

## Clinical Profile of Oral Sensory Abilities in Developmental Dysarthria

**Authors :** Swapna N., Deepthy Ann Joy

**Abstract :** One of the major causes of communication disorders in pediatric population is Motor speech disorders. These disorders which affect the motor aspects of speech articulators can have an adverse effect on the communication abilities of children in their developmental period. The motor aspects are dependent on the sensory abilities of children with motor speech disorders. Hence, oral sensorimotor evaluation is an important component in the assessment of children with motor speech disorders. To our knowledge, the importance of oral motor examination has been well established, yet the sensory assessment of the oral structures has received less focus. One of the most common motor speech disorders seen in children is developmental dysarthria. The present study aimed to assess the orosensory aspects in children with developmental dysarthria (CDD). The control group consisted of 240 children in the age range of four and eight years which was divided into four subgroups (4-4.11, 5-5.11, 6-6.11 and 7-7.11 years). The experimental group consisted of 15 children who were diagnosed with developmental dysarthria secondary to cerebral palsy who belonged in the age range of four and eight years. The oro-sensory aspects such as response to touch, temperature, taste, texture, and orofacial sensitivity were evaluated and profiled. For this purpose, the authors used the 'Oral Sensorimotor Evaluation Protocol- Children' which was developed by the authors. The oro-sensory section of the protocol was administered and the clinical profile of oro-sensory abilities of typically developing children and CDD was obtained for each of the sensory abilities. The oro-sensory abilities of speech articulators such as lips, tongue, palate, jaw, and cheeks were assessed in detail and scored. The results indicated that experimental group had poorer scores on oro-sensory aspects such as light static touch, kinetic touch, deep pressure, vibration and double simultaneous touch. However, it was also found that the experimental group performed similar to control group on few aspects like temperature, taste, texture and orofacial sensitivity. Apart from the oro-motor abilities which has received utmost interest, the variation in the oro-sensory abilities of experimental and control group is highlighted and discussed in the present study. This emphasizes the need for assessing the oro-sensory abilities in children with developmental dysarthria in addition to oro-motor abilities.

**Keywords :** cerebral palsy, developmental dysarthria, orosensory assessment, touch

**Conference Title :** ICSHS 2018 : International Conference on Speech and Hearing Sciences

**Conference Location :** Venice, Italy

**Conference Dates :** November 14-15, 2018