



UNIVERSITEIT VAN PRETORIA  
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**DEVELOPMENT OF  
A COMMUNICATION ASSESSMENT PROTOCOL  
FOR YOUNG CHILDREN WITH CLEFT LIP AND/OR PALATE  
(CL/P) IN MAURITIUS**

**BY**

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## ABSTRACT

TITLE	Development of a communication assessment protocol for young children with cleft lip and/or palate (CL/P) in Mauritius
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Research guides the parameters for assessment and treatment of individuals with cleft lip and/or palate (CL/P). Most developing countries cannot provide an adequate standard of cleft care, due to limited resources. Speech-language therapists and audiologists in developing countries can contribute to improving cleft care through early communication intervention to minimise/prevent the negative impact of a cleft on a young child's communication ability and to support the families. However, they require linguistically and contextually relevant assessment instruments for early identification of communication disorders in these children.

The aim of the research was to develop and evaluate a communication assessment protocol for young children with CL/P, for use in Mauritius, a developing country in the Indian Ocean with a multilingual and multicultural population. A further aim was to develop an electronic database of children with CL/P in the public health sector of Mauritius. Eighty-eight children, with CL/P, 0-6 years, were selected by consecutive sampling and their parents acted as participants. Four

speech-language therapists and audiologists from the public health sector of Mauritius participated in the data collection and appraisal of the newly developed assessment protocol.

A mixed methods research design was selected. Based on exploratory research of cleft care in Mauritius and international recommendations for assessment of young children with CL/P, a comprehensive Communication Assessment Protocol was compiled and speech elicitation materials in Creole and French were prepared. Speech-language therapists and audiologists conducted assessments, using non-invasive procedures to assess feeding, hearing, communication skills development, emergent literacy skills, speech production and voice of the participants. Digital video and audio recordings of the elicited speech samples were made and auditory-perceptual procedures for speech analysis and inter-rater comparisons for reliability were employed.

The communication assessment protocol was useful in describing the characteristics of the children with CL/P treated in the National Health System in Mauritius. The speech-language therapists and audiologists together with the parents of the children as partners in assessment were successful in early identification of communication delays/disorders in children with CL/P (73%) and also referrals to other health care professionals. The protocol was evaluated and accepted for application in clinical practice.

The newly developed Communication Assessment Protocol was applied by local speech-language therapists and audiologists with the possibility of implementing this assessment



instrument nationally. This was an important contribution to improve cleft care in Mauritius where interdisciplinary team-based cleft care has not occurred to date.

Key Terms: Cleft lip and/or palate; communication assessment protocol; early communication intervention; developing country; Mauritius; speech-language therapists and audiologists.



## OPSOMMING

TITEL	Development of a Communication Assessment Protocol for young children with cleft lip and/or palate in Mauritius
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MEDELEIER	Prof A Kritzinger
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Die parameters vir die assessering en behandeling van individue met gesplete lip en/of verhemelte word deur navorsing gerig. Die meeste ontwikkelende lande kan nie sorg van 'n toereikende standaard aan individue met splete voorsien nie, hoofsaaklik as gevolg van beperkte hulpbronne. Spraak-taalterapeute en oudioloë in ontwikkelende lande kan deur vroeë intervensie bydra tot die verbetering van spleetsorg en sodoende die negatiewe impak van 'n spleet op die lewe van 'n jong kind se kommunikasievermoë minimaliseer/verhoed en ondersteuning bied aan gesinne wat daar deur geraak word. Spraak-taalterapeute en oudioloë benodig egter assesseringsinstrumente vir vroeë identifikasie van kommunikasie-afwykings in hierdie kinders.

Die doel van hierdie navorsing was om 'n omvattende kommunikasie-assesseringsprotokol vir jong kinders met gesplete lip en/of verhemelte saam te stel en te evalueer vir gebruik in Mauritius. 'n Verdere doel was om 'n elektroniese databasis te ontwikkel om kinders met

gesplete verhemelte aan te teken in die publieke gesondheidsektor van Mauritius. Mauritius is 'n ontwikkelende land met 'n multilinguistiese, multikulturele bevolking in die Indiese oseaan.

Deelnemers: Agt-en-tagtig kinders met gesplete lip en/of verhemelte in die ouderdomsgroep 0-6 jaar is deur opeenvolgende steekproefneming geselekteer en het saam met hulle ouers aan hierdie navorsingsprojek deel geneem. Vier spraak-taalterapeute en oudioloë van die openbare gesondheidsektor van Mauritius het deel geneem aan die data-insameling en evaluering van die navorsingsprotokol wat ontwikkel is.

Die navorsingsontwerp het op gemengde metodes berus. Op grond van verkennende navorsing oor spleetsorg in Mauritius en internasionale aanbevelings vir die assessering van jong kinders met gesplete lip en/of verhemelte, is 'n omvattende assesseringsprotokol saamgestel. Verder is ontlokkingsmateriaal vir spraak in Kreools en Frans saamgestel. Spraak-taalterapeute en oudioloë het die assessering van voeding, gehoor, ontwikkeling van kommunikasievermoëns, ontwikkelende literêre vaardighede asook spraak- en stemproduksie van die deelnemers deur middel van nie-indringende assesseringsmetodes uitgevoer. Digitale video- en oudio-opnames is van die ontlokte spraakmonsters gemaak en ouditief-perseptuele prosedures vir spraakanalises en inter-beoordelaarvergelykings is vir die doeleindes van betroubaarheid gebruik.

Die bevindinge het aangetoon dat die kommunikasie-assesseringsprotokol nuttig was in die beskrywing van die kenmerkende eienskappe van kinders met gesplete lip en/of verhemelte wat deur die Nasionale Gesondheidstelsel in Mauritius behandeling ontvang. Die spraak-taalterapeute en oudioloë, tesame met die ouers van die kinders as vennote in die assessering,

was suksesvol in die vroeë identifisering van vertraagde kommunikasie-ontwikkeling en -afwykings in 73% van kinders met gesplete lip en/of verhemelte. Kinders in hierdie groep wat verwysing na ander kundiges in gesondheidsorg benodig het, kon ook geïdentifiseer word. Die protokol is toepaslik verklaar en aanvaar vir aanwending in kliniese pratyk.

Slot: Die nuut-ontwikkelde '*Communication Assessment Protocol*' is plaaslik toegepas deur spraak-taalterapeute en oudioloë met die moontlikheid dat dit as nasionale assesseringsinstrument gebruik kan word. Hierdie protokol verteenwoordig 'n belangrike bydrae tot die verbetering van spleetsorg in Mauritius waar 'n interdisiplinêre span-gebaseerde benadering tot op hede nog nie bestaan nie.

Sleutelwoorde: Gesplete lip en/of verhemelte; kommunikasie-assesseringsprotokol; vroeë kommunikasie-intervensie; ontwikkelende land; Mauritius; spraak-taalterapeute en oudioloë.



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