Effect of Timing and Contributing Factors for Early Language Intervention in Toddlers with Repaired Cleft Lip and Palate

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Abstract: Introduction: Cleft lip and palate (CLP) is a congenital condition which hinders effectual communication due to associated speech and language difficulties. Expressive language delay (ELD) is a feature seen in this population which is influenced by factors such as type and severity of CLP, age at surgical and linguistic intervention and also the type and intensity of speech and language therapy (SLT). Since CLP is the most common congenital abnormality seen in Indian children, early intervention is a necessity which plays a critical role in enhancing their speech and language skills. The interaction between the timing of intervention and factors which contribute to effective intervention by caregivers is an area which needs to be explored. Objectives: The present study attempts to determine the effect of timing of intervention on the contributing maternal factors for effective linguistic intervention in toddlers with repaired CLP with respect to the awareness, home training patterns, speech and non-speech behaviors of the mothers. Participants: Thirty six toddlers in the age range of 1 to 4 years diagnosed as ELD secondary to repaired CLP, along with their mothers served as participants. Group I (Early Intervention Group, EIG) included 19 mother-child pairs who came to seek SLT soon after corrective surgery and group II (Delayed Intervention Group, DIG) included 16 mother-child pairs who received SLT after the age of 3 years. Further, the groups were divided into group A, and group B. Group 'A' received SLT for 60 sessions by Speech Language Pathologist (SLP), while Group B received SLT for 30 sessions by SLP and 30 sessions only by mother without supervision of SLP. Method: The mothers were enrolled for the Early Language Intervention Program and following this, their awareness about CLP was assessed through the Parental awareness questionnaire. The quality of home training was assessed through Mohite's Inventory. Subsequently, the speech and non-speech behaviors of the mothers were assessed using a Mother's behavioral checklist. Detailed counseling and orientation was done to the mothers, and SLT was initiated for toddlers. After 60 sessions of intensive SLT, the questionnaire and checklists were re-administered to find out the changes in scores between the pre- and posttest measurements. Results: The scores obtained under different domains in the awareness questionnaire, Mohite's inventory and Mothers behavior checklist were tabulated and subjected to statistical analysis. Since the data did not follow normal distribution (i.e. p > 0.05), Mann-Whitney U test was conducted which revealed that there was no significant difference between groups I and II as well as groups A and B. Further, Wilcoxon Signed Rank test revealed that mothers had better awareness regarding issues related to CLP and improved home-training abilities post-orientation ($p \le 0.05$). A statistically significant difference was also noted for speech and non-speech behaviors of the mothers ($p \le 0.05$). Conclusions: Extensive orientation and counseling helped mothers of both EI and DI groups to improve their knowledge about CLP. Intensive SLT using focused stimulation and a parent-implemented approach enabled them to carry out the intervention in an effectual

Keywords: awareness, cleft lip and palate, early language intervention program, home training, orientation, timing of intervention

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