

**Critical Review:**  
**What are the effects of parent-mediated intervention for speech and language outcomes in children with cleft lip and palate?**

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This critical review examines the effects of parent-mediated intervention on speech and language outcomes in children with cleft lip and palate. Study designs include case-controls and between-group randomized clinical trials. Overall, there was found to be limited research available on the topic of interest. Further research studies are required before conclusive statements can be made regarding the efficacy of parent-mediated intervention on the speech and language outcomes in children with cleft lip and/or palate. Recommendations for future research and clinical practice are provided.

***Introduction***

Traditionally, intervention approaches for speech and language deficits in cleft lip and palate (CLP) have involved using modeling, stimulating environments and encouragement of spontaneous imitation of t-3(o)-71 (-1 (n) -48 -4 (g)79880o) -1 80.I 457.0-481 ( -481 Tf ( ) Tj 1) 6rvI (v0 (

[(cleft lip) or (cleft palate) and (intervention) or (program) or (treatment) and (speech) or (language) and (development)].

#### Selection Criteria

Studies selected for inclusion in this critical review were required to investigate speech and language developmental outcomes of children with cleft lip and/or palate whose parents had been involved in the therapy process via parent-training and parent-mediated intervention. With the exception of presence of a cleft lip and/or palate as well as parent involvement in speech therapy, no limitations were set on the demographics of the research participants.

#### Data Collection

Results of the literature search yielded 3 articles congruent with the aforementioned selection criteria. One article employed a case-control study, while two of the articles used a between group randomized clinical trial design.

### ***Results***

#### **Studies using parent-mediated intervention**

Scherer, D'Antonio and McGahey (2008) carried out a case-control study to investigate the effectiveness of a parent-implemented, focused stimulation program on the speech characteristics of children with CLP below the age of three. They sought to answer two questions: Can parents be trained to deliver early intervention programs for children with CLP, and does a parent-implemented early intervention program result in positive changes in speech characteristics. A case group of 10 mother-unilateral CLP child pairs were matched to a control group of 10 mother-non-CLP child pairs. Inclusion criteria for participants with CLP consisted of: cleft lip with or without cleft palate in absence of a genetic syndrome; absence of significant medical or neurological impairments or preterm birth earlier than 36 wks gestation; and passing hearing screening. The case and control groups were matched for vocabulary production, age, gender and socioeconomic status, with vocabulary production being the primary matching variable. Pre and post-test measures consisted of standardized and informal procedures. The case group completed the *Sequenced Inventory of Communication Development, Revised (SICD-R)* and a 30-minute video and audiotaped language sample of mother-child interaction during a book-reading activity and free play. Transcribers who were blinded to the treatment phase generated transcripts. Analysis consisted of measures of the mother's use of speech and language and child measures consisted of four language measures and three speech measure

reliability of the data, treatment fidelity and statistical analysis. The authors also provided a useful discussion of directions for future research in this area.

This case





