SURVEY OF DEPRESSION STATUS IN DENTAL SCHOOL STUDENTS OF RAJARAJESHWARI DENTAL COLLEGE AND HOSPITAL, BENGALURU.

Dr. Prafulla Thumati¹, Dr Shwetha Poovani², Dr Bhavya Bharathi³

¹Professor & Head of Orofacial Pain Clinic, Rajarajeshwari Dental College and hospital, Bengaluru.

²Professor, Orofacial Pain Clinic, Rajarajeshwari Dental College and hospital, Bengaluru

³Post graduate student, Orofacial Pain Clinic, Rajarajeshwari Dental College and hospital, Bengaluru.

*Corresponding Author

Prof Dr Prafulla Thumati

Email id: thumatiprafulla@gmail.com

Introduction

Depression is categorized by anhedonia, low energy level, worthlessness, insomnia, disturbed appetite, and cognitive problems. It could be chronic or recurrent as it effects and impairs individuals' function at work by weakening the individual abilities to understand and respond to difficult situations¹.

Mental health has a profound effect on individual, interpersonal and institutional aspects of a student's life. It also affects their academic performance, use of effective learning strategies and completion of education.^{1, 2}Behavioural problems in students have a huge impact on peers, faculty, and staff in

an institution. These problems also affect the institutional management system in terms of legal challenge that they pose.

Mental health problems are known to be highly prevalent among college students. Stress, anxiety, and depression were the three important factors affecting academic performance of the students.

3

An increasing trend is observed in the prevalence of severe psychological problems in students over past few years. The depressed students may show symptoms such as reduced concentration, loss of interest, loss of energy and disorder in sleep pattern, which could negatively affect students' school performance [4-10]. It is very important to identify the depressed individuals before the depression worsens, so that they may be effectively managed.

This also has important ramifications for meeting the professional requirements of their course.

Materials and Methods:

A cross-sectional study was conducted among the dental undergraduates of Rajarajeswari Dental College in Bangalore during May 2018 to October 2018. All undergraduate students who were present on the day of the survey, were considered eligible to participate.

The Institutional Ethical Committee approved the study. The participating students filled out the questionnaire which was anonymous, and only collected the following socio-demographic data: age, gender and year of study.

Data collection:

The forms were filled in a class room, and collected at the end of the lesson. The Beck Depression Inventory (BDI-II) consisting of 21 items estimates a subject's level of depression scored on a 4-point scale, where for each question the subject circles their current feeling.

The BDI-II is scored as the sum of all the answers to each question. 63 is the highest possible total, with zero being the lowest total. Total scores are compared to the BDI-II Index to determine a subject's "Level of Depression." the levels of depression were classified as;

1-10 these ups and downs are considered normal.

11-16 Mild mood disturbance.

17-20 Borderline clinical depression.

21-30 Moderate depression

31-40 severe depression

Over 40 extreme depression

Results of the study:

A total of 180 students participated and completed the research questionnaire. Of these, 70.68% were females, conforming with the recent trends in dental college demographics in India. Depression levels were normal in 63.3%, mild mood disturbance in 21.1%, borderline clinical depression in 5.6%, moderate depression in 7.2% and severe depression in 2.8% of the study population.

Table 1

Distribution of depression levels	among study p	articipants [N=180]
Depression levels	n	%
Normal	114	63.3%
Mild mood disturbance	38	21.1%
Borderline clinical depression	10	5.6%
Moderate depression	13	7.2%
Severe depression	5	2.8%
Extreme depression	0	0.0%

TABLE II

Gender wise comparison of distribution of		ssion leve	s am	ong the Stud	dy Participant	s using Chi
	Ė	Males [n=48]		Females [n=132]		
Depression Levels	n	%	n	%	χ² Value	P-Value
Normal	33	68.8%	81	61.4%		
Mild Mood Disturbance	7	14.6%	31	23.5%	4.424	0.35
Borderline Clinical Depression	1	2.1%	9	6.8%		
Moderate Depression	5	10.4%	8	6.1%		
Severe Depression	2	4.2%	3	2.3%		

Table 3

Beck's Depression Inventory Symptoms	Score 0		Score 1		Score 2		Score 3	
	n	%	n	%	n	%	n	%
Sadness	91	50.6%	73	40.6%	10	5.6%	6	3.3%
Discouraged	139	77.2%	28	15.6%	7	3.9%	6	3.39
Failure	147	81.7%	25	13.9%	7	3.9%	1	0.69
Satisfaction	120	66.7%	39	21.7%	13	7.2%	8	4.49
Guiltiness	93	51.7%	76	42.2%	10	5.6%	1	0.69
Punishment	131	72.8%	37	20.6%	6	3.3%	6	3.39
Disappointment	120	66.7%	52	28.9%	4	2.2%	4	2.29
Blame	107	59.4%	37	20.6%	27	15.0%	9	5.09
Suicidal Thoughts	161	89.4%	13	7.2%	3	1.7%	3	1.79
Crying frequency	130	72.2%	35	19.4%	1	0.6%	14	7.89
Irritation	94	52.2%	67	37.2%	13	7.2%	6	3.39
Level of Interest	89	49.4%	66	36.7%	17	9.4%	8	4.49
Decision making	130	72.2%	25	13.9%	17	9.4%	8	4.49
Attractiveness	144	80.0%	23	12.8%	10	5.6%	3	1.79
Ability to work	108	60.0%	53	29.4%	13	7.2%	6	3.39
Quality of sleep	134	74.4%	38	21.1%	6	3.3%	2	1.19
Tiredness	92	51.1%	68	37.8%	15	8.3%	5	2.89
Appetite	124	68.9%	41	22.8%	11	6.1%	4	2.29

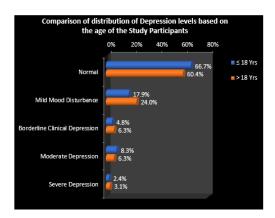
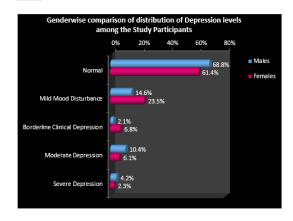


Figure 3:



Discussion:

Depression can be taken as reliable indicator for assessment of mental illness in a community. The emotional status of students during medical school training has been a concern, reported as early as 1956.as it may affect the overall performance of students and lead to cascade of consequence at

both personal and professional levels.

Stress levels and perceived sources of stress among dental students were investigated by using various scales such as, MBI, PSSI, BSI and PGWB index.^{7.} in this study BDI-11 was used to score the degrees of depression.

The results of this study indicate that 37% of

dental students had varying levels of depression.

The present findings seem to be in agreement with research among dental students from other countries. Also, a higher percentage of older students rated positive for any mood disturbance, though the differences are not statistically significant. [6,7,8,9]

Table 1 explains the distribution levels among study participants, out of 180 participants: nearly one in 10 dental students had moderate or severe depression. After completion of the study, according to the survey results the symptomatic students were given psychological counselling and few students underwent the ICAGD computer guided coronoplasty.

Table II explains the gender wise comparison of distribution of depression levels among male and female students. Depression levels in female students were more when compared with male students even between the different levels of depression.

Table III explains about 3 to 8% of the student population had crying tendencies, blaming tendency, level of interest and decision-making deficiencies at severe level. Female students had more issues than male students.

The results of this study cannot ben generalized to all dental students because the study only investigated dental students in one of the dental colleges. Thus, this is the limitation of this study.

Conclusion:

The findings of the present study suggest that the awareness of students and academic staffs about depression and its negative effects should be increased. The dental school administrators should enable counselling service, offering mental health assistance and increased social activities.

Clinical trials are great way to help further research regarding depression symptoms and also to get access to care from experts in the field.

References:

Ikram k,Leghari MA,Khalil S,Khalil
 S,Kainat R. 2015.Prevalence of symptoms
 of depression among the dental
 undergraduates ,Karachi,Pakistan. Int Dent
 Med J Adv Res 2018;4:175-178

- Thumati P1, Sutter B, Kerstein RB,
 Yiannios, N and Radke, J. Changes in the
 Beck Depression Inventory II Scores of
 TMD Subjects after Measured Occlusal
 Treatment. J Adv Dent Tech 2018;1;1.
- Ozkurt-Kayahan Z, Cabbar F, Ozcakir-Tomruk C, Dolekoglu S. Evaluation of depression levels of dental students.
 Biomed Res 2017:28:7
- 4. Inam BN, Saqib A, Alam E. Prevalence of anxiety and depression among medical students of private university. J Pak Med Assoc 2003; 53: 44-47.
- 5. Newbury BD, Lowry RJ, Kamali F. The changing patterns of drinking, illicit drug use, stress, anxiety, and depression in dental students in a UK dental school: a longitudinal study. British Dent J 2002; 192: 646-649.
- 6. Atalayin C, Balkis M, Tezel H, Onal B, Kayrak G. The prevalence and consequences of burnout on a group of preclinical dental students. Eur J Dent 2015; 9: 356-363
- 7. Peker I, Alkurt MT, Usta MG, Turkbay T. The evaluation of perceived sources of stress and stress levels among Turkish dental students. Int Dent J 2009; 59: 103-111
- 8. Uraz A, Tocak YS, Yozgatligil C, Cetiner S, Bal B. Psychological well-being, health, and stress sources in Turkish dental students. J Dent Educ 2013; 77: 1345-1355.
- 9. Takayama Y, Miura E, Miura K, Ono S, Ohkubo C. Condition of depressive

symptoms among Japanese dental students. Odontology 2011; 99: 179-187.

10. . Bostanci M, Ozdel O, Oguzhanoglu NK, Ozdel L, Ergin A, Ergin N, Atesci F, Karadag F. Depressive symptomatology among university students in Denizli, Turkey: prevalence and sociodemographic correlates. Croat Med J 2005; 46: 96-1