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## A COMPARATIVE ANALYSIS TO REVEAL STRESS LEVELS IN POST GRADUATE RESIDENT DOCTORS IN PUBLIC AND PRIVATE HOSPITALS OF LAHORE CITY OF PAKISTAN

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#### **Abstract:**

**Objective:** To analyze and compare the level of stress of Post-graduate residents in Public and Private sector hospitals.

Study Design: A cross-sectional comparative study.

**Place and Duration:** In two major Hospitals of Lahore, Services and Shalamar Hospital for one year period from October 2017 to October 2018.

**Methodology:** A total of 207 doctors were selected with the possibility of unsuitable sampling technique. The main result was a higher stress level of medical or resident apprentices.

**Result:** 62.3% of the 207 physicians in the training were under stress. The proportion of stressed women was 66.3%. The majority of PGs experienced high levels of stress with 67.2%. A large proportion of approximately 69.7% of the stressed physicians have low-income. This study was not statistically significant in terms of different socioeconomic and demographic variables including sex, age, specialty, monthly income and university.

Conclusion: In both hospitals the stress level of the undergraduate students was high. It was found that there was a high level of stress among the apprentices, but no risk factors showed a significant relationship with stress. We should have to take steps to facilitate future healers understand the stress symptoms and how to deal effectively and safely with them.

**Key Words:** Post-graduate residents, Stress, private and Public sector university.

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#### **INTRODUCTION:**

In recent years, stress, anxiety, anxiety, aggression have increased significantly. Individuals in the world are constantly reacting physically and mentally. Clinical manifestations of stress appear daily in the doctor's office. A report from the United Nations was labeled with stress. "The disease of the twentieth century." The World Health Organization calls this a "global epidemic." Psychiatric and Neurological issues may increase their participation in the global burden of the disease from 50% to 10.5%, to almost 15%. This is certainly the largest increase in proportion to cardiovascular disease. Medical education is intrinsically stressful and is challenging with a few stressors (Mouret GM) that can lead to problems of judgment, decreased concentration and increased anxiety, depression and loss of self-esteem. Stress is defined as a process that induces or precipitates an individual in order to believe that the individual can not cope with what he or she is confronted with. Anxiety is related to the sense of tension of frustration and anger, resulting in the perception that they are unable to deal with the situation. In response to stress, stress occurs when there is a discrepancy between the sources of the biological and environmental demands. psychological, or social systems of the person causing the homeostatic deterioration. Stressful stimuli have many different types and include physiological, mental, physical or anatomical reactions. In almost all professional Stress is observed, but it can be a major influence on medical professionals and their communities. The main obstacle in front of the doctors is to manage stress and function. When medical care is necessary for patients, unintentional harm should be provided. Physicians suffer from psychological distress levels with high perceived stress levels. There is conclusive evidence that mental health problems are more prevalent, especially in physicians compared to a general population with morbidity ranging from 20% to 48% in psychologically manner. After all the doctors have loved the patients, they have similar limitations and are humble. Among physicians Substance abuse can make psychological distress difficult. It is not surprising that doctors have a high suicide rate than the general population. Previous studies have shown that "doctors in the field of education and difficult doctors" tend to deteriorate in areas of "technical skills and clinical judgment" that can lead to negligence. When the stress exceeds exceed the critical level, psychological morbidity can turn into a manifestation of the suffering that results in deterioration and depletion. This study was designed to identify the level of stress among postgraduate medical students using the stress measure of professional life. "

#### **METHODOLOGY:**

This study identified the stress level as anxiety or fear determined by the application of the "stress scale of occupational life". We use a professional life stress questionnaire to measure "stress level". Four main faculties of each university were selected; including General medicine, general surgery; obstetrics, gynecology and paediatrics department. Residents registered with PGME were selected for training at FCPS, MS, MD, MDS and DCPS and were included in the study. We exclude Fellows, the official doctor, the consultants and the officers. In this stallion, a total of 207 graduate students were included in the probability through an unlikely possibility. SPSS-13 was used for data analysis. The percentage and frequency of relevant descriptive statistics for categorical variables were calculated: marital status, gender, stress level and income status for the groups. The standard deviation and mean were calculated for the group, ie age and stress level for graduate students. The chi-square test was used to compare the odds ratio of the qualitative variables among the groups to the significance level of 0.05.

#### **RESULTS:**

250 total Performa were distributed to doctors of FCPS, MS, MD, MCPS and DCPS. There was an equal answer from the main expertise group. We received 207 docs with 82% response rate. In this study, the doctors average age was 28.5 and 3.124 was the standard deviation (SD). While apprentices were 52.0%, 68% of doctors were bachelor. Doctors with monthly incomes less than or equal to 15,000 rupees have earned 37.8%, 27% of physicians earned rupees from 16000-31000 rupees, and 35.05% had rupees or more than thirty thousand persons per month. The distribution of the socio demographic characteristics of the two universities is given in Table-I.

Table-I: Socio demographic characteristics of postgraduate trainees in public hospitals (n=207)

Table-I: Socio demographic characteristics of postgraduate trainees in public and private Universities (n=207)

Characteristics of the respondents	Private University (N= 92)	Public University (N= 115)
	Frequency (%)	Frequency (%)
Age (mean) *	29.14 (SD 3.3)	27.77 (SD 2.6)
Gender (female)	60 (52.6)	47 (51.1)
Marital status (single)	74 (66.7)	62 (69.7)
Monthly income (mean) **	33920.14 (SD 21707.3)	32959.18 (SD 62110.7)
Number of children (mean) ***	1.85 (SD 1.1)	1.36 (SD 0.6)
Gynecology/obstetrics	17 (18.5)	36 (31.3)
Medicine	26 (28.3)	27 (23.5)
Pediatrics	25 (27.2)	25 (21.7)
Surgery	24 (26.1)	27 (23.5)

In both institutions, most of the students were exposed to moderate and severe stress. In Services Hospital, Lahore found that 57% of doctors had moderate stress and 8% had severe stress. For this reason, 65% of the total doctors were under stress at Shalamar Hospital, Lahore. 49% of the doctors experienced moderate stress, severe stress occurs in 10% and 58% suffered stress. Among the 207 participants, 129 were found to be moderate and severe (62.3%). In this example, the distribution.

According to the social sex, 66.3% of the women are stressed. The proportion of stress was 67.2% in married doctors compared to 50% among who are single. The stress ratio among low-income PGs (15,000 to 30,000 / month) is 70.01%. Gynecology 70.8%) and drug (61.92%) are more stressful in surgery (56.9) and pediatrics (60.12). This study compared stress in post-graduate students according to socio demographic factors and medical fields (Table II).

Table-II: Comparison of the stressed and non-stressed postgraduate trainees

Characteristics of the respondents	No Stressed Frequency (%) N = 78	Stressed Frequency (%) N= 129	Odds ratio	P. value
University				
Public	40 (51)	75 (58)	0.76	0.21
Private	38 (49)	54 (42)		
Gender				
Male	42 (54)	57 (45)	1.45	0.12
Female	36 (46)	71 (55)		
Marital status				
Single	54 (72)	82 (66)	1.34	0.22
Married	21 (28)	43 (34)		
Department				
Obstetric Gynecology	16 (20)	37 (29)		
Medicine	20 (26)	33 (26)	1.19*	0.57
Pediatrics	20 (26)	30 (23)		
Surgery	22 (28)	29 (22)		
Age group				
26 to 30 years	49 (66)	94 (75)	0.64	0.11
< 26 or >30 years	26	32		
Age (Mean age in years)	28.47 (SD 2.9)	28.56 (SD 3.3)	Ω	0.83

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Most of the bivariate analyzes presented in Table I are done by cross tabulation with calculation of the chi-square value, the odds ratio (when applicable) and the respective values of p. The mean age in the two groups was compared using an independent sample t test. (Table II).

#### **DISCUSSION:**

This study showed that 62.3% of the apprentices were stressed. Two different local studies in Lahore in 2009 and 2010 found that the stress level of the undergraduate student was 48% and 60%, respectively. Another study at King Fahad National Hospital in Riyadh found that stress morbidity reached 59%. For this reason, the results of these two studies support the outcome of the current study and show that stress frequency is increasing. They concluded that the stressing elements of the job, including time and patient pressure, were almost the same with multiple functioning commitments; In addition, public sector professionals prefer more challenging tasks than private medical professionals. In terms of gender and marital status, 66.3% of women and married PGs were 67.2% more stressed. The reasons may be that married PGs and women are more likely to have more responsibility than PGs who are more likely to work, male or single. Medical trainees experience more stress than male apprentices, without conflict between career and home. A study of stress in medical women in Karachi showed that 34% of women experienced high levels of stress. In addition, the result of stress in medical women has led to a reduction in the possibility of taking antidepressant cigarettes and enjoying their application over the longer study period18. Specialization related to gynecology (69.8%) and medication (62.2%). Compared to pediatrics (59.2%) and surgery (56.9%), it is more stressful. Gynecology has many hours of work, time demands, many emergency situations, and critical patients can be the cause of stress. Other research conducted at the Department of Psychiatry at the Hamdard and Dental Department showed that 55% of physicians were exposed to major stress due to academic and economic difficulties. Many factors play a role in the development of stress in physicians, such as how to deal with patients and their families, time management, family and other social factors. Raporda also suggested complaints from trainees, supervisors who do not have time for such things when they have only time to talk with them, after their private studies at 2 o'clock; Stress is very common among students enrolled in undergraduate courses and is suitable for seniors and teachers who are currently in denial and despair rather than a counseling service. Time has changed, increasing pressure and competition has led to suicidal tendencies among the general population. This cross-sectional study and the stress factors as age, gender, marital status was related and the results of this study are not generalized to other hospitals because there is no significant social status. We recommend a prospective cohort study and a larger sample size should be used to examine this relationship. RESULT

#### **CONCLUSION:**

It has been found that the stress level of students in both universities is high. Stress was found to be high in women, but no risk factors were found to be significantly associated with stress. Every effort should be made to help future healers understand the stress symptoms and how to deal effectively and safely with them. In addition, it is necessary to take measures to reduce stress factors among doctors.

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