

## Editorial

# Critical Inadequacies in the Undergraduate Dental Education

**Wael M Talaat\***

Department of Oral and Craniofacial Health Sciences, University of Sharjah, UAE  
Department of Oral and Maxillofacial Surgery, Suez Canal University, Egypt

## EDITORIAL

It is the duty of dental practitioners to screen patients for all diseases and disorders that are within the scope of their license [1]. Referring to specialists might be all what is needed from a dentist if the necessary experience required for treatment is not present. Failing to do that might render the dental practitioner liable for medico legal consequences. Accordingly, all teaching institutions should strive to provide the required knowledge and skills that prepare students to successfully evaluate their patients for every disease or disorder that lies within their scope of practice. The sequelae of failing to diagnose a disease during the initial screening procedure are serious, leading to disease progression, and more difficulties in managing the advanced stages. Two deficiencies in the undergraduate dental training have been clearly identified worldwide; temporomandibular disorders (TMD) and sleep related disorders (SRD).

TMD are a group of muscular and articular disorders that affect the temporomandibular joint (TMJ) and all associated tissues [2]. The etiology of TMD is divergent, as well as the clinical symptoms, which may include pain, joint sounds, limitation of mouth opening, deviation of the mandible on opening, headache, earache and muscle tenderness [3]. Patients tend to ignore TMD symptoms, which can be diagnosed only if TMJ examination is included as a part of the initial screening in dental practice. This explains the fact that advanced forms of the disease have been recently diagnosed in patients who did not mention TMD as a complaint in the dental practice [4]. An epidemiologic survey has shown that 18-19% of the populations are suffering from undiagnosed TMD, and the chances are low to have those patients managed, as they are not looking for treatment [5]. These disorders are progressive, and advanced forms involve degenerative changes, leading to severe symptoms, which may require complicated surgeries for management.

The United States Court System has recently identified TMD to be within the scope of practice of dentistry. Thus every dental practitioner should have the basic knowledge and skills to properly diagnose TMD, and refer the patient to specialists as needed [6]. Simmons HC 3<sup>rd</sup> negotiated the statement of the Commission on Dental Accreditation (CODA) which defines the standards required for the accreditation of dental schools in

**\*Corresponding author**

Wael M. Talaat, Associate Professor of Oral and Maxillofacial Surgery, Assistant Director for Training and Education, College of Dental Medicine, University of Sharjah, UAE, Tel: 9716-505-7605; Fax: 9716-505-7606, Email: wtaha@sharjah.ac.ae

Submitted: 19 February 2018

Accepted: 20 February 2018

Published: 22 February 2018

Copyright

© 2018 Talaat

ISSN: 2573-1564

OPEN ACCESS

the United States (CODA – Accreditation Standards for Dental Education Programs copyright 2015) [7], and which mentioned that the training in the assessment and diagnosis of TMD is not required in the undergraduate dental education. The author recommended that dental students should be trained on the assessment of TMD, and that this training should be a requirement to accredit dental schools [6].

In a recent study, the prevalence of TMD incidentally discovered during routine dental examination was 10.8%. Advanced forms of these disorders were diagnosed in patients who did not self-report their symptoms. The authors mentioned that the current guidelines for diagnosing TMD are inconstant, despite the high prevalence of these disorders. The authors also recommended that the educational institutions and the health authorities should attend to these disorders, by providing the necessary undergraduate training, and refining the guidelines for diagnosis [4].

The second identified inadequacy in the undergraduate dental training worldwide is that concerning SRD. SRD are a range of disorders including obstructive sleep apnea, snoring and upper airway resistance syndrome. The complications of undiagnosed or untreated SRD are serious, including insulin resistance, hypertension, and stroke and ischemic heart disease. Interestingly, most of these complications can be prevented if the disease is diagnosed early [8]. Although many considerations related to the diagnosis and treatment of SRD fall out of the scope of dentistry, however dentists still have a major role in the screening, diagnosis and treatment of these disorders. A dentist is an important member of a multidisciplinary team approach required to diagnose and treat SRD. Lateral cephalometric radiographs, which are usually interpreted by a dentist, are essential for the diagnosis of SRD. Clinical examination to identify the mechanical factors causing airway obstruction, the use of oral appliances and osteotomy surgeries for treatment, are examples of procedures which are performed by a dental graduate, and which are required for the diagnosis and treatment of SRD. Even though the reported prevalence of SRD in the literature has been very high, many patients remain undiagnosed due to different reasons [9]. One of the main reasons for the big number of undiagnosed patients is the limited sleep medicine education

in the undergraduate medical and dental schools [10]. Studies showed that the average teaching hours in the undergraduate dental education in the Middle East universities was 1.2 hours [9], while that in the United States was 3.92 hours, which is still considered deficient [11]. The basic knowledge and skills required for the diagnosis, treating or referring patients to the appropriate specialist should be incorporated into undergraduate dental education as soon as possible. Health authorities should pay more attention to these common disorders, enhancing public awareness and education, defining the guidelines required for management, and supporting access to treatment.

## REFERENCES

1. ADA. Scope of practice/definition of dentistry. 1997.
2. Greene CS. Managing the care of patients with temporomandibular disorders: a new guideline for care. *J Am Dent Assoc.* 2010; 141: 1086-1088.
3. John MT, Reismann DR, Schierz O, Wassell RW. Oral health related quality of life in patients with temporomandibular disorders. *J Orofac Pain.* 2007; 21: 46-54.
4. Talaat WM, Adel OI, Al Bayatti S. Prevalence of temporomandibular disorders discovered incidentally during routine dental examination using the Research Diagnostic Criteria for Temporomandibular Disorders. *Oral Surg Oral Med Oral Pathol Oral Radiol.* 2017; 125: 250-259.
5. Gray RJ, Davies SJ, Quayle AA. A clinical approach to temporomandibular disorders. 1. Classification and functional anatomy. *Br Dent J.* 1994; 176: 429-435.
6. Simmons HC 111. Why are dentists not trained to screen and diagnose temporomandibular disorders in dental school? *Cranio.* 2016; 34: 76-78.
7. ADA. CODA, accreditation standards for dental education programs. 2015.
8. Callop N, Cassel DK. Snoring and sleep disordered breathing. In: Lee- Chiong TJr, Sateia M, Carskadon M, editors. *Sleep medicine.* Philadelphia: Hanley & Belfus. 2002; 349-355.
9. Talaat W, AlRozzi B, Kawas SA. Sleep medicine education and knowledge among undergraduate dental students in Middle East universities. *Cranio.* 2016; 34: 163-168.
10. Rosen RC, Zozula R, Jahn EG, Carson JL. Low rates of recognition of sleep disorders in primary care: comparison of a community-based versus clinical academic setting. *Sleep Med.* 2001; 2: 47-55.
11. Simmons MS, Pullinger A. Education in sleep disorders in US dental schools DDS programs. *Sleep Breath.* 2012; 16: 383-392.

## Cite this article

Talaat WM (2018) Critical Inadequacies in the Undergraduate Dental Education. *JSM Gen Surg Cases Images* 3(1): 1041.