

Psychological Stress among Dental Students at Al-Iraqia University after Corona Virus Pandemic

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Abstract

Aim of the Study: Among undergraduate dental students at Al-Iraqia University after “Covid-19” pandemic, this study was done in order to evaluate the amount of psychological stress between them.

Materials and Method: By the use of the General Health Questionnaire (GHQ-12), Psychological stress was evaluated among (305) students who asked to fill completely the supplied questionnaires.

Results: The highest level (22.3%) was found at the 1st stage, and generally among female higher than male, (60.9%) scored more than 3 on the (GHQ- 12) vs. (38.8%) for male, at p=0.05 which was considered to be statistically significant.

Conclusion: Despite the changes in the curriculum and the gradual increase in the number of students. The different sources of stress from the year 2020 were mostly unaltered in our study. To minimize stress among dental students during certain conditions further studies is needed.

Keywords: “Covid-19”, Stress, Dental Students.

Introduction

One of the most stressful health professions was Dentistry ⁽¹⁻⁵⁾. Since the survey of Kay and Lowe, in the United Kingdom among the dental practitioners, observed that this risky demanding profession and continually dentists appear to be pleased as participants of profession companies ⁽⁶⁾.

From all over the world, the subject of interest for most searchers was the stress among this group of students in this field ⁽⁷⁻²⁰⁾, which was considered to be a higher level if compared with medical students, even

they might also have a little bit psychiatric signs which may also lead to consider them psychiatrically sick and may also be in some cases the want for psychiatric remedy is indicated ⁽²⁰⁾. This occupation because of its stress may negatively affect their performance ^(21,22), this relation was found by Sanders and Lushington ⁽²³⁾.

In our college the machine of find out about for undergraduate is a dental regimen of 5 years. The (first and second years) were the preclinical while the mainly preclinical is the (third year) otherwise the (fourth and fifth years) the performance of the clinical portion of our study. It was supposed that anxiety because of the “Covid-19” was experienced in about 24.9% of college students ⁽²⁴⁾.

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Aim of the study: The purpose of this study was to determine the stress in undergraduate dental students at Al-Iraqia University, during 1st peak of “Covid-19” pandemic the level of stress among dental students. In addition, we also liked to locate if gender and stages has effect on the results of this study.

Materials and Method

All undergraduate (460) college students at our dental university enrolled at Al-Iraqia University at some point of the educational year 2019–2020 and after 6 months of pandemic attack of “Covid-19”. Our college students had been contacted electronically via this method, and the questionnaires had been stuffed and return to us except extend on line with the aid of the usage of Google sorts and documents had been gathered by way of sheet sorts immediately.

In this article, one of the questions was about the first choice of the student that he prefers whether medicine or dentistry, the first question asked for students’ demographic data, age, sex. (GHQ-12) represent the questionnaires which was delivered to the students (General Heath Questioner) and the administration had been well-known by means of the dean’s place of business of our dental college.

In the beginning it was explained to the students the aim of this study, and they realized that participation was voluntary, nameless, and with illustrative pictures. Not more than 10 minutes was required to fill these questioners, students at virtual classes were all invited to participate. It was all in English Language. This questioner will measure psychological distress (25). in number of studies Its reliability and validity have been proven (26). An enlarge in psychological distress as evaluated from first- to fifth-year university college students (27).

It is a twelve-item questionnaire, with 5 solutions to each question. The man or woman is requested to think about the ultimate two months in answering the questions. “Have you felt constantly under stress?” and “Have you been losing confidence in yourself?” are Examples of these questions .The present solutions are

no greater than usual. The scoring strategies have been used for the (GHQ-12), yielding a specific (high vs. low stress) result variable.

The (GHQ-12) was first scored using the 1-5 scoring method as in the investigation by Guthrie et al (28). A rating of 1 means two low stress objects and a rating of 5 means two excessive stress objects from the 5 feasible solutions. The whole for the twelve questions was once then calculated when the scoring technique is used. It has a clear crossing factor of extra than three, and individuals who were more than score 3, are considered to have an evidence of psychological stress . The crossing element of increased than three used to be arrived at with the useful resource of Guthrie et al (29).

We reached a whole score by scoring the responses and summing it. The imply rating for the questioner was once then calculated.

Results

This descriptive study had been applied in Al-Iraqia University of dentistry with about 305 college students from university had been participated in this on-line types questioners to give an explanation for the relation between the stress occurs during education with of undergraduate student in the duration of “Covid-19” pandemic (Table 2).

Frequency distribution means, and standard deviation had been calculated for the (GHQ-12). The arrangement of the questionnaires depends on (Cronbach’s alpha). Chi square test of independence had been utilized to test the association between demographic and questions asked. P-value < 0.05 considered statistically significant.

This table describes the stress and the variation of it according to the gender male and female (table1).

Table 1: The frequency and percentage of stress according to the student gender.

Stress * Gender Crosstabulation					
			Gender		Total
			Male	Female	
Stress	No stress	Count	60	81	141
		% within Gender	61.2%	39.1%	46.2%
	Stress	Count	38	126	164
		% within Gender	38.8%	60.9%	53.8%
Total	Count		98	207	305
	% within Gender		100.0%	100.0%	100.0%

This table shows the stages, frequency and percentage of the college students had been take parts in the questioners (table 2).

Table 2: Stages, frequency and percentage of the college students had been take parts in the questioners

Class stage		
Class stage	Frequency	Percent
1st	68	22.3
2nd	56	18.4
3rd	57	18.7
4th	66	21.6
5th	58	19.0
Total	305	100.0

Chi square test had been applied in this research to explain the different education stages of the college under stress at the “Covid-19” pandemic (Table 3).

Table 3: Chi square test which represent the student with different education stages under stress.

Stage (Class)	Students are under stress												
	Very low		Low		Medium		High		Very high		Total		
	N	%	n	%	n	%	n	%	n	%	n	%	
1 st	0	0.00%	1	4.30%	12	15.20%	18	29.50%	37	29.60%	68	22.30%	
2 nd	6	31.60%	10	47.60%	24	30.40%	7	11.50%	9	7.20%	56	18.40%	
3 rd	10	52.60%	4	19.00%	29	36.70%	9	14.80%	5	4.00%	57	18.70%	
4 th	3	15.80%	5	23.80%	6	7.60%	16	26.20%	36	28.80%	66	21.60%	
5 th	0	0.00%	3	4.80%	8	10.10%	11	18.00%	38	30.40%	58	19.00%	
Total	19	100.00%	23	100.00%	79	100.00%	61	100.00%	125	100.00%	305	100.00%	
Chi square test		P- value						0.001 ***					

Discussion

This descriptive research had been done in the 1st peak of “Covid -19” with undergraduate dental students from Al-Iraqia University, this research has been taken apart with different 5 stages to explain the level of stress which effect the undergraduate students at the period of the pandemic.

This research have been done with the aid of Google forms and then these forms had been sent to the students by an email due to the spread of viral infection and to reduce face to face contact so depend on social media in filling the questioners via all participated undergraduate students³⁰, these questioners had been answered by a 305 undergraduate students whom seems to be at different stages 98 students were male in the collage and 207 were female, and the result indicated that the female greater stressed than male 60.9% during this period of

the infection (figure 1) the variation of the study may additionally be associated to the truth that female had been more in all likelihood than male in responding to emotional stress³¹.

The effect of this investigation had been confirmed that the peak of stress level which was measured via Chi square test used to be related to the first year 22.3% (fig 3) whilst the lowest level of stress value used to be related to the second year 18.4%, in the meantime the third year stress level represent 18.7% and the fourth year stress level in about 21% whilst the fifth year which consider the last year for undergraduate student in dentistry collage were 19% .Several studies indicated agreement with this research which had been discovered that the first year student had been regarded the highest level of stress for which may additionally be related to the young age of this stage which had been extremely great relation with the emotional exhaustion ^{32,33}, moreover the first

year students might also observed the new study topics vary from the secondary school studies topics, course clinical necessities, full schedule and lack of time for interest or leisure all of these reasons would possibly be lead to elevate the level of stress on first year students³⁴.

This study had been located that the other highly level of stress had been observed at the fourth stage, whilst the second and the third stage had been sort of steady. The high level of stress at fourth stage might also be due to the transition from preclinical stages to clinical stages and the close contact to actual patient instead of manikin as in the previous stages^{35,36}.

the Variations between stages in the level of stress can also moreover affected with the unique education method of the lecturers and the new approach they have been observed in talk about the concern with the student and the approach they relay to reduce the confusion and stress on the student³⁷.

Whilst, the result of this study had been indicated disagreement with Gorter et al which found that the Fifth year students had been relatively high stress level when compared with first year and this may also be explained to that the dental education at the final level had been focused on the clinical works extra more than the other educational years³⁸,

Conclusion

As a result of this study, there is a strong relationship between stresses during dental study (online) and "Covid-19", also this stress differs from stage to stage, ranging from high stress at 1st stage to lowest at 2nd stage.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both MOH and MOHSER in Iraq

Conflict of Interest: Non

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