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Eating Disorders within the Dental Practice: A Literature Review

By Sara E. Askounes & Kristin A. Williams

Case Western Reserve University, United States

Abstract- Eating Disorders (ED) affect a great deal of individuals around the world, yet initial diagnosis continues to be elusive to detect. Many of the physical and psychological manifestations that occur in patients suffering from an ED can be seen by both medical and dental professionals; however the mentality behind this diagnosis is complex. The task of discussing the disorder with the patient has a tendency to be passed amongst practitioners even though current literature agrees that early diagnosis is key to prevention and successful treatment. Two areas of focus that need to be addressed are who is responsible for making the initial diagnosis and what needs to be included for prevention and/or successful treatment.

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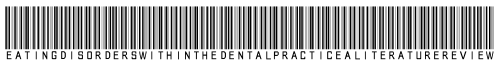

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Eating Disorders within the Dental Practice: A Literature Review

Sara E. Askounes [α] & Kristin A. Williams [σ]

Abstract- **Eating Disorders (ED) affect a great deal of individuals around the world, yet initial diagnosis continues to be elusive to detect. Many of the physical and psychological manifestations that occur in patients suffering from an ED can be seen by both medical and dental professionals; however the mentality behind this diagnosis is complex. The task of discussing the disorder with the patient has a tendency to be passed amongst practitioners even though current literature agrees that early diagnosis is key to prevention and successful treatment. Two areas of focus that need to be addressed are who is responsible for making the initial diagnosis and what needs to be included for prevention and/or successful treatment.**

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I. Introduction

An Eating Disorder (ED) is a complex multi-faceted disease that contains both physical and psychological complications. The American Psychiatric Association has given full diagnostic criteria for each subcategory of ED to include: Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge-Eating Disorder (BED), Other Specified or Unspecified Feeding or Eating Disorder, Pica, Rumination Disorder, and Avoidant/Restrictive Food Intake Disorder (1). Regardless of the specific diagnosis, ED's affect over 5 million people in the United States alone (2). According to one review on medical complications and clinical nutrition, complications with the disorder present in many different forms (3), and yet these physical manifestations are just the tip of the iceberg when it comes to discussing the side effects associated with an ED.

Clinical signs of EDs can be fairly easy to diagnose during a dental exam. The oral manifestations are relatively specific to the disorder and with a limited amount of preliminary knowledge a dental professional can make a diagnosis quickly and noninvasively. One study highlighted salivary flow as a contributor to increased dental caries. This study examined dental erosion scores of persons with BN and those without to conclude that those with the disorder are at significantly higher risk for dental erosion and thus dental caries. This has been found to be the most distinct oral finding with BN specifically (4). Another study names what they call "cues" of ED manifestations which include dentin hypersensitivity, parotid enlargement, parotid dysfunction, periodontal disease and gingival inflammation, as well as erosion and xerostomia (5). Self-reported findings in one study compared those diagnosed with an ED to the control patient who does not have the disorder and found significant distinctions in the presence of oral symptoms (6). Research overwhelmingly agrees that those affected by the disorder are at significantly higher risk for oral complications compared to their counterparts.

Extensive research has been conducted to evaluate the oral manifestations of EDs that present in the dental office. There is conclusive evidence that EDs typically present first within the oral cavity, and can be seen as early as six months after behavior has begun (7). Enamel erosion, dental caries, mucosal membrane trauma, xerostomia and salivary gland swelling have all been identified as common oral findings associated with ED's (4).

The dental team is in the optimal position to make early detection screenings and step in to begin the intervention process (8). While there is a plethora of information available for physicians and nurses to utilize in assisting with prevention, screening, recognition, and management, there is very little information accessible to assist dentists caring for the same population (2).

Diagnosis based solely on oral findings may be risky and problematic; therefore familiarization with dermatological signs is necessary. The effects of starvation on the body appear outwardly in many forms. These can include xerosis, lanugo-like body hair, acrocyanosis, pruritus, purpura, or even acne. These signs are relatively common for AN, while BN exhibit slightly different presentations such as Russell's sign- a small callus or cut on the knuckles of the hand used to induce vomiting (9). While educating the medical/dental professional on physical signs and symptoms is important, these signs do not encompass the story as a whole.

The common theme within EDs typically involves food; however psychological issues are more often than not a root cause (10). It has been suggested

Author α: RDH, BA, Dental Hygienist at Case Western Reserve University in the Department of Community Dentistry.
e-mail: sea10@case.edu
Author σ: DDS, MPH, Assistant Professor at Case Western Reserve University School of Dental Medicine in the Department of Community Dentistry. Her research interests are in Public Health and helping the underserved get access to Oral Health prevention and care.
e-mail: kaw14@case.edu

that EDs may develop as a coping mechanism for underlying personality disorders (11). The development of the disorder has also been suggested to be the product of situational prompting, or triggering. Depression, loneliness or the feeling one has lost control have all been identified as possible triggers for an ED. As a result, EDs have been linked with a need to be in control. Enforcing a compulsory daily routine is one example of maintaining control exhibited quite frequently (12). It is therefore typical for a person with an ED to hide their behaviors for as long as possible because they do not believe relinquishing control is an option. Without diagnosis and medical and psychological therapy, these destructive behaviors continue to progress (13). Even with treatment, if the approach to recovery is insufficient, relapse is extremely common (14).

As a result of the complexity of the disorder, an interdisciplinary team-based approach to treatment has been recommended for successful treatment of all ED's. The recommended team composition includes a physician, psychologist or psychiatrist, a registered dietitian, and a dentist (15). All of these disciplines include, within their general curriculum, a basic overview of the disease (16). Despite the general knowledge presented within the professional curriculum however, multiple barriers have been identified. Dental professionals in particular have discussed that they do not feel knowledgeable enough to converse with patients or referral agencies about such a sensitive subject, though they do feel it is within their scope of practice. A fear of causing further detriment or offense is at the root of this thought process as a result of a lack of clinical instruction on patient education and communication. Another barrier deals with interdisciplinary collaboration specifically in the form of dissonance between professions (17). Despite these barriers, it still remains clear that signs present first in the mouth.

As mentioned previously, an ED is primarily a psychiatric disorder; those who are affected will typically attempt to avoid arousing suspicion (6). As a result, it is unlikely a person struggling with an ED will be forthcoming with information; therefore clinicians must be observant (18). Acquiring genuine answers without embarrassing the patient is a challenge that must be overcome. Consequently, a survey was developed as a screening tool to identify individuals with ED's (19). It was designed to quickly interview participants, and can be completed relatively effectively. For ease of use, the survey is referred to as SCOFF to represent each individual question asked to determine if patients made themselves sick, felt out of control, had lost a significant amount of weight, believed themselves to be fat, and if food played a dominant role in their lives (Figure 1). The questionnaire was later examined more closely to be used as a screening tool specifically for the oral health care professional (20). It was concluded that the survey could be easily administered in dental offices to more effectively identify patients in need of diagnosis and ED treatment (20).

II. Conclusion

Referral and maintenance of EDs is not thoroughly covered in the literature. While it has been concluded that the dental professional is in the optimal position to diagnose a person suffering from the disorder, it is unknown to what extent one participates in communicating appropriately with the target age group. Continued research should focus on determining if the diagnosis is being made, to what extent, and what current maintenance of those patients looks like.

The SCOFF Questions
Do you make yourself sick because you feel uncomfortably full?
Do you worry you have lost control over how much you eat?
Have you recently lost more than 15 pounds in a three month period?
Do you believe that you are fat when others say you are too thin?
Would you say that food dominates your life?

Figure 1: The Scoff Questionnaire (12).

III. Practice Implications

The aim of this review was to provide a knowledge base to begin the process of recognizing the need for research in the area of ED's. While continuing education specific to ED recognition does exist, it is limited in form and relatively rare. The evidence presented within this paper clearly suggest that inter-professional connections are extremely important in ensuring that all healthcare providers remain united and identification of a disorder is swift. Detection and management of ED's is key to prevention and treatment, therefore a plan of action set in motion for all members of the team is crucial to ensure that all individuals affected are cared for quickly and action is taken to ensure prevention. Further research is necessary to determine what approaches are currently being utilized within the dental practice. Research should investigate how private practices can increase their involvement in the prevention, or initial detection, and subsequent treatment of eating disorders.

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