UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

The development of a neonatal communication intervention tool

by

Esedra Strasheim

Submitted in the fulfilment of the requirements for the degree

M.Communication Pathology
(Speech-Language Pathology)

in the

Department of Communication Pathology
Faculty of Humanities
University of Pretoria

Supervisor: Prof B. Louw
Co-supervisor: Prof A. Kritzinger

November 2009

Acknowledgements

My sincere thanks to

My dear Lord Jesus, who has given me the ability to work for Him. Thank you God for showing me the way every day.

Prof Brenda Louw and Prof Alta Kritzinger, thank you for guiding me in every step of this project. Thank you for encouraging me, teaching me and inspiring me to be passionate about ECI. Thank you for your guidance, reassurance and kind words.

Speech-language therapists and audiologists everywhere -- without you this study would not have been possible.

Loina Bodenstein at the Department of Statistics for your words of wisdom as well as statistical analysis.
Dr Mike van der Linde and Mrs Rina Owen at the Department of statistics for the statistical analysis of the data.

Annelie Steenkamp in Kimberley who assisted me with completion of the study in the Northern Cape. Dankie vir jou waardevolle bydrae.

Erika Bostock and the therapists at Witbank hospital for the pilot study.

My colleagues and friends at the Baby Therapy Centre, for teaching me and inspiring me. Martie, dankie vir jou ondersteunende woorde. Liz, dankie vir jou entoesiasme en geduld. Gayle en Lizl, dankie dat julle my onder julle vlerk geneem het. Tami en Elriza, julle weet nie wat julle daagliks vir my beteken nie. Dankie vir julle belangstelling en omgee (en proeflees)!

Elmien, for always asking about my progress. Dankie vir jou belangstelling!

Annette, for understanding how much this project meant. Dankie vir jou belangstelling, moed-inpraat, berading en gratis advies.

Sanet, for your constant interest. Dankie dat jy 'n spesiale vriendin is.

Delia, for 'holding my hand' at a crucial time this year. Ek waardeer jou baie.

Soné, for unconditional love and support throughout this project and everything that came with it. Dankie vir jou liefde -- jy is waarlik 'n inspirasie.

Michelle, for kindness and support throughout my study. Ek het al oneindig baie by jou geleer en waardeer jou teenwoordigheid in my lewe.

Ma en Pa, for always being my home and my support-team. Dankie vir julle entoesiasme en aanmoediging met my studie. Dankie vir julle ore wat altyd luister en julle arms wat altyd oop is vir my - julle warmte en omgee dra my elke dag. Dankie vir julle onskatbare bydrae tot hierdie projek.

Eben, my brother, for being my friend as well as my sib and for continuous encouragement and support. Dankie dat jy altyd perspektief bring wanneer dinge deurmekaar begin lyk.

Abstract

Title: The development of a neonatal communication intervention tool
Researcher: Esedra Strasheim
Supervisors: Prof. B. Louw & Prof. A. Kritzinger
Department: Department of Communication Pathology
Degree: M.Communication Pathology

Comprehensive management in the neonatal nursery involves medical treatment of the infant, as well as developmental care and the provision of guidance, counselling and information to the family who are part of the decision-making process regarding the infant's care. Neonatal communication intervention is of utmost importance in a country such as South Africa, which has an increased prevalence of infants at risk for disabilities and where the majority of these infants live in poverty.

Speech-language therapists fulfil an important role in the neonatal nursery and are an integral part of the team involved with the high risk neonatal population. Local literature showed a dearth of information on the current service delivery and roles of speech-language therapists and audiologists in neonatal nurseries in the South African context. From an asset-based perspective it appears that the South African population receiving services in neonatal nurseries have unique characteristics. This provides speech-language therapists with ample opportunity to intervene, providing that intervention is well-timed in the neonatal nursery context.

The country-wide initiative to implement the evidence-based technique of kangaroo mother care indicates that speech-language therapists should recognise its importance and develop communication based materials and tools to complement this successful neonatal intervention. The aim of the research was to establish whether speech-language therapists have needs for assessment and intervention tools/materials in this context. The study

furthermore aimed to compile a locally relevant neonatal communication intervention instrument/tool for use by speech-language therapists in the neonatal nurseries of public hospitals in South Africa in order to propose a solution to address the shortage of tools in the public health context.

The study entailed descriptive, exploratory research. During Phase 1, a survey was received back from 39 speech-language therapists and two audiologists in six provinces. The data revealed that participants performed different roles in neonatal nurseries, which were determined by the environment, tools, materials and instrumentation available to them. Many participants were inexperienced, but were resourceful in their attempts to develop and adapt tools/materials. Participants expressed a need for culturally appropriate and user-friendly instruments for parent guidance and staff/team training on the topic of *developmental care*.

During Phase 2 a tool for parent guidance titled "*Neonatal communication intervention programme for parents"* was compiled for use by speech-language therapists and justified by participants' roles and needs as well as current early communication intervention (ECI) literature. The programme was piloted by three participants. Certain suggestions for enhancements of the programme were made such as providing a glossary of terms, adapting the programme's language and terminology, and providing more illustrations. The programme complied with the guiding principles for best practice in ECI (ASHA, 2008) and can therefore contribute to neonatal care of high risk infants in South Africa. Speech-language therapists and audiologists must contribute to neonatal care of high risk infants to facilitate optimal health and development and to support their families.

Key words: Early communication intervention (ECI); kangaroo mother care (KMC); neonatal communication intervention; developmental care; public health care context; neonatal intensive care unit (NICU); high risk infant.

Opsomming

Titel: Die ontwikkeling van ‘n neonatale kommunikasie intervensie instrument
Navorser: Esedra Strasheim
Studieleiers: Prof. B. Louw & Prof. A. Kritzinger
Departement: Departement Kommunikasiepatologie
Graad: M.Kommunikasiepatologie

Omvattende intervensie in die neonatale sorgeenheid behels mediese behandeling van die neonaat, sowel as ontwikkelingstoepaslike sorg en die verskaffing van leiding, berading en inligting aan die gesin wat deel is van die besluitnemingsproses rakende die baba se sorg. Neonatale kommunikasie intervensie is van uiterste belang in Suid-Afrika aangesien daar ‘n hoër prevalensie van babas is wat ‘n risiko het vir ontwikkelingsafwykings en aangesien die meerderheid van hierdie babas in armoede leef.

Spraak-taalterapeute vervul ‘n belangrike rol in die neonatale sorgeenheid en is ‘n integrale deel van die span wat betrokke is by die hoërisiko neonatale populasie. Plaaslike literatuur dui op ‘n tekort aan inligting rakende die huidige dienslewering van die spraak-taalterapeut en oudioloog in neonatale sorgeenhede in die Suid-Afrikaanse konteks. Vanuit ‘n bate-benadering kom dit voor of die Suid-Afrikaanse populasie wat dienste in neonatale sorgeenhede ontvang, unieke eienskappe het. Dit bied genoegsame geleenthede aan spraak-taalterapeute om intervensie te verskaf, solank die behandeling betyds in die neonatale sorgeenheid konteks aanvang neem.

Daar is ‘n landswye inisiatief om die bewysgerigte tegniek van kangeroe moedersorg toe te pas. Spraak-taalterapeute moet dus die belang daarvan herken en kommunikasie gebasseerde terapiemateriaal ontwikkel om hierdie suksesvolle neonatale intervensie te komplementeer. Die navorsing se doel was om vas te stel hoe wyd spraak-taalterapeute en oudioloe ‘n behoefte aan evaluasie en intervensie instrumente en –materiaal in hierdie konteks het. Die navorsing het verder ten doel gestel om ‘n relevante terapie instrument saam te stel vir spraak-taalterapeute in die neonatale sorgeenhede as ‘n

moontlike oplossing vir die tekort aan relevante terapiemateriaal in die plaaslike publieke gesondheidsorgkonteks.

Die studie het beskrywende, eksplorerende navorsing behels. Gedurende Fase 1 is ‘n vraelys terug ontvang van 39 spraak-taalterapeute en twee oudioloë in ses provinsies. Die data het aangedui dat deelnemers verskillende rolle in hierdie konteks vervul, wat beïnvloed was deur die omgewing, die instrumentasie en materiaal wat tot hulle beskikking was. Die meerderheid van die deelnemers was onervare, maar was vindingryk in hulle pogings om terapiemateriaal aan te pas en te ontwikkel. Deelnemers het ‘n behoefte vir kultureel toepaslike- en gebruikersvriendelike instrumente en materiaal uitgedruk met die oog op ouerleiding en personeel/span opleiding oor die onderwerp van *ontwikkelingstoepaslike sorg*.

Gedurende Fase 2 is ‘n terapie instrument naamlik *“Neonatale kommunikasie intervensie program vir ouers”* saamgestel vir die gebruik in die neonatale sorgeenhede deur spraak-taalterapeute. Die samestelling van hierdie program is verantwoord deur die deelnemers se rolbeskrywing en behoeftebepaling van Fase 1, sowel as deur huidige vroeë kommunikasie intervensie (VKI) literatuur. Die program is deur drie deelnemers in ‘n loodsstudie geëvalueer. Voorstelle vir die verbetering van die program is verskaf, naamlik die byvoeging van ‘n terminologielys, aanpassing van die program se taalgebruik en terminologie en verskaffing van meer illustrasies. Die program het ooreengestem met die beginsels vir beste praktyk in VKI (ASHA, 2008) en kan daarom tot neonatale sorg van hoërisikobabas in Suid-Afrika bydra. Spraak-taalterapeute en oudioloë moet bydra tot neonatale sorg van hoërisiko neonate om sodoende optimale gesondheidsorg en ontwikkeling te fasiliteer en gesinne te ondersteun.

Sleutelterme:
Vroeë kommunikasie intervensie (VKI); kangeroe moedersorg (KMS); neonatale kommunikasie intervensie; ontwikkelingstoepaslike sorg; publieke gesondheidsorg konteks; neonatale intensiewe sorgeenheid (NISE); hoërisikobaba.

CONTENTS

CHAPTER 1

PERSPECTIVES ON THE ROLE OF THE SPEECH-LANGUAGE THERAPIST AND AUDIOLOGIST IN THE NEONATAL NURSERY

CHAPTER 2

BEST PRACTICE IN NEONATAL CARE IN SOUTH AFRICA

CHAPTER 3

METHODOLOGY

CHAPTER 4

RESULTS AND DISCUSSION

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

TABLES

FIGURES

ABBREVIATIONS

ABR – Auditory brainstem response

AIDS – Acquired immunodeficiency syndrome

ASHA – American Speech-language and Hearing Association

BFHI – Baby friendly hospital initiative

CPD – Continued professional development

ECI – Early communication intervention

EI – Early intervention

FASD – Fetal alcohol spectrum disorder

FEFARI – Feeding evaluation form for at-risk infants

HIV – Human immunodeficiency virus

HPCSA – Health professions council of South Africa

JCIH – Joint commission on infant hearing

KMC – Kangaroo mother care

NHCU – Neonatal high care unit

NICU – Neonatal intensive care unit

NIDCAP – Newborn individualised developmental care and assessment programme

OAE – Oto-acoustic emmission

OCI – Observation of communicative intent

PHC – Primary health care

PMTCT – Prevention of mother to child transmission

PPIP – Perinatal problem identification programme

PPP – Pretoria pasteurisation project

ROP – Retinopathy of prematurity

SASLHA – South African speech-, language- and hearing association

SLT & A – Speech-language therapist and audiologist

UNICEF – United nations children's fund

WHO – World health organisation