Special school (mainstream syllabus)	3.4 (3/89)
		General otological risk factor		Alternative education: technical or apprentice	1.1 (1/89)
		History of tinnitus prior to CI	22.5 (20/89)		
		Chronic middle-ear infection	15.7 (14/89)		
		History of dizziness prior to CI	15.7 (14/89)		
		History of ear surgery prior to CI	13.5 (12/89)		
		Meniere's disease	2.3 (2/89)		
		Otosclerosis	1.1 (1/89)		

Table A2: Suspected predictive factors

Explanatory variables	Categorical/ continuous description	% (n)
Demographic and related factors		
Gender	Male	58.0 (58/100)
	Female	42.0 (42/100)
Marital status	Married	47.5 (47/99)
	Single/ divorced/ partner, not married	52.5 (52/99)
Age at study (years)*	Mean (SD)	44.7 (16.7)
(n=100)	Range	19.4 – 83.4
Highest educational qualification	High school	51.6 (47/91)
	Tertiary qualification	48.4 (44/91)
School type attended	Mainstream	73.0 (65/89)
	Non-mainstream	27.0 (24/89)
Employment status	Employed	67.4 (64/95)
	Not employed	32.6 (31/95)
Hearing loss factors		
Rapidity of onset of hearing loss	Congenital/ early onset	30.9 (30/97)
	Post-natal (sudden and progressive)	69.1 (67/97)
Onset of hearing loss	Prelingual	36.1 (35/97)
	Postlingual	63.9 (62/97)
Duration of hearing loss prior to CI* (n=78)	Mean (SD)	22.9 (16.8)
(time from diagnosis of hearing loss to cochlear implantation)	Range	0.3 – 66.0
Use of assistive listening device	Yes	18.2 (18/99)
	No	81.8 (81/99)
Cochlear Implant factors		
Choice of ear for 1st/ only implant	Left	41.0 (41/100)
	Right	59.0 (59/100)
Age at implantation (years)*	Mean (SD)	36.9 (18.6)
(n=100)	Range	3.3 – 74.9
Duration of CI use (years)*	Mean (SD)	7.7 (5.0)
(n=100)	Range	1.0 – 21.9
Bilateral implantation *(including only cases with at least 6 month experience with bilateral implant)*	Yes (bilateral)	24.0 (24/100)
	No (unilateral)	76.0 (76/100)
Risk factors		
Additional disabilities	Yes (1 or more)	10.4 (10/96)
	None	89.6 (86/96)
Diagnosed ear disease	Yes	20.2 (18/89)
(e.g. Meniere's disease, otosclerosis, chronic middle-ear infection)	No	79.8 (71/89)
History of ear surgery prior to CI	Yes	13.5 (12/89)
	No	86.5 (77/89)
History of tinnitus prior to CI	Yes	22.5 (20/89)
	No	77.5 (69/89)
History of dizziness prior to CI	Yes	15.7 (14/89)
	No	84.3 (75/89)
Family history of permanent childhood hearing loss	Yes	17.0 (16/94)
	No/ uncertain	83.0 (78/94)
Presence of 1 or more pre-natal risk factor	Yes (1 or more)	20.6 (20/97)
	None	79.4 (77/97)
Presence of 1 or more post-natal risk factor	Yes (1 or more)	33.7 (31/92)
	None	66.3 (61/92)

**continuous variables*