

Prevalence of Eating Disorders in Dental Students of a Young University in UAE

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Abstract: *The aim of this study was to analyze the prevalence of eating disorders in dental students of a young university. The present study was carried out at RAK College of Dental Sciences. The students included in the study belonged to the 3rd, 4th and 5th year BDS program. The research was carried out by means of a survey method, an Eating Attitude Test questionnaire was used. The prevalence towards eating attitude was treated as a dependent variable and the student's gender was treated as an independent variable. To identify distinctions and dependences between variables the Chi² test was used. Values with probability <0.05 were regarded as statistically significant. The mean age of males of the study group was 23.18±1.08 years and the mean age of females of the population was 23.35±1.11 years. Prevalence of ED's in males ranged from 34.62% to 48.57%. Prevalence of ED's in females ranged from 51.28% to 54.17%. It is seen that females have a higher prevalence of ED's when compared to males.*

Keywords: anorexia, bulimia, dental students, eating disorders

1. Introduction

Eating disorders (EDs) are described as psychiatric illnesses associated with serious medical complications.

The EDs are characterized by disturbed self perception of body weight and shape and a desire to be thinner.¹⁻³ These disorders present a unique medical, psychiatric, dental and nutritional pattern.³ The exact etiology of EDs is unknown. However genetic, cultural and psychiatric factors may play a role.⁴ EDs are usually predominantly recorded in teenage girls.² Though not greatly described, the oral manifestations include increased levels of dental caries, sensitivity to hot and cold substances, dry mouth, enamel erosion and occasionally swelling of the parotid salivary gland.¹⁻⁵ These signs can develop within six months of the onset of disordered eating.⁵ Therefore it may be imminent for a dentist to be an integral part of the multidisciplinary approach towards the treatment of these disorders.³

United Arab Emirates (UAE) is a country in the middle-east and has experienced paramount growth in the last four to five decades. The discovery of oil in the late 1960's turned the fortunes of the nation along with a visionary governance.⁶ UAE has welcomed westernization, globalization and industrialization in the due course of time which has eventually resulted in changes of lifestyle, diet and physical exercises.⁶ However these changes have become detrimental as witnessed by an increase in the prevalence of conditions like hypertension and obesity.⁷ One important disorder or condition which has not been discussed or researched upon profoundly is the prevalence of eating disorders amongst the youth in this part of the world. It is understood that adapting to the western lifestyle also means to look and feel like the west which includes being thin for the girls and now this thought process is also catching up with the boys.^{6,7}

Dentists can usually be the first health care professional to whom an undiagnosed ED patient may report to. It becomes important that as a part of this profession the students involved should be knowledgeable and aware of these conditions. It is imperative for the students of a dental university to refer and treat these patients appropriately. Therefore, this study was designed to understand the prevalence of eating disorders within the student population of a dental university in UAE.

2. Materials and Methodology

The present study was carried out at RAK College of Dental Sciences, after the approval from the Ethics Committee of the university. The students included in the study belonged to the 3rd, 4th and 5th year BDS program. These students work in the dental clinics as a part of their curriculum and therefore it is expected out of these students to have knowledge regarding Eating Disorders and the clinical reflection of these conditions. We believe that most of the undiagnosed and unsuspected ED patients are first seen by dental professionals thereby making it imperative for these professionals to have knowledge about ED's. In this study the authors have tried to evaluate the prevalence of ED's amongst dental students of the university. The results of this study will help us understand the prevalence of ED's amongst these students. The authors believe that based upon these results we can try understanding if there is a necessity to implement measures to educate these students on ED's as it will not be possible for these students to be astute clinicians in terms of clinical diagnosis if they themselves are suffering with these conditions.

A total of 156 out of 212 students from all the three clinical years consented to participate in the study. Out of these 156 students 74 were males and 82 were females. An orientation was given to all these students regarding the Eating Attitudes Test (EAT) questionnaire⁸ before they completed it.

Eating Attitudes Test (EAT): This is a tool developed by Garner and Garfinkel for the purpose of screening eating disorders in adolescent individuals. It can be used for people over 11 years of age, which contains 40 questions with six graduated answers in Likert style.⁸ In 1989, Erol and Savas confirmed the validity and reliability of this tool in Turkey.⁹

The EAT was used to determine the prevalence of ED's amongst these dental students of the university. The student would be considered as suffering with or at risk of ED's when the total score of the EAT was 20 points or more as already indicated in other studies.^{8,9} The observations were tabulated and analyzed using SPSS package version 19.

3. Results

The mean age of males of the study group was 23.18±1.08 years and the mean age of females of the population was 23.35±1.11 years. Prevalence of ED's in males ranged from 34.62% to 48.57%. Prevalence of ED's in females ranged from 51.28% to 54.17%. Therefore, it is seen that females have a higher prevalence of ED's when compared to males. However the results were not statistically significant (Table 1). It also needs to be noted that the difference in prevalence between the males and female population is not very different and hence the lack of statistical significance.

4. Discussion

The present study compared the EAT scores within three clinical years of Bachelors of Dental Surgery program (BDS year 3, 4 and 5) in a university from UAE. It needs to be stressed upon that, usually undiagnosed patients of ED's visit the dentists and that makes it necessary for the dentists to be aware of these conditions and their oral manifestations. What needs to be further understood is that if these dentists are not aware or do not behold knowledge of the possible oral manifestations or tell-tale signs of these conditions then it may be futile.

This study was designed therefore to evaluate the prevalence of ED's within this dental school population. It has also been emphasized in various literature that ED's are a group of conditions that is usually found within the female population and is not seen amongst males, therefore this study also intended to understand the difference in prevalence of ED's between males and females of this dental school.

The population contained 156 students between the ages of 21-25 years, with 74 male students and 82 female students. When the EAT scores were used it was understood that 40.55% of the males were suffering with ED's when compared to 52.69% of females. The results of our study are identical to studies who reported upon prevalence of ED's amongst males in countries such as Kuwait (47.3%), Sharjah within UAE (29.8%).¹⁰ The results of our study found a higher degree of prevalence when compared to similar studies done in Libya (19.35%), Jordan (20.1%) and Algeria (29.8%).¹⁰ It needs to be emphasized that though earlier males were considered to be immune to such groups of disorders but recently various studies have reflected an

increasing prevalence of male adolescents with ED's. However when compared to the rest of the adolescents it is found that males from UAE have a higher prevalence. This can be possibly explained due to a rapid change in food habits with an inclination towards higher prevalence of intake of fast food or junk food in terms of increased consumption of high fat food, burgers, energy drinks and carbonated drinks. The physical exercises amongst this population have come down immensely and this can also be a reason for the increased prevalence of ED's. Media also can be one of the reasons which have influenced this population aggressively with thoughts like "being thin" is "being healthy" which also could have triggered an increase in the number of cases reporting with ED's.¹¹

One other important factor attributed towards an increased prevalence of EDs could be due to the increase in per capita income which could result in inappropriate lifestyle and dietary habits which could have resulted in this group of disorders.

The other part of the study in which the research group wanted to emphasize that these dental school students are supposed to be having knowledge or be aware of the existence of such ED's suggested that even though the students belong to an ally of the medical profession yet the percentage prevalence was on a high amongst these students though it was not statistically significant.

It needs to be reflected that more education programs for these students need to be used so that they themselves can stay away from such eating disorders and thereby become a responsible member within the society who will be able to diagnose unsuspecting patients with ED's. It could also be fruitful to include this wide spectrum of disorders within the curriculum of dentistry, nursing and pharmacy if not included already. The authors believe that being dentists we have a profound responsibility towards the wider society by enabling an early diagnosis of patients visiting us.

5. Conclusions

- 1) The curriculum of dentistry and other allied health sciences should include Eating Disorders and their significance.
- 2) Dental students should be appraised upon the high prevalence of this condition and its clinical significance.
- 3) Dentists should be a part of the multidisciplinary team treating these patients.

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BDS Year	Sample Size n = 156	Mean Age±SD	Students				P value Year	P value Gender
			With ED		Without ED			
3 rd Year	M=26	21.85±0.92	M=09	34.62%	M=18	69.2%	0.86	0.40
	F=24	21.96±1.16	F=13	54.17%	F=10	41.6%		
4 th Year	M=35	22.46±1.17	M=17	48.57%	M=19	54.2%		
	F=39	22.79±0.89	F=20	51.28%	F=20	51.2%		
5 th Year	M=13	25.23±1.17	M=05	38.46%	M=08	61.5%		
	F=19	25.32±1.29	F=11	52.63%	F=08	42.1%		
Total	M=74	23.18±1.08	M=31	40.55%	M=45	61.6%		
	F=82	23.35±1.11	F=44	52.69%	F=38	44.9%		

Prevalence of Eating disorders amongst males and females of 3rd Year, 4th Year and 5th Year students