

Stress among Clinical Dental Students in a Private Dental College in Jeddah

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ABSTRACT

Introduction: Environment in many dental colleges is highly competitive and stressful. Stress of students has two main factors personality-oriented and work/study-oriented.

Aim: To assess the factors responsible for stress among the dental students in a private dental college.

Materials and Methods: The cross-sectional study population included the students of dentistry program who were from fourth year to sixth year which are clinical years and students spend most of their time in the dental clinic. To investigate relevance and influence of the factors on stress experienced by students in the clinical years, a questionnaire was designed. The questionnaire has been tested for its validity and reliability based on a pilot study and pre-survey discussions with peers in the college. The association of the responses of the students to

factors associated with stress was calculated using chi-square test. The data were analysed using Statistical Package for Social Sciences (SPSS) version 23.0.

Results: The responses of the students have been analysed, 64% of the students do feel that they are stressed during exams. A 52% students strongly agreed that the amount of work assigned was more. A 22% students agree that they lack the confidence of being a successful dental student. More than half of the students (71%) have lack of time for relaxation. The p-value of <0.05 was considered as statistically significant.

Conclusion: This is an important study as dental students of Jeddah, are under tremendous amount of stress which is due to their own personality traits or created by environment.

Keywords: Competitive, Dentistry program, Stressful, Questionnaire

INTRODUCTION

Dental curriculum has varied domains of learning which includes skills in knowledge, cognition, interpersonal skills and psychomotor skills [1,2]. Dental students are subjected to undue stress if they don't have a healthy environment in the dental institution, if they lack confidence in themselves, lack of faith in faculty, facilities available such as laboratories, clinics, library, attached hospital and so on Stress can result in physical and psychological distress, which affect the performance of the students, causing anxiety, depression, phobia, fear, tension dizziness, fatigue etc., [3]. Stress may be caused due to the discrepancy between the demands of the dental curriculum and the capacity of the students to fulfill all the requirements to complete the program and get the dental degree [4]. The author perceives from the literature review that the students don't set goals to complete the requirements of the program and if they have set clear goals, they do not monitor task completion as per the allotted time [5].

Thus the objective of the present study is to assess the factors responsible for stress among the dental students in a private dental college.

MATERIALS AND METHODS

The Dentistry curriculum in Saudi Arabia is for seven years inclusive of one year of internship. This cross-sectional study included the students of dentistry program from fourth year to sixth year, age 19 to 25 years and was conducted in March 2018. Ethical approval was granted for the study from the Ethical Committee of Ibn Sina National College for Medical Studies. All the students from 4th to 6th year registered to Dentistry program, available on the day of questionnaire distribution were included in the study. Consent was taken from all the participants and it was informed that confidentiality of the data would be maintained.

The questionnaire has been tested for its validity and reliability based on a pilot study and pre-survey discussions with peers in the institution. The questionnaire was translated into Arabic for pilot

and the main study. It has been validated by a pilot study that was conducted on a sample of 30 students. The linguistic validity was assessed as content validity and all the questions included in the questionnaire have yielded a positive value from all the reviewers. The cronbach alpha value for the validity of the questionnaire was 0.8. The questionnaire was distributed to the students in their break time so that they could get sufficient time to fill the questionnaire. The questionnaire was collected back from the students in the form of a hard copy.

A 40 item questionnaire was prepared from the various factors causing stress among students, from the literature review and was used to collect data for the study [1-4]. All the students from 4th to 6th year students in the institute were the inclusion for the study. All the preclinical year students and the students of other programs like medicine, pharmacy and nursing were the exclusion for the study. The questionnaire contained questions that throw light on factors to investigate the relevance and influence on stress experienced by students in the clinical years. The author observed and included all the points described below that the students in the clinical years feel stress.

The questionnaire included reasons of stress being the students inability to complete the assignments regularly within the time allocated, competition with peers, fear of failing a course or the year, difficulty in understanding lectures, lack of confidence to be the successful dental student, language barrier with the patients, lack of time for relaxation, rules and regulations set by the faculty, unapproachability of the teaching staff, inability to catch up if getting behind work, lack of confidence to be a successful dentist, financial resources, personal problems, language barrier with teaching staff, difficulty in understanding literature, working on patients with dirty mouths and fear of getting infectious diseases, lack of cooperation from patients, lack of confidence in clinical decision making, difficulty in learning clinical procedures, availability of supervisors, lab technicians, lack of calibration among staff and inconsistency of feedback regarding work, responsibility to do a comprehensive patient care, difficult cases for the clinical exam and having a fully

loaded day.

This study was conducted on the students attending the clinical years of study in the Dentistry program, Ibn Sina National College. There were 300 questionnaires distributed to the students in clinical years. The total sample of students who participated in the survey was 273. The power of study was considered to be 80%.

STATISTICAL ANALYSIS

The data were analysed using SPSS (statistical package for social sciences) version 23.0. The association of the responses of the students to factors associated with stress was calculated using chi-square test and p-value <0.05 was considered statistically significant.

RESULTS

The mean age of the participants was 22 years. The gender and academic year distribution of the participants has been explained in [Table/Fig-1].

The responses of the students have been collected and analysed using the chi-square test and the results have been discussed below. The factors that have statistically been proved significant after applying chi-square test in which the p-value was <0.05 have been star marked in [Table/Fig-2,3]. As summarised in

Academic year		Male	Female	Total
4 th year	Number	35	80	115
	Percentage	30.4%	69.6%	100.0%
5 th year	Number	39	45	84
	Percentage	46.4%	53.6%	100.0%
6 th year	Number	17	57	74
	Percentage	23.0%	77.0%	100.0%
Total	Number	91	182	273
	Percentage	33.3%	66.7%	100.0%

[Table/Fig-1]: The mean of gender and academic year distribution of the participants.

[Table/Fig-2,3], majority of the students that is nearly 90% have a feeling that the amount of work assigned to them is more. A 54% of the students feel the competition with peers for getting good grades.

Almost 80% of the students are finding difficulty in understanding the lectures and 12% students strongly agree that they lack the confidence of being a successful dentist.

More than half of the students have lack of time for relaxation (71%). An amount of 27% of the students strongly agree that they have a fear of failing a course or the year. Nearly 50% of the students agree that they

	Strongly agree n (%)	Agree n (%)	True sometimes n (%)	Disagree n (%)	Strongly disagree n (%)	p-value after chi-square test
1.	I feel that the amount of assigned work is more					0.237
4 th year BDS	54 (47.0%)	32 (27.8%)	16 (13.9%)	11 (9.6%)	2 (1.7%)	
5 th year BDS	48 (57.1%)	17 (20.2%)	13 (15.5%)	5 (6.0%)	1 (1.2%)	
6 th year BDS	40 (54.1%)	15 (20.3%)	5 (6.8%)	8 (10.8%)	6 (8.1%)	
Total	142 (52.0%)	64 (23.4%)	34 (12.5%)	24 (8.8%)	9 (3.3%)	
2.	I feel the competition with peers for getting good grades					0.096
4 th year BDS	22 (19.1%)	36 (31.3%)	35 (30.4%)	16 (13.9%)	6 (5.2%)	
5 th year BDS	27 (32.1%)	23 (27.4%)	18 (21.4%)	9 (10.7%)	7 (8.3%)	
6 th year BDS	12 (16.2%)	28 (37.8%)	17 (23.0%)	13 (17.6%)	4 (5.4%)	
Total	61 (22.3%)	87 (31.9%)	70 (25.6%)	38 (13.9%)	17 (6.2%)	
3.	I feel stressed during examinations*					0.019
4 th year BDS	71 (61.7%)	24 (20.9%)	10 (8.7%)	8 (7.0%)	2 (1.7%)	
5 th year BDS	66 (78.6%)	6 (7.1%)	7 (8.3%)	3 (3.6%)	2 (2.4%)	
6 th year BDS	38 (51.4%)	19 (25.7%)	8 (10.8%)	4 (5.4%)	5 (6.8%)	
Total	175 (64.1%)	49 (17.9%)	25 (9.2%)	15 (5.5%)	9 (3.3%)	
4.	I have difficulty in understanding lectures					0.663
4 th year BDS	10 (8.7%)	29 (25.2%)	55 (47.8%)	19 (16.5%)	2 (1.7%)	
5 th year BDS	10 (11.9%)	21 (25.0%)	36 (42.9%)	13 (15.5%)	4 (4.8%)	
6 th year BDS	5 (6.8%)	20 (27.0%)	28 (37.8%)	18 (24.3%)	3 (4.1%)	
Total	25 (9.2%)	70 (25.6%)	119 (43.6%)	50 (18.3%)	9 (3.3%)	
5.	I have lack of confidence to be a successful dental student					0.652
4 th year BDS	17 (14.8%)	12 (10.4%)	20 (17.4%)	31 (27.0%)	35 (30.4%)	
5 th year BDS	9 (10.7%)	12 (14.3%)	21 (25.0%)	18 (21.4%)	24 (28.6%)	
6 th year BDS	8 (10.8%)	6 (8.1%)	12 (16.2%)	22 (29.7%)	26 (35.1%)	
Total	34 (12.5%)	30 (11.0%)	53 (19.4%)	71 (26.0%)	85 (31.1%)	
6.	Having lack of confidence to be a successful dentist					0.419
4 th year BDS	16 (13.9%)	11 (9.6%)	20 (17.4%)	39 (33.9%)	29 (25.2%)	
5 th year BDS	7 (8.3%)	7 (8.3%)	15 (17.9%)	21 (25.0%)	34 (40.5%)	
6 th year BDS	5 (6.8%)	7 (9.5%)	13 (17.6%)	21 (28.4%)	28 (37.8%)	
Total	28(10.3%)	25 (9.2%)	48 (17.6%)	81 (29.7%)	91 (33.3%)	
7.	Having lack of time for relaxation					0.170
4 th year BDS	50 (43.5%)	27 (23.5%)	26 (22.6%)	7 (6.1%)	5 (4.3%)	
5 th year BDS	50 (59.5%)	17 (20.2%)	7 (8.3%)	5 (6.0%)	5 (6.0%)	
6 th year BDS	33 (44.6%)	17 (23.0%)	11 (14.9%)	8 (10.8%)	5 (6.8%)	
Total	133 (48.7%)	61 (22.3%)	44 (16.1%)	20 (7.3%)	15 (5.5%)	

8.	I have a fear of failing a course or the year					0.079
4 th year BDS	31 (27.2%)	17 (14.9%)	40 (35.1%)	14 (12.3%)	12 (10.5%)	
5 th year BDS	27 (32.1%)	21 (25.0%)	22 (26.2%)	8 (9.5%)	6 (7.1%)	
6 th year BDS	14 (18.9%)	9 (12.2%)	27 (36.5%)	10 (13.5%)	14 (18.9%)	
Total	72 (26.5%)	47 (17.3%)	89 (32.7%)	32 (11.8%)	32 (11.8%)	
9.	The rules and regulations of the faculty are difficult*					0.006
4 th year BDS	32 (27.8%)	35 (30.4%)	35 (30.4%)	9 (7.8%)	4 (3.5%)	
5 th year BDS	50 (59.5%)	16 (19.0%)	13 (15.5%)	4 (4.8%)	1 (1.2%)	
6 th year BDS	28 (37.8%)	21 (28.4%)	17 (23.0%)	5 (6.8%)	3 (4.1%)	
Total	110 (40.3%)	72 (26.4%)	65 (23.8%)	18 (6.6%)	8 (2.9%)	
10.	I fear of not having possibility to pursue a postgraduate program					0.272
4 th year BDS	28 (24.3%)	25 (21.7%)	35 (30.4%)	17 (14.8%)	10 (8.7%)	
5 th year BDS	20 (23.8%)	19 (22.6%)	23 (27.4%)	15 (17.9%)	7 (8.3%)	
6 th year BDS	19 (25.7%)	17 (23.0%)	18 (24.3%)	13 (17.6%)	7 (9.5%)	
Total	67 (24.5%)	61 (22.3%)	76 (27.8%)	45 (16.5%)	24 (8.8%)	
11.	Un approachability of the teaching staff					0.997
4 th year BDS	31 (27.0%)	28 (24.3%)	31 (27.0%)	18 (15.7%)	7 (6.1%)	
5 th year BDS	26 (31.0%)	17 (20.2%)	28 (33.3%)	9 (10.7%)	4 (4.8%)	
6 th year BDS	29 (39.2%)	16 (21.6%)	14 (18.9%)	8 (10.8%)	7 (9.5%)	
Total	86 (31.5%)	61 (22.3%)	73 (26.7%)	35 (12.8%)	18 (6.6%)	
12.	I have fear of being unable to catch up if getting behind with work*					0.003
4 th year BDS	35 (30.4%)	34 (29.6%)	24 (20.9%)	13 (11.3%)	9 (7.8%)	
5 th year BDS	42 (50.0%)	11 (13.1%)	22 (26.2%)	6 (7.1%)	3 (3.6%)	
6 th year BDS	17 (23.0%)	17 (23.0%)	18 (24.3%)	15 (20.3%)	7 (9.5%)	
Total	94 (34.4%)	62 (22.7%)	64 (23.4%)	34 (12.5%)	19 (7.0%)	
13.	I have fear of unemployment after graduation					0.215
4 th year BDS	40 (34.8%)	23 (20.0%)	23 (20.0%)	19 (16.5%)	10 (8.7%)	
5 th year BDS	26 (31.0%)	19 (22.6%)	20 (23.8%)	9 (10.7%)	10 (11.9%)	
6 th year BDS	21 (28.4%)	16 (21.6%)	17 (23.0%)	11 (14.9%)	9 (12.2%)	
Total	87 (31.9%)	58 (21.2%)	60 (22.0%)	39 (14.3%)	29 (10.6%)	
14.	I have difficulty in managing my financial resources					0.934
4 th year BDS	31 (27.0%)	22 (19.1%)	29 (25.2%)	20 (17.4%)	13 (11.3%)	
5 th year BDS	25 (29.8%)	15 (17.9%)	23 (27.4%)	15 (17.9%)	6 (7.1%)	
6 th year BDS	14 (18.9%)	17 (23.0%)	17 (23.0%)	14 (18.9%)	12 (16.2%)	
Total	70 (25.6%)	54 (19.8%)	69 (25.3%)	49 (17.9%)	31 (11.4%)	
15.	My marriage or engagement is postponed because of studies					0.679
4 th year BDS	30 (26.1%)	17 (14.8%)	20 (17.4%)	16 (13.9%)	32 (27.8%)	
5 th year BDS	30(35.7%)	16(19.0%)	11(13.1%)	12(14.3%)	15(17.9%)	
6 th year BDS	16 (21.6%)	13 (17.6%)	14 (18.9%)	13 (17.6%)	18 (24.3%)	
Total	76 (27.8%)	46 (16.8%)	45 (16.5%)	41 (15.0%)	65 (23.8%)	
16.	Necessity to postpone having children					0.540
4 th year BDS	35 (30.4%)	27 (23.5%)	26 (22.6%)	9 (7.8%)	18 (15.7%)	
5 th year BDS	34 (40.5%)	20 (23.8%)	12 (14.3%)	9 (10.7%)	9 (10.7%)	
6 th year BDS	28 (37.8%)	15 (20.3%)	13 (17.6%)	7 (9.5%)	11 (14.9%)	
Total	97 (35.5%)	62 (22.7%)	51 (18.7%)	25 (9.2%)	38 (13.9%)	
17.	Having dual role of wife/mother/father/dental student is difficult					0.754
4 th year BDS	31 (27.0%)	22 (19.1%)	34 (29.6%)	14 (12.2%)	14 (12.2%)	
5 th year BDS	42 (50.0%)	15 (17.9%)	12 (14.3%)	5 (6.0%)	10 (11.9%)	
6 th year BDS	28 (37.8%)	15 (20.3%)	16 (21.6%)	6 (8.1%)	9 (12.2%)	
Total	101 (37.0%)	52 (19.0%)	62 (22.7%)	25 (9.2%)	33 (12.1%)	
18.	My personal physical health is affected					0.074
4 th year BDS	37 (32.2%)	30 (26.1%)	34 (29.6%)	6 (5.2%)	8 (7.0%)	
5 th year BDS	45 (53.6%)	15 (17.9%)	15 (17.9%)	5 (6.0%)	4 (4.8%)	
6 th year BDS	26 (35.1%)	19 (25.7%)	19 (25.7%)	3 (4.1%)	7 (9.5%)	
Total	108 (39.6%)	64 (23.4%)	68 (24.9%)	14 (5.1%)	19 (7.0%)	

19.	Distance and time needed to travel dental college					0.153
4 th year BDS	43 (37.4%)	34 (29.6%)	21 (18.3%)	8 (7.0%)	9 (7.8%)	
5 th year BDS	39 (46.4%)	9 (10.7%)	26 (31.0%)	5 (6.0%)	5 (6.0%)	
6 th year BDS	30 (40.5%)	17 (23.0%)	14 (18.9%)	6 (8.1%)	7 (9.5%)	
Total	112 (41.0%)	60 (22.0%)	61 (22.3%)	19 (7.0%)	21 (7.7%)	
20.	I have language barrier with teaching staff*					0.034
4 th year BDS	20 (17.4%)	23 (20.0%)	41 (35.7%)	15 (13.0%)	16 (13.9%)	
5 th year BDS	20 (23.8%)	18 (21.4%)	19 (22.6%)	18 (21.4%)	9 (10.7%)	
6 th year BDS	13 (17.6%)	14 (18.9%)	18 (24.3%)	8 (10.8%)	21 (28.4%)	
Total	53 (19.4%)	55 (20.1%)	78 (28.6%)	41 (15.0%)	46 (16.8%)	

[Table/Fig-2]: The responses of 4th, 5th and 6th year BDS students on stress from question no.1-20.

21.	I have difficulty in understanding literature					0.510
4 th year BDS	18 (15.7%)	23 (20.0%)	46 (40.0%)	16 (13.9%)	12 (10.4%)	
5 th year BDS	12 (14.3%)	20 (23.8%)	35 (41.7%)	15 (17.9%)	2 (2.4%)	
6 th year BDS	10 (13.5%)	12 (16.2%)	28 (37.8%)	11 (14.9%)	13 (17.6%)	
Total	40 (14.7%)	55 (20.1%)	109 (39.9%)	42 (15.4%)	27 (9.9%)	
22.	Working on patients with dirty mouths					0.087
4 th year BDS	29 (25.2%)	23 (20.0%)	32 (27.8%)	15 (13.0%)	16 (13.9%)	
5 th year BDS	32(38.1%)	14 (16.7%)	20 (23.8%)	11 (13.1%)	7 (8.3%)	
6 th year BDS	16 (21.6%)	16 (21.6%)	12 (16.2%)	15 (20.3%)	15 (20.3%)	
Total	77 (28.2%)	53 (19.4%)	64 (23.4%)	41 (15.0%)	38 (13.9%)	
23.	I have lack of confidence in clinical decision making					0.192
4 th year BDS	19 (16.5%)	14 (12.2%)	44 (38.3%)	26 (22.6%)	12 (10.4%)	
5 th year BDS	12 (14.3%)	13 (15.5%)	31 (36.9%)	17 (20.2%)	10 (11.9%)	
6 th year BDS	8 (10.8%)	8 (10.8%)	22 (29.7%)	21 (28.4%)	15 (20.3%)	
Total	39 (14.3%)	35 (12.8%)	97 (35.5%)	64 (23.4%)	37 (13.6%)	
24.	I have difficulty in completing of clinical requirements					0.098
4 th year BDS	20 (17.4%)	20 (17.4%)	42 (36.5%)	20 (17.4%)	13 (11.3%)	
5 th year BDS	23 (27.4%)	17 (20.2%)	22 (26.2%)	16 (19.0%)	6 (7.1%)	
6 th year BDS	15 (20.3%)	11 (14.9%)	22 (29.7%)	13 (17.6%)	13 (17.6%)	
Total	58 (21.2%)	48 (17.6%)	86 (31.5%)	49 (17.9%)	32 (11.7%)	
25.	I am receiving criticism from staff in clinical work					0.474
4 th year BDS	14 (12.2%)	17 (14.8%)	41 (35.7%)	27 (23.5%)	16 (13.9%)	
5 th year BDS	18 (21.4%)	11 (13.1%)	32 (38.1%)	19 (22.6%)	4 (4.8%)	
6 th year BDS	10 (13.5%)	10 (13.5%)	24 (32.4%)	16 (21.6%)	14 (18.9%)	
Total	42 (15.4%)	38 (13.9%)	97 (35.5%)	62 (22.7%)	34 (12.5%)	
26.	I feel distressed when patients being late or not showing for their appointments					0.388
4 th year BDS	71 (61.7%)	15 (13.0%)	15 (13.0%)	7 (6.1%)	7 (6.1%)	
5 th year BDS	65 (77.4%)	6 (7.1%)	10 (11.9%)	2 (2.4%)	1 (1.2%)	
6 th year BDS	44 (59.5%)	10 (13.5%)	11 (14.9%)	5 (6.8%)	4 (5.4%)	
Total	180 (65.9%)	31 (11.4%)	36 (13.2%)	14 (5.1%)	12 (4.4%)	
27.	I have difficulty in learning clinical procedures					0.255
4 th year BDS	21 (18.3%)	20 (17.4%)	33 (28.7%)	30 (26.1%)	11 (9.6%)	
5 th year BDS	17 (20.2%)	15 (17.9%)	27 (32.1%)	18 (21.4%)	7 (8.3%)	
6 th year BDS	12 (16.2%)	14 (18.9%)	10 (13.5%)	22 (29.7%)	16 (21.6%)	
Total	50 (18.3%)	49 (17.9%)	70 (25.6%)	70 (25.6%)	34 (12.5%)	
28.	I hate the atmosphere created by clinical supervisors					0.316
4 th year BDS	36 (31.3%)	24 (20.9%)	41 (35.7%)	11 (9.6%)	3 (2.6%)	
5 th year BDS	37 (44.0%)	19 (22.6%)	14 (16.7%)	9 (10.7%)	5 (6.0%)	
6 th year BDS	27 (36.5%)	15 (20.3%)	20 (27.0%)	6 (8.1%)	6 (8.1%)	
Total	100 (36.6%)	58 (21.2%)	75 (27.5%)	26 (9.5%)	14 (5.1%)	
29.	There is lack availability of supervisors in clinic					0.071
4 th year BDS	59 (51.3%)	21 (18.3%)	18 (15.7%)	10 (8.7%)	7 (6.1%)	
5 th year BDS	35 (41.7%)	23 (27.4%)	17 (20.2%)	5 (6.0%)	4 (4.8%)	
6 th year BDS	30 (40.5%)	20 (27.0%)	14 (18.9%)	6 (8.1%)	4 (5.4%)	
Total	124 (45.4%)	64 (23.4%)	49 (17.9%)	21 (7.7%)	15 (5.5%)	

30.	I have shortage of allocated clinical time					0.163
4 th year BDS	56 (48.7%)	23 (20.0%)	23 (20.0%)	2 (1.7%)	11 (9.6%)	
5 th year BDS	40 (48.2%)	20 (24.1%)	11 (13.3%)	8 (9.6%)	4 (4.8%)	
6 th year BDS	29 (39.2%)	22 (29.7%)	13 (17.6%)	7 (9.5%)	3 (4.1%)	
Total	125 (46.0%)	65 (23.9%)	47 (17.3%)	17 (6.2%)	18 (6.6%)	
31.	I have language barrier with patients					0.749
4 th year BDS	16 (13.9%)	15 (13.0%)	33 (28.7%)	22 (19.1%)	29 (25.2%)	
5 th year BDS	16 (19.0%)	9 (10.7%)	25 (29.8%)	24 (28.6%)	10 (11.9%)	
6 th year BDS	10 (13.5%)	12 (16.2%)	17 (23.0%)	16 (21.6%)	19 (25.7%)	
Total	42 (15.4%)	36 (13.2%)	75 (27.5%)	62 (22.7%)	58 (21.2%)	
32.	Availability of lab technicians is in shortage					0.105
4 th year BDS	57 (49.6%)	16 (13.9%)	15 (13.0%)	17 (14.8%)	10 (8.7%)	
5 th year BDS	46 (54.8%)	16 (19.0%)	9 (10.7%)	9 (10.7%)	4 (4.8%)	
6 th year BDS	45 (60.8%)	11 (14.9%)	10 (13.5%)	4 (5.4%)	4 (5.4%)	
Total	148 (54.2%)	43 (15.8%)	34 (12.5%)	30 (11.0%)	18 (6.6%)	
33.	Differences in opinion between clinical staff concerning patient treatment					0.288
4 th year BDS	49 (42.6%)	22 (19.1%)	26 (22.6%)	8 (7.0%)	10 (8.7%)	
5 th year BDS	32 (38.1%)	20 (23.8%)	22 (26.2%)	5 (6.0%)	5 (6.0%)	
6 th year BDS	32 (43.2%)	16 (21.6%)	17 (23.0%)	6 (8.1%)	3 (4.1%)	
Total	113 (41.4%)	58 (21.2%)	65 (23.8%)	19 (7.0%)	18 (6.6%)	
34.	Getting an ideal case for clinical examination is difficult					0.516
4 th year BDS	42 (36.5%)	21 (18.3%)	37 (32.2%)	8 (7.0%)	7 (6.1%)	
5 th year BDS	39 (46.4%)	17 (20.2%)	21 (25.0%)	3 (3.6%)	4 (4.8%)	
6 th year BDS	32 (43.2%)	19 (25.7%)	10 (13.5%)	6 (8.1%)	7 (9.5%)	
Total	113 (41.4%)	57 (20.9%)	68 (24.9%)	17 (6.2%)	18 (6.6%)	
35.	I have a fear of facing parents after failure					0.939
4 th year BDS	27 (23.5%)	16 (13.9%)	35 (30.4%)	22 (19.1%)	15 (13.0%)	
5 th year BDS	23 (27.4%)	10 (11.9%)	24 (28.6%)	19 (22.6%)	8 (9.5%)	
6 th year BDS	11 (14.9%)	9 (12.2%)	20 (27.0%)	20 (27.0%)	14 (18.9%)	
Total	61 (22.3%)	35 (12.8%)	79 (28.9%)	61 (22.3%)	37 (13.6%)	
36.	Lack of cooperation by patients in their home care					0.170
4 th year BDS	41 (35.7%)	29 (25.2%)	32 (27.8%)	9 (7.8%)	4 (3.5%)	
5 th year BDS	31 (36.9%)	24 (28.6%)	20 (23.8%)	5 (6.0%)	4 (4.8%)	
6 th year BDS	26 (35.1%)	23 (31.1%)	11 (14.9%)	9 (12.2%)	5 (6.8%)	
Total	98 (35.9%)	76 (27.8%)	63 (23.1%)	23 (8.4%)	13 (4.8%)	
37.	I have a full loaded day*					0.016
4 th year BDS	66 (57.4%)	26 (22.6%)	13 (11.3%)	4 (3.5%)	6 (5.2%)	
5 th year BDS	62 (73.8%)	8 (9.5%)	11 (13.1%)	3 (3.6%)	0 (0.0%)	
6 th year BDS	41 (55.4%)	17 (23.0%)	5 (6.8%)	3 (4.1%)	8 (10.8%)	
Total	169 (61.9%)	51 (18.7%)	29 (10.6%)	10 (3.7%)	14 (5.1%)	
38.	I have more responsibilities for comprehensive patient care					0.525
4 th year BDS	44 (38.3%)	29 (25.2%)	24 (20.9%)	10 (8.7%)	8 (7.0%)	
5 th year BDS	34 (40.5%)	19 (22.6%)	25 (29.8%)	5 (6.0%)	1 (1.2%)	
6 th year BDS	32 (43.2%)	24 (32.4%)	8 (10.8%)	6 (8.1%)	4 (5.4%)	
Total	110 (40.3%)	72 (26.4%)	57 (20.9%)	21 (7.7%)	13 (4.8%)	
39.	I fear of getting infectious diseases					0.556
4 th year BDS	70 (60.9%)	22 (19.1%)	12 (10.4%)	6 (5.2%)	5 (4.3%)	
5 th year BDS	60 (71.4%)	9 (10.7%)	7 (8.3%)	8 (9.5%)	0 (0.0%)	
6 th year BDS	40 (54.1%)	16 (21.6%)	10 (13.5%)	3 (4.1%)	5 (6.8%)	
Total	170 (62.3%)	47 (17.2%)	29 (10.6%)	17 (6.2%)	10 (3.7%)	
40.	Inconsistency of feedback regarding my work					0.128
4 th year BDS	55 (47.8%)	20 (17.4%)	22 (19.1%)	12 (10.4%)	6 (5.2%)	
5 th year BDS	52 (61.9%)	13 (15.5%)	10 (11.9%)	6 (7.1%)	3 (3.6%)	
6 th year BDS	30 (40.5%)	18 (24.3%)	13 (17.6%)	8 (10.8%)	5 (6.8%)	
Total	137 (50.2%)	51 (18.7%)	45 (16.5%)	26 (10%)	14 (10%)	

[Table/Fig-3]: The responses of 4th, 5th and 6th year BDS students on stress from question no. 21-40.

*Variables are statistically significant with p<0.05

have a fear of possibility to pursue a postgraduate program. About 80% of the respondents do feel that the teaching staff are unapproachable.

A total of 46% of the students were having difficulty in managing their financial resources. Nearly, 50% of the students responded that personal issues like engagement, marriage, roles to play as a wife/mother/father/dental student were the possible reasons for stress. A total of 63% of the students responded that health and distance and time needed to travel to the dental college was a cause of stress.

There were 36%, 27% and 39% of the respondents strongly agree and agree that learning clinical procedures, lack of confidence in clinical decision making and difficulty in completing requirements were a cause of stress. Nearly, 65% of the respondents strongly agree, agree and find it true sometimes that criticism from staff was a cause of stress. Lack of availability of the supervisors and not comfortable with the atmosphere created by them in the clinic were a cause of stress as agreed by 69% and 57%, respectively. A total of 46% strongly agree, 23.9% agree, 17.3% say true sometimes, 6.2% disagree and 6.6% strongly disagree that there was a shortage in the allocated clinical time and was a cause of stress. Faculty not being calibrated in their opinion between patient treatment options was a cause of stress as per 62% of the participants. Almost the same 62% also agree that getting an ideal case for the clinical examination was stressful. Nearly 50% of the respondents were unable to face their parents after failure. Patients not showing cooperation in following their home care instructions were a cause of stress which was agreed by 67% of the respondents. A total of 62% strongly agree, that the students have a fully loaded day which was a cause of stress. Responsibility of comprehensive patient care was stressful for 66.7% of the respondents who agree. Many of the respondents feel stressed about acquiring infectious diseases from the patients.

The analysis of the responses from the sample of students in the clinical years shows that the factors that are a cause of stress for them are examinations, rules and regulations laid down by the faculty, fear of being unable to catch up if getting behind with work, language barrier with teaching staff and a fully loaded day.

DISCUSSION

The most prominent factor causing stress among students is "examinations". Stress during the clinical years due to the examination is more because of the practical treatment of patients. The students are stressed as they may not be able to catch up with work. Students should complete their clinical requirements within the allotted time and should be enlightened about the positive effects of completing it on time. This will also take care of the stress caused by examinations [6].

A study by Gorter R et al., discussed that the patients not able to keep up appointments, is a cause of stress to the dental students [6]. Lack of time to relax also is a cause for stress. Added to this language barrier with the patient, understanding lectures, timing of the clinical patients and patient's attitude towards the student and the treatment. These make the day for the students a fully loaded one. The results of the present study are in line with the studies by Fonseca J et al., where increased workload, time constraints and some aspects of clinical training are top stressors [7]. Also, the results of the studies conducted by Rosli TI et al., and Harris RC et al., have the same conclusions where the course requirements completion by the students created stress [8,9]. Social interactions and hobbies may be commonly used coping methods by the students to reduce stress. Workload of a student in the clinical years has consistently been more as the students have to do a comprehensive treatment for the patient by applying their knowledge and the cognitive skills.

The study by Hj Ramli NH is in line with this study where the faculty work and examinations are the main cause of students' academic stress [10]. And students were using self-regulation as a coping

mechanism to overcome the stress. Rules and regulations can be set placing the focus of the student for learning while certain rules and regulation including enforcing discipline are absolutely essential for maintenance and progress of students. A constant review is necessary to evaluate the stress caused to the students through the regulations. However, no compromise has to be made on overall interest and progress of students and the Institution.

The language of communication between the staff and the student is same as the medium of instruction in the institution. The students need to be made aware that strengthening their language skills right from the beginning will help them to break the barrier of language with the teaching staff. Al-Sowygh ZH, in his study also have found that language is a barrier and could have been a cause of stress [11]. The reason may be attributed to the fact that English is the second language, thus it is suggested to strengthen their English language. Understanding literature will also be easy for the students which will help them subsequently to reduce stress during examinations.

Faculty have a tendency to impart lot of knowledge in the shortest possible time. In their endeavour to ensure this, assignments and works are given to the students which becomes strenuous. A similar finding was found in the study by Al-Samadani KH and Al-Dharrab A, where the students of mainly the fifth year were unable to complete the assignments given to them by the faculty [3]. A study by Kossioni AE et al., the students gave negative statements on teachers for not giving a good feedback and this may be attributed to the traditional system of assessment, where feedback to the students is not given at all on steps of their working [12]. Although the assessment system used by the Institute of the current study does not involve giving a feedback to the students during all the steps. However, there needs to be a proper orientation of the students to make them aware of the assessment methods by the staff.

The dental educational system in Ibn Sina National College for Medical Studies, Jeddah, Makkah, Saudi Arabia, is for seven years including the one year of internship. Wherein the first year is an initial preparatory year. The first two years include the basic sciences in medicine and dentistry. The third year students are exposed to the clinical environment and the fourth and fifth and sixth years are mainly clinically oriented, which is followed by a 1 year of rotatory internship for exposure and practice [11]. The fourth and the sixth year students have a greater fear of failing in exams, as found in this study. The study by Al-Samadani KH and Al-Dharrab A, and Kumar S et al., also are in line with current study with a special focus on the fourth year students having stress of failing in their exams [3,13]. Fourth year students are getting exposed to the clinics and treating patients and this could be a primary factor related to stress. The sixth year students have more stress as they have to complete all the courses to move into the Internship.

A noteworthy finding by Harris RC et al., was that the students, in spite of high levels of stress, do not use the counselling services in the Institute readily available for them for help [9]. This could also be an explanation given to the respondents in the current study. The authors suggest coping mechanisms for reducing stress among students by having a clarity of goal, increase in self-confidence, interest towards the dentistry, improvement in knowledge and skills and improving the coordination between available time and task completion.

Limitation(s)

The study did not explore the various coping mechanisms that the dental students may have utilised when under stress.

CONCLUSION(S)

The dental students of Ibn Sina National College for Medical Studies Jeddah, have stress due to the clinical work during their graduation days. The factors that cause stress among the students in the present study are examinations, the rules and regulations of the

faculty, fear of being unable to catch up with work, language barrier with teaching staff and a fully loaded day. It is recommended that further studies may be conducted in exploring the various coping mechanisms that the students may utilise to reduce stress.

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