

## Do Libyan Dental Professionals Have Adequate Oral Health Status, Hygiene Practices, and Reasonable Treatment Needs?

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### Abstract

**Objectives:** This study aimed to assess oral health-related practices, behaviors, and treatment needs as well as the perceived barriers to accessing oral health services of dentists working in public dental clinics in Benghazi, Libya.

**Methodology:** Data was collected from dentists employed at public dental clinics in Benghazi. Participants completed a self-administered questionnaire, and clinical examinations were performed. The questionnaire covered socio-demographic characteristics, oral health practices, self-reported oral health, and perceived barriers to accessing dental services. Clinical examination data included the Decayed, Missing, and Filled Teeth index (DMFT), Community Periodontal Index (CPITN), and the Simplified Oral Hygiene Index. Statistical analyses were performed using SPSS software. All statistical analyses were performed at a P-value < 0.05.

**Results:** The study surveyed 171 participants, predominantly female (59.1%), with 96.5% reporting twice-daily teeth brushing and only 12 (7%), who adhered to all recommended oral health-related practices. The clinical examination showed that the oral hygiene status was good in 42.1%, the mean DMFT score of 4.07 and the CPITN score of 3 was recorded in 21.1% of the participants. Treatment needs, based on missing teeth, decayed teeth and CPITN score, were high, with 86% requiring some sort of dental care. Weak negative correlations were observed between oral hygiene status and oral health-related practices ( $r = -0.287$ ,  $P < 0.001$ ), and non-significant associations between oral health-related practices score and treatment needs and DMFT score. The most commonly reported barriers by more than two-thirds of the participants were lack of time for dental visits, difficulty in scheduling, insufficient time for oral care, and dental anxiety.

**Conclusion:** Despite Libyan dentists reporting regular twice-daily tooth brushing, they did not adhere to all recommended oral health-related practices. This poor adherence to oral health practices may explain the observed high treatment needs. However, no significant association was discovered. Additionally, patient-related barriers were prominent, but they were not directly associated with the treatment needs of the participants. Accordingly, further research is advised to explore the reasons behind the high treatment needs and to explore the precise barriers to accessing oral health services.

### Keywords

Oral hygiene practices, Treatment needs, Self-reported, perceived, Dentists, Oral health, DMFT, CPITN, Libya, Barriers, Access to services.