

## Research Article

# Perceived Stress and its Sources among Undergraduate Dental Students of Private Dental College of Lahore

Sadaf Gull<sup>1</sup>, Hafiza Sara Adrees<sup>2</sup>, Amina Tariq<sup>3\*</sup>, Faisal Mumtaz Chahal<sup>4</sup>, Hira Mumtaz<sup>5</sup>

<sup>1,2</sup>Faryal Dental College, Sheikhpura Lahore, Punjab, Pakistan

<sup>3</sup>Corresponding Author, University college of Medicine and Dentistry, University of Lahore Pakistan

<sup>4</sup>Department of Psychology, Lahore Garrison University, Lahore Pakistan

<sup>5</sup>Department of Psychology, Riphah International University, Islamabad Pakistan

### \*Corresponding Author

Amina Tariq

Article History: | Received: 04.02.2020 | Accepted: 22.02.2020 | Published: 28.02.2020 |

**Abstract:** This study aimed to assess the perceived stress as well as the sources of stress among undergraduate dental students of private dental college of Lahore. Data of cross-sectional research was collected from 100 dental students using convenient sampling. The results of One-way ANOVA revealed significant differences between gender and Perceived stressors among dental students in terms of Self-efficacy beliefs ( $P=0.027$ ), Faculty and administration ( $P=0.01$ ), Workload ( $P=.002$ ), Patient Treatment ( $P=.001$ ), Clinical training ( $P=.001$ ), and Performance Pressure ( $P=.011$ ), whereas Social Stressors difference was found insignificant among both genders ( $P=.20$ ). In conclusion, higher level of stress caused by stressors in terms of Self-efficacy beliefs, Faculty and administration, Workload, Patient Treatment, Clinical training, and Performance Pressure are found more in female dental students as compared to male dental students.

**Keywords:** Dental students, Workload, Performance pressure, Stress.

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## INTRODUCTION

Stress is the reaction of body towards any change in situation or environment, involves any response at physical, emotional or mental level which could be positive, inspiring and encouraging people to perform at their best, or could be something negative, discouraging and affecting the performance of the person [1, 2]. The stress perception concept varies widely among individuals and could be negatively affected the person's beliefs, approaches as well as career. Among students enrolled in degree programs has stress inducing factors especially among students of health sciences. Regrettably, it was explored that learning environment of dental schools are highly stressful and the dental students has the higher stress levels as compare to the stress levels in common man [3-8]. Furthermore, the influence of perceived stress among undergraduate dental students is higher due to dental school environment. This perceived stress could be the cause of low performance in clinical training as well as due to the exposure towards stressors related to patient treatment [9, 10].

Undergraduate dental students' well-being has negatively influenced by the environmental stress in dental schools until unless necessary step should be taken. Undergraduate dental students may be incapable of continuing their work if stress persists. They may feel interaction difficulties with the patients, which as a result can cause depersonalization. In the long run, raised stress levels can worsen academic accomplishment and lessen career choices as well as opportunities of living style enhancement [8, 11].

So, defining and exploring the factors which are provoking-stress among dental students is worthwhile. It will be helpful for the policy developing personals, academic staff and administrators with the essential information to alter the dental schools environment in such a manner which will be more helpful for the dental students. This study aimed to assess the perceived stress as well as the sources of stress among undergraduate dental students of private dental college of Lahore.

## METHODOLOGY

**Research design:** Cross-sectional research

**Sampling technique:** Convenient sampling

**Sample Size:** 100 dental students were taken as the sample of the study.

### Procedure

With the permission of Medical superintendents of a private dental hospital, data collection was done. The aim of the study was to explore the level of perceived stress among dental students of private dental colleges which was explained to the participants before data collection and informed consent was taken from each participant. For measuring perceived stress, pre-validated questionnaire named Dental Environment Stress (DES) was used. DES contains 41 items in total which are further grouped in seven sub-scales. First subscale was covering the phenomenon of self-efficacy beliefs which contain 9 questions, second was faculty and administration issues which were 10 statements, third subscale was workload containing 6 questions, patient treatment was the fourth sub-scale which comprised of four questions, fifth subscale was clinical training which has 4 items, sixth subscale was performance pressure which has 3 questions, and the last sub-scale was social stressors comprised of 5 questions [12]. The scoring was done on 4-point Likert scale 1 to 4 whereas 1 means not stressful

at all, 2 means somewhat stressful, 3 means quite stressful, and 4 means very stressful.

## DATA ANALYSIS

Data was analyzed using SPSS version 20.0. One-Way ANOVA test was used to explore the level of perceived stress among dental students of private dental college.

## RESULTS

The results of One-way ANOVA revealed significant differences between gender and Perceived stressors among dental students in terms of Self-efficacy beliefs ( $P=0.027$ ), Faculty and administration ( $P=0.01$ ), Workload ( $P=.002$ ), Patient Treatment ( $P=.001$ ), Clinical training ( $P=.001$ ), and Performance Pressure ( $P=.011$ ), whereas Social Stressors difference was found insignificant among both genders ( $P=.20$ ). Self-efficacy beliefs as stressor were found higher among female dental students ( $1.83\pm 0.58$ ) as compared to male dental students ( $1.75\pm 0.47$ ). Faculty and administration stress was found higher among female dental students ( $1.59\pm 0.55$ ) as compared to male dental students ( $1.44\pm 0.49$ ). Stress of workload was found higher among female dental students ( $2.25\pm 0.43$ ) as compared to male students ( $2.10\pm 0.46$ ). Stress of patient's treatment and clinical training was also higher among female dental students ( $1.71\pm 0.91$ ) and  $1.71\pm 0.71$  respectively. Performance pressure was found higher among females ( $2.10\pm 0.53$ ).

**Table-1: Stressors among undergraduate dental students**

Variables	Gender		Sig.
	Male (Mean±Std. deviation)	Female (Mean±Std. deviation)	
Self-efficacy beliefs	1.75±0.47	1.83±0.58	0.027
Faculty and administration	1.44±0.49	1.59±0.55	0.01
Workload	2.10±0.46	2.25±0.43	0.002
Patient treatment	1.46±0.88	1.71±0.91	0.001
Clinical training	1.47±0.87	1.71±0.71	0.001
Performance pressure	1.90±0.55	2.10±0.53	0.011
Social stressors	0.76±0.39	0.83±0.69	0.2

## DISCUSSION

This study aimed to assess the perceived stress as well as the sources of stress among undergraduate dental students of private dental college of Lahore. Significant differences between gender and Perceived stressors among dental students in terms of Self-efficacy beliefs, Faculty and administration, Workload, Patient Treatment, Clinical training, and Performance Pressure, whereas Social Stressors difference was found insignificant among both genders. Self-efficacy beliefs as stressor were found higher among female dental students as compared to male dental students. Faculty and administration stress was found higher among female dental students as compared to male dental students. Stress of workload was found higher among female dental students as compared to male students.

Stress of patient's treatment and clinical training was also higher among female dental students. Performance pressure was found higher among females. The influence of perceived stress among undergraduate dental students is higher due to dental school environment. This perceived stress could be the cause of low performance in clinical training as well as due to the exposure towards stressors related to patient treatment which in support of the results of the current study [9, 10]. Learning environment of dental schools are highly stressful and the dental students has the higher stress levels as compare to the stress levels in common man which also supports the finding of the study [3-8]. Moreover, Female dental students are more affected by perceived stress as compared to the male dental students.

In conclusion, higher level of stress caused by stressors in terms of Self-efficacy beliefs, Faculty and administration, Workload, Patient Treatment, Clinical training, and Performance Pressure are found more in female dental students as compared to male dental students.

#### **Conflict of interest**

No Conflict of interest

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