



**“ASSESS THE PREVALENCE OF MALOCCLUSION AND
TRAUMATIC INJURIES IN DISABLED CHILDREN STUDYING
IN SPECIAL NEEDS SCHOOLS IN TWIN CITIES OF HUBLI-
DHARWAD”**

By

Dr. Prajna. P. Nayak

Dissertation Submitted to the
RajivGandhiUniversity of Health Sciences, Karnataka, Bangalore

In partial fulfillment of the requirements for the degree of

MASTER OF DENTAL SURGERY

In

PREVENTIVE AND COMMUNITY DENTISTRY

Under the guidance of
Dr. K. V. V. Prasad

**Preventive and Community Dentistry
S. D. M. College of Dental Sciences and Hospital,
Dharwad**

May 2012

SDMCDSLRC



T-00862

ABSTRACT

Introduction: In recent years, there has been an increased sensitivity to the challenges that disabled children face in their daily lives and there have been many studies on common oral health problems like dental caries and periodontal diseases. However, risks of malocclusion and traumatic dental injuries have received relatively scant attention. **Aim:** To assess the prevalence of malocclusion and traumatic injuries in disabled children studying in special needs schools in twin cities of Hubli-Dharwad. **Methodology:** 714 children in the age group of 4-16 years, studying in 14 special needs schools in Hubli-Dharwad were included. The traumatic injuries were recorded based on Ellis and Davey's classification and occlusal anomalies, by using Dental Aesthetic Index (DAI). The data was analyzed using the statistical package – STATA 9.2. **Results:** Multiple disabled children sustained highest trauma (40.90%) and speech & hearing impaired children experienced lowest trauma (18%). Statistically significant association was found between trauma prevalence and gender, geographic location, anterior teeth protrusion and lip coverage. Central incisors were most affected, followed by lateral incisors and the most common type of trauma was Ellis class 1. The prevalence of malocclusion was highest in mentally retarded children (62.42%), followed by 52.5% in multiple disabilities children and lowest (37.22%) among speech and hearing impaired. **Conclusions:** Multiple disabilities and visually impaired children experienced highest trauma; multiple disabilities and mentally retarded children had highest proportion of severe or handicapping malocclusion among all the disability types.

Key words: malocclusion, traumatic injuries, disabled, prevalence, overjet