

# EFFECTIVENESS OF SPEECH INTERVENTION IN PATIENTS WITH A CLEFT PALATE: COMPARISON OF MOTOR-PHONETIC VERSUS LINGUISTIC-PHONOLOGICAL SPEECH APPROACHES

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**Aims.** The purpose of this study was to compare the effect of two different speech therapy approaches, a traditional motor-phonetic approach and a linguistic-phonological approach, on the speech and health-related quality of life in Dutch-speaking children with a cleft palate with or without a cleft lip (CP±L) between 4 and 12 years old. **Methods.** Fourteen children with a CP±L (mean age: 7.71 years) were divided into two groups using blocked randomization stratified by age and gender: one receiving motor-phonetic intervention (MPI) (n = 7) and one receiving linguistic-phonological intervention (LPI) (n = 7). Each group received 10 hours of speech therapy divided over two weeks. Perceptual speech assessments were performed on several data points. The psychosocial effects of the intervention were assessed using a patient-reported questionnaire. Both groups were compared over time using (generalized) linear mixed models. **Results.** Significant time-by-group interactions with large effect sizes were revealed in terms of consonant proficiency, indicating significant differences in evolution over time among the two groups. Only in the group receiving LPI, percentage correctly produced consonants and places significantly improved after the treatment. Total VELO scores of the parents significantly improved in both groups following intervention. **Conclusion.** Both intervention types can have a positive impact on the occurrence of cleft speech characteristics in children with a CP±L. A linguistic-phonological approach, however, was observed to be more effective in terms of improving these speech outcomes compared with a motor-phonetic approach. Speech intervention, irrespective of the used approach, significantly improved the participant's health-related quality of life.