

Review Article

Journal of Stomatology & Dental Research

Promoting Awareness Among New Generations of Dental Instructors about Essential Knowledge and Expertise for Recognizing and Managing Dental Patients with Somatic Symptom Disorder in Undergraduate Dental Clinics - A Review

Khamis A Hassan^{1*} and Salwa E Khier²

¹Professor of Operative Dentistry & Senior Clinical Consultant, Global Dental Centre, Vancouver, Canada ²Professor of Dental Biomaterials & Senior Research Consultant, Global Dental Centre, Vancouver, Canada

*Corresponding author

Khamis A Hassan, Professor of Restorative Dentistry, Global Dental Center, Vancouver, British Columbia, Canada. **Received:** October 03, 2023; **Accepted:** October 17, 2023; **Published:** October 23, 2023

ABSTRACT

Dental instructors are equipped with the fundamental dental knowledge and expertise to efficiently supervise dental students for managing their patients in the undergraduate dental school clinics. However, they do not have the basic knowledge for identifying and managing patients with Somatic Symptom Disorder (SSD) at chairside prior to initiating the dental treatment. Lack of such knowledge is a major reason for problems in diagnosis and management of these dental patients which could result in repeated, ineffective dental treatments, such as dental filling, root canal, or even extraction.

The aim of this review is to promote awareness among new generations of dental instructors of the need to acquire the basic knowledge about SSD. Several recommendations are made to assist dental instructors in gaining the essential knowledge for assisting dental students at chairside in identifying and managing dental patients with such psychiatric disorder.

Keywords: Dental, Instructors, Students, Patients, Somatic, Symptom, Disorder, Oral, Skills, Knowledge, Psychiatric, Consultation Liaison

Introduction

Clinical instructors are equipped with the essential knowledge and clinical skills required to supervise dental students in the undergraduate teaching clinics while providing dental treatment for patients with straightforward health problems.

Reviewing the current dental literature reveals that psychology and psychiatry as subjects are not included in the dental curricula of undergraduate or postgraduate education. As such, the clinical instructors do not have the basic knowledge for identifying and managing dental patients with Somatic Symptom Disorder (SSD) at chairside prior to initiating the dental treatment. They might have encountered such patients in dental practice without recognizing the clinical presentation of SSD. These patients complain of oral symptoms after dental treatment for which the cause remains undetermined. They might have SSD without being aware of it, simply because they have never visited a psychiatrist nor a psychologist [1].

Lack of recognition of SSD in dental patients by clinical instructors could result in searching for the most likely cause and

repeating the ineffective dental treatments that fail to relieve the patient's symptoms. It could ultimately result in misdiagnosis, inefficient management of treatment time, and dental treatment failure [2].

Additionally, the dental literature lacks in-depth information on how to identify and manage dental patients presenting with SSD before initiating the dental treatment. The aim of this review is to promote awareness and develop knowledge among new generations of dental instructors about SSD in dental patients. This would assist the dental instructors in identifying SSD in undiagnosed individuals who seek dental treatment, as well as avoiding the initiation of extensive treatment before managing this disorder. It is also the aim of this review to provide indepth information on SSD regarding its definition and causes, epidemiology, diagnostic procedures, and treatment methods.

SSD is a quite common psychiatric condition characterized by preoccupation with physical symptoms that are attributed to a psychologic disorder rather than organic disease. The exact cause of SSD is not clear. However, it seems to be associated with any of the following traits, or a combination of them: (1) genetic traits, e.g. pain sensitivity, (2) a personality trait that involves negative emotions and poor self-image, (3) difficulty dealing with stress (4), decreased emotional awareness, which

Citation: Khamis A Hassan, Salwa E Khier. Promoting Awareness Among New Generations of Dental Instructors about Essential Knowledge and Expertise for Recognizing and Managing Dental Patients with Somatic Symptom Disorder in Undergraduate Dental Clinics - A Review. J Stoma Dent Res. 2023. 1(1): 1-5. DOI: doi.org/10.61440/JSDR.2023.v1.04

can make patients focus more on physical issues than emotional ones (5), learned behaviors, e.g. getting attention from having an illness or increasing immobility from pain behaviors [3].

SSD usually starts before the age of 25 or 30, although it can begin in adolescence, and can last for many years. This disorder appears to be more common in women than men, with a lifetime prevalence of 0.2 to 2 percent in women compared with less than 0.2 percent in men. This disorder ranges from mild to severe and from general to very specific [4].

Individuals with SSD complain of persistent or recurrent vague physical symptoms accompanied by dysfunctional cognitive, affective, or behavioral reactions. Diagnosis of SSD relies on three main criteria which include somatic symptoms, excessive thoughts, feelings, and behaviors, as well as chronicity. The first criterion of 'somatic symptoms' denotes one or more symptoms that result in disruption of daily life. The second criterion of 'excessive thoughts, feelings and behaviors' entails the presence of somatic symptoms or associated health concerns. To meet this criterion, at least two of the following are needed: high level of health-related anxiety, disproportionate and persistent concerns about the medical seriousness of symptoms, and excessive time and energy devoted to these symptoms or health concerns. The third criterion of 'chronicity' refers to a duration of typically greater than 6 months [5,6].

The distinctive sign to recognize SSD is that symptoms cause a severe impact on daily activities with inability to frequently school or work and inability to pursue hobbies or sport activities. Patients usually spend much time at home and have limited relationship with peers. So, the effects of symptoms on thoughts and behaviors are more important than the symptom itself. The disproportion between reported symptoms and the severe limitations in daily activities should be used as a diagnostic clue [7].

Management of mental disorders including SSD is provided by mental health professionals. It focuses on helping the person with SSD to live as much of a normal life as possible. The two modalities used for managing SSD are Cognitive Behavior Therapy (CBT) and Mindfulness-Based Therapy (MBT). CBT; the first management modality, is the most consistently supported treatment for SSD. It helps patients find ways to reframe and gain control of their situation, and break what can become a self- fulfilling cycle of pain and despair. CBT uses specific techniques which include relaxation training, problem-solving, visualization, biofeedback, exercise, and breathing techniques. MBT; the second management modality, helps patients increase their awareness of what they are sensing and feeling in the moment, without interpretation or judgment. The practices used involve various breathing techniques and guided imagery to relax the body and mind and help reduce stress [8].

In the dental teaching clinics, patients with SSD typically present complaining of certain physical symptoms without identifiable causes. Such symptoms are known as Medically Unexplained Oral Symptoms (MUOS) [9,10]. MUOS may be the first or only manifestation of a mental health problem including chronic orofacial pain, occlusal discomfort, burning mouth syndrome, salivary gland complaints, atypical odontalgia, phantom bite syndrome, oral cenesthopathy (Oral Dysesthesia) and halitophobia and preoccupation with dentures [11-18]. Temperomandibular Disorder (TMD) is another example of psychiatric-related complaints in the dental office [19]. The TMD has symptoms like those of SSD which are sometimes difficult to be differentiated.

Lack of detection and identification of SSD by dental instructors can result in inappropriate dental treatment, e.g., the uninformed student might provide TMD patients in a clinical session with unnecessary and irreversible surgical treatment although their physical symptoms could be due to mental disorders. After completion of dental treatment, patients frequently report back to dental teaching clinic with persistent symptoms and require dental instructors to re-evaluate their dental work. Re-examining of these patients still do not detect any organic pathology related to such symptoms [5,6]. In an attempt to address the patients' suffering, dental instructors may feel pressure to intervene with further treatments such as replacement of fillings, providing endodontic treatment, or even extracting the tooth. However, these dental re-treatments result in no improvement of persistent symptoms and cause additional distress and impairment [8].

In medicine, it is a common practice that surgeons tend to rely on a psychiatric evaluation prior to initiating invasive and permanent procedures, e.g., cosmetic plastic surgery. This evaluation is done to either exclude inappropriate candidates or develop a plan for management [20]. As for the dental practice, a number of primary care activities can be conducted in the office such as screening of diabetics and managing hypertension [21]. Additionally, dental patients are never referred to a psychiatrist nor screened in dental office for psychiatric illnesses prior to initiating extensive dental procedures, e.g., placing dental implants especially in maxillary anterior region of the mouth. Failure to screen for psychiatric illnesses leaves the dental instructors and the patient susceptible to extreme likelihood of time consuming and costly dental problems [22].

Efforts are warranted to provide dental instructors with basic knowledge about SSD in the form of seminars, courses, and/ or workshops, along with short training courses on screening dental patients for SSD. It is further recommended that basic psychiatric assessment training programs be incorporated in dental curricula at undergraduate or postgraduate levels. Upon detection of a patient with SSD, it is advised that dental instructors make a consultation with the patient's family doctor and other health providers involved prior to initiating any dental treatment. This is done to either exclude inappropriate candidates or develop a plan for management. Additional efforts should be made towards establishing a psychiatric consultation liaison service in dental teaching facilities to assist dental instructors in diagnosing and managing dental patients with SSD prior to initiating any invasive dental treatment.

Conclusion

SSD should be strengthened in dental education, and screening of dental patients for SSD should be paid attention to in dental teaching clinics. Dental instructors should be trained to recognize patients attending the dental teaching clinics with SSD. Failure of such recognition leaves the dental instructors and the patient susceptible to extreme likelihood of additional distress, time consuming and costly dental problems.

References

- Leon-Salazar V, Morrow L, Schiffman EL. Pain and persistent occlusal awareness: what should dentists do? J Am Dent Assoc. 2012. 143: 989-991.
- Forssell H, Jääskeläinen S, List T, Svensson P, Baad-Hansen L. An update on pathophysiological mechanisms related to idiopathic orofacial pain conditions with implications for management. J Oral Rehabil. 2015. 42: 300-322.
- Dimsdale JE, Dantzer R. A biological substrate for somatoform disorders: importance of pathophysiology. Psychosom Med. 2007. 69: 850-854.
- 4. Henningsen P. Management of somatic symptom disorder. Dialogues Clin Neurosci. 2018. 20: 23-30.
- Diagnostic and statistical manual of mental disorders. American Psychiatric Association (5th Edition, DSM-5). 2013.
- Witthöft M, Jasper F. Encyclopedia of mental health (2nd Edition), Science Direct, United Kingdom. 2016. 211-214.
- 7. Lipowski ZJ. Somatization: The concept and its clinical application. Am J Psychiatry. 1988. 145: 1358-1368.
- 8. Gozzi G, Barbi E. Facing somatic symptom disorder in the emergency department. J Paediat Child Health. 2019. 55: 7-9.
- 9. Matsuoka H, Chiba I, Sakano Y, Toyofuku A, Abiko Y. Cognitive behavioral therapy for psychosomatic problems in dental settings. Bio Psychosoc Med. 2017. 11: 18.
- Toyofuku A. Psychosomatic problems in dentistry. Bio Psychosoc Med. 2016. 10: 14.
- 11. Kalkur C, Sattur AP, Guttal K. From brain to dentistry: oral psychosomatic disorders-A review EC Dental Science. 2019. 18: 1189-1196.

- Van der Laan GJ, Duinkerke ASH, Luteijn F, Poel CMA. Role of psychologic and social variables in TMJ Pain Dysfunction Syndrome (PDS) symptoms. Community Dent Oral Epidemiol. 1988. 16: 274-277.
- Jerlang BB. Burning Mouth Syndrome (BMS) and the concept of alexithymia. A preliminary study. J Oral Pathol Med. 1997. 26: 249-253.
- 14. Votta TJ, Mandel L. Somatoform salivary complaints, Case reports. NY State Dent J. 2002. 68: 22-26.
- 15. Takenoshita M, Sato T, Kato Y, Katagiri A, Yoshikawa T, et al. Psychiatric diagnoses in patients with burning mouth syndrome and atypical odontalgia referred from psychiatric to dental facilities. Neuropsych Dis Treat. 2010. 6: 699-705.
- Tomar B, Bhatia NK, Kumar P, Bhatia M, Shah R. The psychiatric and dental interrelationship Delhi Psych J. 2011. 14: 138-142.
- Umezaki Y, Miura A, Watanabe M, Takenoshita M, Uezato M, et al. Oral cenesthopathy. Bio Psycho Soc Med. 2016. 10: 20.
- Imhoff B, Ahlers MO, Hugger A, Lange M, Schmitter M, et al. Occlusal dysesthesia- A clinical guideline. J Oral Rehabil. 2020. 47: 651-658.
- Naidu J, Bhattacharya P, Mendonsa JP, Manju M, Satish K. Management of chronic atypical facial pain of psychogenic origin: A unique case report. Int J Clin Pediatr Dent. 2020. 13: 196-198.
- Pakhurst CL. Controversies in the aetiology of temporomandibular disorders. Part 1. Temporomandibular disorders: All in the mind? Prim Dent Care. 1997. 4: 25-30.
- 21. Sansone RA, Sansone LA. Cosmetic surgery and psychological issues. Psychiatry (Edgmont). 2007. 4: 65-68.
- 22. Gambhir RS. Primary care in dentistry-An untapped potential. J Family Med Prim Care. 2015. 4: 13-18.

Copyright: © 2023 Khamis A Hassan, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.