



Beyond the First Wave: Consequences of COVID-19 Lockdown on Dental Students' Mental Health

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Introduction

- On March 11, 2020, the World Health Organization (WHO) declared COVID-19 as an international pandemic, number of cases increased across all the continents with a large number of deaths.⁽¹⁾
- In Palestine, a quick surge in the number of COVID-19 cases was observed during the first period of the pandemic.⁽²⁾
- Lockdown of distinctive degrees was the foremost common hone in numerous nations as it was accessible way to contain the episode in its starting.⁽³⁾
- Earlier investigation revealed a broad range of profound psychosocial impacts during outbreaks of infection on people at individual, community, and international levels.⁽⁴⁾
- Dentist and dental students in their clinical preparing confront higher chance of contracting diseases as well as experiencing adverse psychological outcomes in the form of burnout, anxiety, fear of transmitting infection, feeling of incompatibility, depression, increased substance dependence, and PTSD⁽⁵⁾
- Uncertainty about what would happen next in their clinical training, their exams and e-learning (online education) left homebound Palestinian dental students feeling helpless and confused about their educational outcomes.

What makes this research unique?

- As part of the first closure, Al-Quds University (AQU) in East Jerusalem, one of the two only dental schools in Palestine stopped physical attendance and switched to totally online theoretical courses; this study is the first research of its kind in Palestine evaluated the impact of COVID-19, online teaching and the lockdown on the mental health of dental students.

Aims and Objectives

This study assessed levels of: Depression, anxiety and stress • Among dental students during the pandemic using the standardized DASS-21 scale.⁽⁶⁾

Materials and methods

- An online questionnaire survey was distributed in the period between March, 28 - April, 10, 2020.
- The collected data was about several aspects of participants' including:
 - The first section of the questionnaire consisted of questions about:
 - Sociodemographic and academic performance.
 - Students' sources of information about COVID-19.
 - Students' e-learning hours and challenges faced in the e-learning process.
 - The second section

Included the validated DASS-21 in Arabic (Depression, Anxiety, Stress) scale⁽⁷⁾

DASS-21 scale has shown acceptable reliability and validity in the Arabic version, the language used in the current survey.⁽⁸⁾

Scales	Entire scale	Subscale		
		Depression	Anxiety	Stress
Cronbach's alpha	0.884	0.84	0.8	0.88

- Subscales' scores were multiplied by 2.

- Scores range between 0 and 42; higher scores indicate higher levels of these conditions.

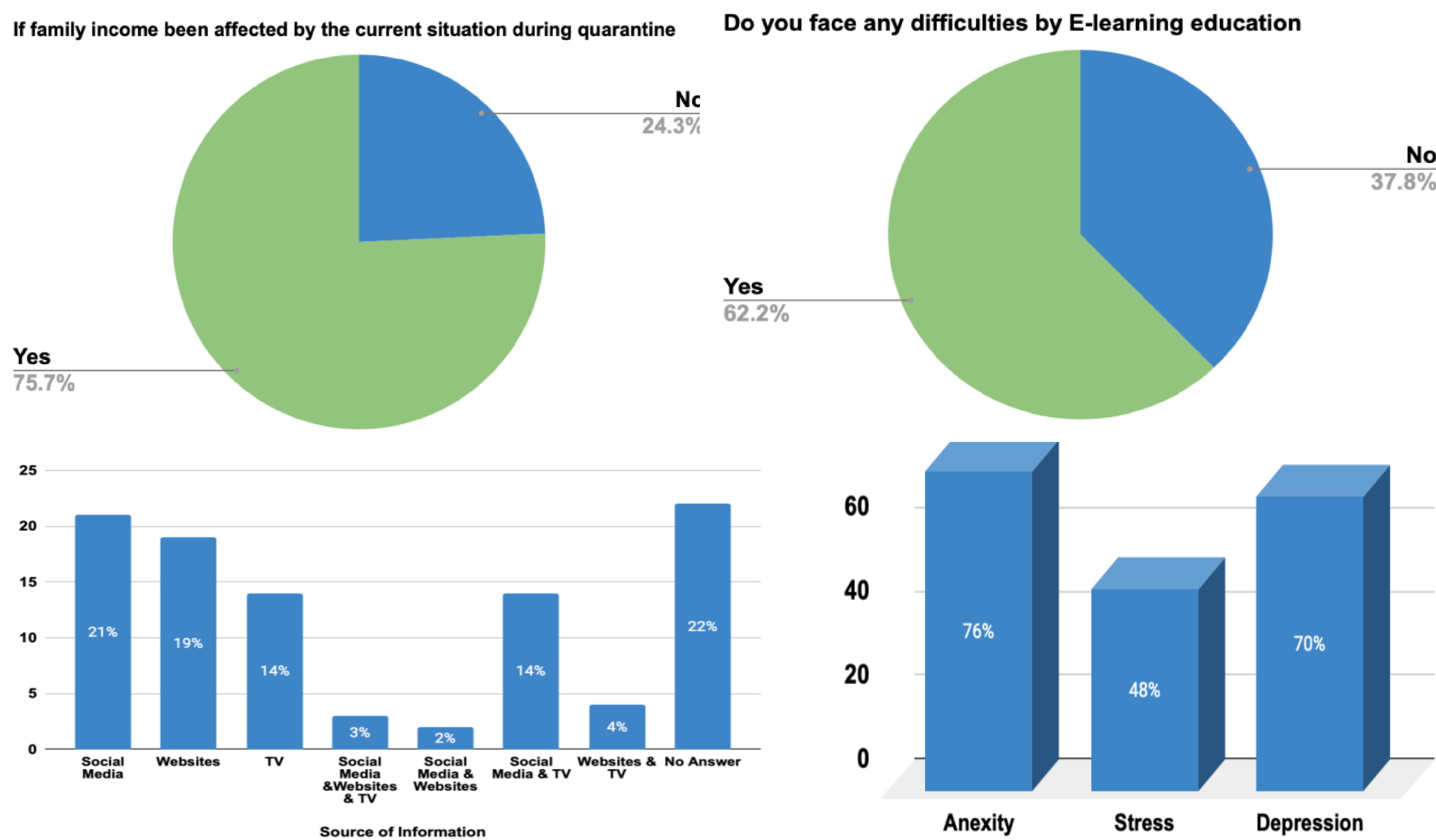
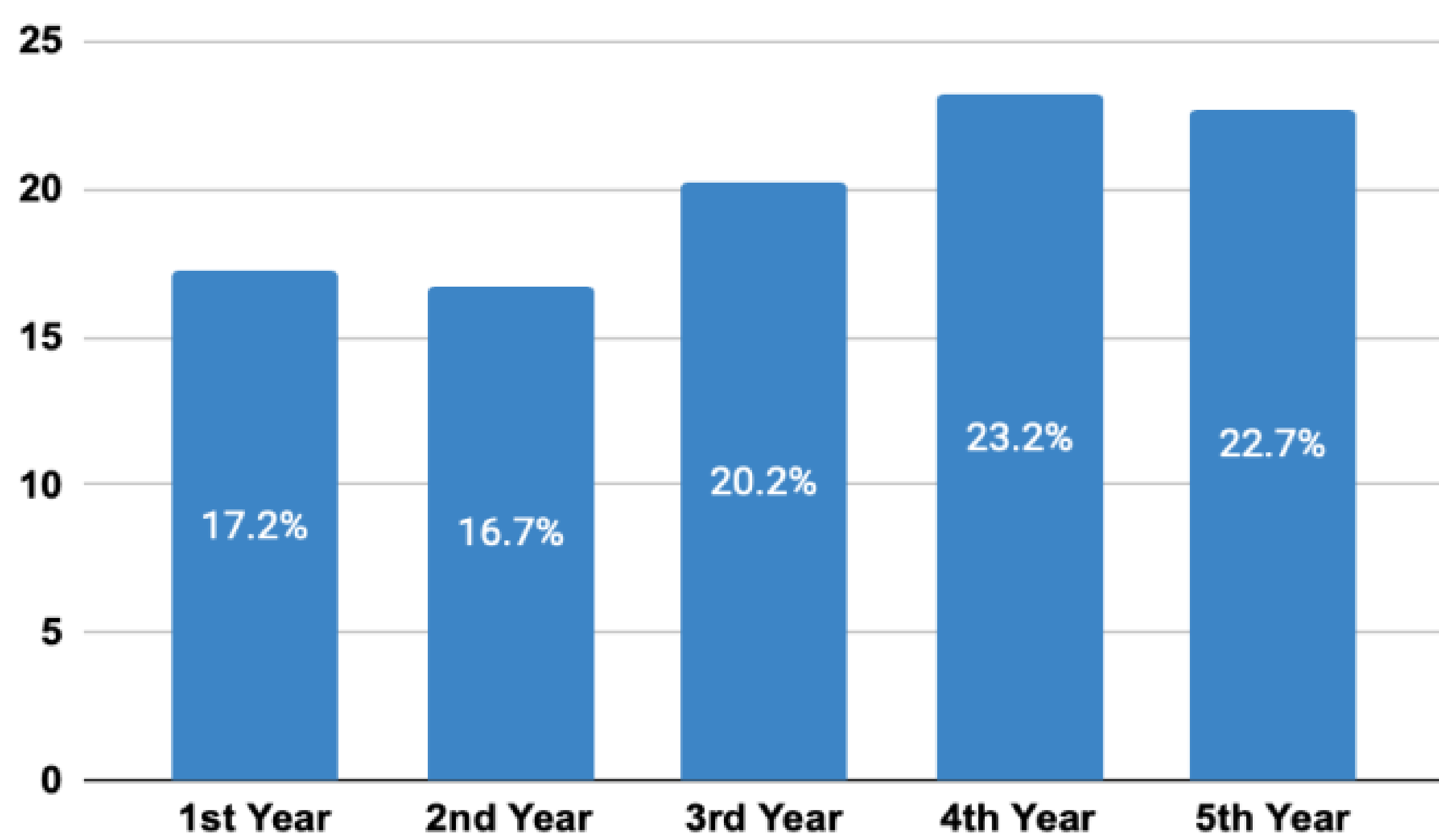
- Scores for each subscale were then categorized ranging from normal, mild, moderate, severe and extremely severe according to cut points suggested by Lovibond & Lovibond.⁽⁹⁾

- Bivariable associations were investigated among study variables Pearson Chi-square and T-test.

Significance level was set to 0.05.

Results

- Univariate Results:
A total of 436 students completed the survey (55.18% response rate).



The severity levels of the three conditions in frequencies and percentages

Score	Normal	Mild	Moderate	Severe	Extremely Severe
Depression	(131) 30%	(67) 15.4%	(106) 24.3%	(69) 15.8%	(63) 14.4%
Anxiety	(105) 24.1%	(26) 6%	(91) 20.9%	(55) 12.6 %	(159) 36.5%
Stress	(227) 52.1%	(30) 15.1%	(60) 13.8%	(83) 19%	(0) 0%

Bivariable Results:

- Dental students who stated that their family income was impacted by COVID-19 showed signs of depression, $X^2=7.3$, $p=.007$, and anxiety, $X^2=6.1$, $p=.013$
- Dental students who faced difficulties in switching to e-learning reported different levels of depression, $X^2=14$, $p<.001$; anxiety, $X^2=9$, $p=.003$; and stress, $X^2=24$, $p<.001$
- Students who rated their academic performance better had less stress, $X^2=11.5$, $p=0.003$; less anxiety, $X^2=7.6$, $p=0.023$; and less depression, $X^2=7.1$, $p=0.029$.
- Students followed updated news about COVID-19 had less Anxiety, $t=2.58$, $p=0.031$ and less depression $t=2.6$, $p=0.031$.
- Students who rated their academic performance better had less stress, $X^2=11.5$, $p=0.003$; less anxiety, $X^2=7.6$, $p=0.023$; and less depression, $X^2=7.1$, $p=0.029$.
- Students who followed updated news about COVID-19 had less Anxiety, $t=-2.58$, $p=0.031$ and less Depression $t=-2.6$, $p=0.031$.

Discussion

- Most students in this sample showed some level of depression, anxiety and to a lesser extent stress.

- Half of the dental students in this sample had "Severe" or "Extremely Severe" anxiety and one third had "Severe" or "Extremely Severe" depression. First study conducted through the lockdown and assessed the mental health of the dental students at AQU

- Studies conducted among students and health workers in a university setting in Spain and in Istanbul University (similar settings), During COVID-19 pandemic Using the same tool DASS-21, showed prevalence of three conditions were less than the current study.⁽¹⁰⁾

Conclusion

- The major stressors of the COVID-19 lockdown were evident in this study:
 - ✓ financial impact of the lockdown
 - ✓ Switching to online learning.
 - ✓ The unfiltered information broadcast by the news media and social media.

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