

**Oral Health Status In Relation To  
Nutritional and Social Status In Kerbal'a  
Governorate For Primary School Students  
Aged 12 Years Old.**

**A Thesis**

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# **Abstract**

## **Background:**

Although they are not life threatening, dental caries followed by periodontal disease and traumatic dental injuries, considered as the most common and widely spread human's diseases. Nutrition and socioeconomic status were reported to be one of the factors affecting the severity of oral diseases. Internal displaced persons faced many diseases that affect human health and oral diseases are not excluding.

## **Aims of the study:**

The survey aimed to investigate the prevalence and severity of dental caries, traumatized anterior teeth. Furthermore oral diseases (dental caries, oral health status, dental trauma) were studied in relation to the following variables: Residency, Nutritional status, Social status, Gender.

## **Materials and Methods:**

This survey was conducted among primary school students aged 12 years old in Kerbal'a governorate, Iraq. The total sample composed of 1600 (805 males and 795 females) selected randomly from different schools in Kerbala'a governorate. Diagnosis and recording of dental caries and treatment needs were assessed according to the criteria described by WHO (1997). Plaque index of Silness and Loe (1964) was used for plaque assessment, Ramfjord index (1959) was applied for the assessment of calculus, gingival index of Loe and Silness (1963) was followed for recording gingival health condition. Ramfjord index teeth (1959) were examined to assess oral cleanliness and gingival condition. Concerning traumatic dental injuries were diagnosed according to Garcia-Godoy's (1981). Nutritional status was assessed by using anthropometric

measurement (height and weight); modification of Kuppuswamy's 1976 was applied for socioeconomic measurement.

**Results:**

The prevalence of malnutrition described by overt malnutrition equaled to 31.7 %. Also, concerning socioeconomic status, most of low socioeconomic category was occupied by the internally displaced adolescents.

Results showed that the prevalence of dental caries was 69.5% for the total sample. The mean dmft for deciduous teeth was equal to  $(1.6 \pm 0.05)$  and dmfs  $(5.4 \pm 0.2)$ , while concerning permanent teeth the mean DMFT was  $(1.1 \pm 0.04)$  and DMFS  $(2 \pm 0.09)$ . Significant differences were seen between the variables studied in this search and the means of filled surfaces. Girls were more affected by dental caries than boys (for permanent dentition) and the inverse was illustrated for deciduous dentition.

Highly significant correlations were recorded between plaque and gingival index and (residency, gender, nutritional and social status). Concerning calculus index highly significant correlations were reported with categories of residency (urban, rural, internally displaced), while no significant correlations were registered with the rest variables.

It was noticed that prevalence of dental trauma equaled to 10.4%, no significant correlations was shown between dental trauma and the variables, only, gender, as boys were more affected by dental trauma than girls, statistically highly significant correlations were reported. The most common type of injury in traumatized teeth was simple enamel fracture followed by enamel and dentine fracture and then enamel and dentin without pulp exposure. The maxillary central incisors were the most commonly injured teeth.

**Conclusion:**

This search focuses on indicating the need for an improving preventive public health programs, and encouraged to orient health knowledge in a positive direction; in addition to that, high lightening on internally displaced people as risk groups needed more attention concerning dental health and oral educational programs.