

Emotional Burnout Syndrome among Medical Students in Balochistan: Understanding the Role of Perceived Stress

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Abstract

The current investigation aimed to determine the relationship between Emotional Burnout Syndrome and Perceived Stress among medical students in Balochistan. The study's goal was to investigate the relationship between Emotional Burnout Syndrome and Perceived Stress. It also aimed to explore differences related to Emotional Burnout Syndrome and Perceived Stress concerning various demographics. The data consisted of 75 Medical Students (39 male, 36 female). Convenient sampling was used to select participants with an age range of 18-35 years. For data collection, a cross-sectional survey design was implemented. The Maslach Emotional Burnout Inventory and Perceived Stress Scale were utilised. Pearson Correlation and independent t-test were applied. SPSS 21 cultivated the results. Results revealed significant positive link between Emotional Burnout Syndrome and Perceived Stress. The results also indicated that females reported a higher level of Perceived Stress in comparison to males. At the same time, no significant differences were observed regarding gender in Emotional Burnout Syndrome. The implications of this study extend to both academic and research contexts. It will be beneficial for Medical students' well-being and their academic performance at medical institutional.

Keywords: Emotional Burnout Syndrome, Academic Stress, Medical Students. Gender Differences

Introduction

Emotional Burnout syndrome is defined as a psychological syndrome resulting from constant stress in the workplace and academics. It is reflected through factors such as fatigue, doubt, pessimism and professional inadequacy. Burnout undermines both social and personal performance, and it also has adverse effects on the physical and psychological health of individuals (American Psychiatric Association, 2020).

Stress was initially described as the general response of the body to a stimulus. After some time, the concept of subsequent definition of stress was modified by differentiating between stress response and stressor. A stressor is defined as a catalyst that endangers homeostasis, while the stress response refers to the organism's response designed to restore homeostasis (Koolhass, 2011).

Response to stressors may be both psychological and physical. Stress not only involves alternate actions, thoughts, feelings, and emotions, but also affects the whole body system, including dry mouth, fatigue, palpitations, sweating, and shortness of breath (Shah et al., 2010). Emotional burnout is believed to be a set of psychological issues that include emotional fatigue,

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feelings of little achievement and dissociation, whereas stress in Psychology is clarified as a troublesome and uncomfortable condition of the individual as a response to some pressure (Yusoff et al, 2021)

Medical students often experience stress during their studies and training, which can lead to emotional burnout syndrome in these students (Costa et al., 2012). Literature suggests that the psychological well-being of medical students has been a concern. An infinite number of assignments, books, tests, and overburdened, stressful schedules emphasise the importance of adhering to orders, responsibilities, and taking care of their patients or clients. However, fatigue and motivation can simultaneously affect their emotional wellbeing and mental health (Alharbi et al, 2018).

Literature Review

A link between stress and emotional burnout has been observed in numerous studies across various populations and cultures. Studies in Saudi Arabia that included medical students have reported evidence that chronic academic and emotional stress contributed to emotional exhaustion and burnout. (e.g., Al-Dubai et al., 2011; Alharbi et al., 2018).

A U.S.-based study found that almost half of medical students suffered from burnout, with stress being a significant factor (Shana et al., 2002). Similar findings have been observed in another study (Dyrbye et al., 2006), which documented a strong link between stress-related burnout in medical students, primarily due to insufficient sleep and excessive study hours. Students frequently reported experiencing emotional exhaustion and a sense of disconnection from their activities.

Empirical studies with medical students in Pakistan have also observed that medical students reported high stress levels due to constant academic pressure, which was a significant factor in emotional burnout. These studies have documented that over 50% of medical students experienced emotional burnout due to continuous stress from workload and competition. (e.g, Shah et al., 2010; Shaded et al., 2020).

Objectives

1. To explore the relationship between Perceived Stress and Emotional Burnout Syndrome
2. To find out if there were any significant gender, age, marital status, and ethnicity-related differences in the level of Perceived Stress and Emotional burnout Syndrome

Hypotheses

H1: A higher level of Perceived Stress would be linked with more Emotional Burnout

H2: There would be significant differences in Perceived Stress and Emotional Burnout between male and female participants

Methodology

This study was a cross-sectional survey with a correlational design. The study aimed to explore the relationship of stress with emotional burnout syndrome and to explore gender based differences in the level of perceived stress and emotional burnout syndrome.

Participants

The study included 75 male and female participants in total through a convenient sampling technique from two medical colleges of Quetta city (Bolan Medical College, Quetta Institute of Medical Sciences). The Maslach Burnout Inventory was used to measure Emotional Burnout Syndrome (EMBI), and the Perceived Stress Scale (PSS) was used to measure stress. Data on gender and age were also recorded on a demographic sheet attached to the aforementioned self-report Questionnaire.

The study was approved by the Ethics Committee of the Department of Psychology at the University of Balochistan. Permission from the administration of the two medical colleges was

obtained before the students were approached for data collection. Informed consent was used to ensure the anonymous, confidential and voluntary participation.

Result

The demographic breakdown of the participants consisted of 39 male students (52%) and 36 female students (48%), with ages ranging from 18 to 35 years. The 25-30 age group reported the highest level of stress (55%). Participants with Baloch ethnicity reported 41.3% stress in comparison to Pashtun participants who reported 31%, and participants from the other ethnicities who reported 29% stress. Interestingly, unmarried Students reported a greater level of stress (72%) than married Students (21%). Moreover, medical students who were at the stage of their house job reported lesser stress (29.3%) compared to those who were still in the study stage (71%). Regarding emotional burnout, no significant differences in mean scores were observed across demographics, including gender, age, marital status, ethnicity, and stage of study.

Table 1: Descriptive, Psychometric Properties and Correlation coefficient of Emotional Maslach Burnout Inventory and Perceived Stress Scale (N=75)

Scale	Items	M	SD	Range	<i>A</i>	Skew	Kurt	1	2
EMBI	7	17.5	8.23	4-37	.69	.422	.548	-	.51**
PSS	10	20.7	5.24	7-32	.50	-.294	.548	-	-

Note: EMBI= Emotional Maslach Burnout Inventory; PSS= Perceived Stress Scale

Table 2 outline shows the means, standard deviation, alpha reliability, score range, shape statistics of skewness and kurtosis along with correlation coefficient values. The data we symmetrical and alpha reliability for the scales range from .50 to .69 which falls within the reasonable range. Moreover, Pearson's correlation coefficient indicates stress and emotional burnout have significant positive relationship,

Table 2: Mean Score Differences on Perceived Stress and Emotional Burnout Syndrome between males and Females (N = 75)

Variables	Males(n= 39)		Females(n=36)		t(75)	P	Cohen's d
	M	S.D	M	S.D			
EMBI	16.7	5.91	18.6	10.17	-1.062	.292	0.242
PSS	19.1	5.52	22.33	4.40	-2.7814	.007	0.647

Note: EMBI= Emotional Maslach Burnout Inventory; PSS= Perceived Stress Scale

Table 2 shows results of independent sample t-test which reveals some difference in mean scores for males and females on emotional burnout but these differences are statistically nonsignificant. However, statistical significance is observed for the difference in scores on perceived stress between males and females and effect size for this difference is moderate as revealed by the Cohen's d.

Table 3: Regression analysis on Perceived Stress as Predictor of Emotional Burnout Syndrome

Variable	Emotional Burnout Syndrome							
	Model 1		Model 2					
	B	SE	β	B	SE	B	p	95%CI
Constant	14.54	2.97		1.41	3.71		<.05	[8.62 - 20.45]
Gender	2.01	1.90	.12	-.65	1.74	-.04	>.29	[-1.77 - 5.81]
PSS				.83	.16	.53	<.05	[.492 - 1.12]
R^2	.015			.265				
F	1.13			12.98***				
ΔR				.25				
ΔF				24.46				

Note: EMBI= Emotional Maslach Burnout Inventory; PSS= Perceived Stress Scale

Table 3 showed the Hierarchical regression analysis to explore the Stress as a predictor on Emotional Burnout Syndrome while gender treated as a control variable. The first model included gender as the predictor and showed that gender did not significantly predict emotional burnout syndrome [$\beta = .12$, $p = >.29$; $F(1, 73) = 1.13$, $R^2 = 0.15$]. In the second model stress was included as main predictor of emotional burnout syndrome. The findings endorsed stress as the significant predictor [$\beta = .53$, $p = <.05$; $F(2, 72) = 12.98$, $R^2 = .265$].

Discussion

This study provides valuable findings as it showed a strong positive relationship between stress and emotional burnout, which is in accordance with earlier studies showing the individuals who are experiencing more stress are more prone to burnout symptoms and emotional exhaustion (e.g. Maslach & Leiter, 2016; Shanafelt et al., 2015.) Hence the hypothesis H_1 is supported. This showed that higher level of perceived stress would be linked with more emotional burnout.

Higher academic expectations, long working hours, and mental stress that medical students experience in underdeveloped areas like Baluchistan may be the reason for this correlation. Previous research also shows that continuous pressure from academics and psychological challenges is the reason medical students are experiencing stress and burnout (Dyrbye et al., 2006). By showing that emotional burnout increases with stress levels, the positive correlation shows the psychological effects experienced by medical students.

Stressors like relationship issues, jobs problems, career barriers and work environment are highly correlated to emotional burnout (Khattak et al, 2011). Munir and Mehmood (2013) explored that there is significant positive association between burnout and stress. According to research, there is a strong relationship between emotional burnout and stress (Shanafelt et al, 2002).

Secondly according to the gender-wise analysis, this study showed that female have significantly higher levels of stress than the male students. This is similar to results from previous research that shows academic pressure, psychological responses, and social expectations could all be contributing to increased stress levels among female medical students. (Zoccola et al., 2008; McLaughlin et al., 2010)

This study found no apparent gender disparities in the actual symptoms of emotional burnout syndrome. Thus the second hypothesis of this study was that there would be significant differences in perceived stress and emotional burnout between male and female participants. Therefore, this study yield that female have higher and significant relationship on stress in comparison to males. While there were no differences regarding gender observed on Emotional Burnout Syndrome. This finding also challenges some studies that have shown women to be more vulnerable to emotional burnout, according to Maslach and Jackson (1981). A study found that female possess more Stress in comparison to male (Florez et al, 2020). Female possessed high level of emotionally exhausted than male (Radostina et al, 2010). Professional women have greater level of emotional burnout syndrome than professional man (Florez et al, 2020). This study findings regarding age are non-significant on emotional exhaustion (Ozdemir & Demir, 2017).

Moreover, Research consistently shows that younger adults, experience more emotional burnout due to career tension (Maslach & Leiter, 2016). Study shows that minority group experience more burnout due to stress of injustice, biasness, inferiority less institutional framework (Gong et al., 2021). A Study reveal that married people shown less burnout than unmarried people (Ahola et al., 2010).

This study's impacts are quite important. Students that experience high levels of stress and burnout experience long-term risks to their physical and mental well-being, along with issues with their academic performance (Ishak et al., 2013). Burnout among ambitious medical

professionals could negatively affect patient care and the healthcare system from an institutional perspective. Therefore, it is important for medical institutions to include stress management and mental wellness assistance

Conclusion

In the light of the findings of the present study, it is concluded that medical students happen to face constant stressors in their academic life due to multiple factors. The level of appraised stress adversely affects their mental health by leading to conditions such as emotional burn out syndrome. This leaves negative effects on their well-being and academic performance. It is very critical to keep check on the given stressors and ensure in-place mechanism at medical institutes for stress management related capacity building of the students for ensuring their well-being and facilitating their academic performance, particularly for female medical students as the results have revealed reports of greater level of perceived stress among them.

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