

Ministry of Higher Education
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**Dental anomalies in permanent teeth
and associated etiological factors in
relation to nutritional status in 15 years
old students in Basrah city/Iraq**

A Thesis

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Abstract

Background: Dental anomalies are major issue that contributes to dental problems encountered in general practice. These anomalies may be affected by nutritional status.

Aim of the study: This cross sectional study was made to determine the prevalence of dental anomalies in relation to the possible risk factors and to explore the relationship between these anomalies and the nutritional status, among 15 years old students in Basrah city in Iraq.

Materials and Methods: This study was conducted among secondary school students aged 15 years old and the total sample consisted of 1000 students (435 males and 565 females). Diagnosis of dental anomalies (hypodontia, supernumerary, fusion, gemination, talon cusp, microdontia and macrodontia) was recorded by presence or absence of these anomalies, diagnosis and recording of enamel defects was according to the criteria of World Health Organization (1997), nutritional status was recorded according to Body Mass Index (BMI) indicator by applying anthropometric measurement (height and weight) (CDC, 2000).

Results: This study showed that the prevalence of hypodontia was 4.6%, females have higher prevalence than males (5.8% and 3.0% respectively), talon cusp was 37.0% (males 38.6% and females 35.8%), microdontia prevalence was 1.4% and it was equal between males and females, supernumerary teeth was 0.8%, fusion was 0.7%, macrodontia was 0.1% and gemination was 0.1%. Meanwhile, the prevalence of any type of

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enamel defect was 30.5%, demarcated opacities were the most prevalent type of enamel defect 23.8% (males 20.5% and females 26.4%) followed by diffuse opacities 9.1% followed by enamel hypoplasia 0.4%.

The prevalence of chronic malnutrition which was represented by height for age was 3.5% with mean value for males 0.02% and females 0.64%.

The prevalence of underweight was 3.5% and it was represented by weight for age with mean value for males 0.33% and females 0.05%. Wasting prevalence was 5.3% with mean value for males 0.13% and females 0.33%.

Conclusion: This study revealed that secondary school students have dental anomalies, some of them with high prevalence while other anomalies have very low prevalence. Signs of malnutrition were found indicating the need for preventive programs for students to ensure public health.