

**Republic of Iraq  
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and Scientific Research  
University of Baghdad  
College of Dentistry**



# **Oral Health Status and Treatment Needs among Footballers in Baghdad City/ Iraq**

A Thesis

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By

**Yasir Basim Abd Ali**

B.D.S

Supervised by

**Assistant Prof. Dr. Eman Kadem**

(B.D.S., M.Sc.)

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## Abstract

**Background:** Oral health is an important element of overall health, well-being and quality of life. Poor oral health can reduce quality of life and induce a systemic inflammatory response. Football is one of the most popular team sports in the world, with approximately 200.000 professional and 240 million amateur players. It is important that the dentist make a detailed assessment of oral health status of the athlete to detect changes and pathologies such as dental caries, trauma, periodontal disease and malocclusion.

**Objectives of the study:** To assess oral cleanliness (dental plaque and dental calculus) , gingival conditions , the prevalence and severity of dental caries , dental trauma and their treatment needs, and in relation to age, level of education, duration of sport activity and football club type .

**Materials and Methods:** The sample involved 403 male footballers with aged range (18-32) years old who were recruited from 18 football clubs in Baghdad city. Examinations and oral health assessments were carried out according to the basic procedures of the oral health surveys of the World Health Organization (1987). plaque index(Silness and Leo, 1964) used for plaque assessment, calculus index( Ramfjord, 1959) used for calculus assessment , gingival index (Leo and Silness, 1963) used for recording gingival health condition, dental caries and treatment needs (WHO, 1987) and the dental trauma and treatment needs (Garcia-Godoy, 1981). The assessment of oral health status was registered in a special forms designed that included name, age, level of education, and duration of sport activity.

**Results:** Result showed that caries prevalence of the total sample was 88.34%. The mean of DS, MS, FS and DMFS of footballers was  $(4.993\pm 0.256)$ ,  $(3.017\pm 0.259)$ ,  $(1.710\pm 0.174)$  and  $(9.720\pm 0.425)$  respectively. Significant difference were seen between MS, FS and DMFS with age and duration of playing, while significant difference were seen between DS and FS with level of education.

All footballers are in need to dental treatment. the highest need for dental care was at least one tooth need one surface filling (74.44%), followed by 33.75% in need of bridge and 27.54% needs two or more surface filling .

The mean value for total sample for plaque, calculus and gingival indices were  $(1.193\pm 0.022)$ ,  $(1.262\pm 0.024)$  and  $(0.501\pm 0.021)$  respectively. Moderate plaque (65.2%), mild calculus (79.90%) and moderate gingivitis (63.03%) were the most common scores among footballers. The mean of plaque, calculus and gingival indices were significantly decreased with increasing in the levels of education. Positive highly significant correlation were recorded between gingival index with plaque and calculus indices and plaque index with calculus index in all age group, level of education, duration of playing and club type.

Concerning dental trauma, results revealed that the prevalence of dental trauma was (11.66%), the enamel fracture type of dental trauma was the most common (5.21%), while the luxation type of dental trauma was the lowest (0.50%). Significant difference were seen between luxation type of trauma with age and duration of playing, while significant difference was seen between concussion type of trauma with club type.

**Conclusion:** considering higher prevalence of dental plaque, gingivitis and dental caries, it is necessary to provide full support to prevent oral disease by providing dental health education to the footballers and their staff, the dental injuries are common in Iraqi footballers. Strategies should be developed to improve the knowledge of teams' football players about the prevention and management of dental injuries and about the usage of mouthguards.