

Personality factors and burnout among medical students and house officers

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ABSTRACT

Objective: To determine the personality factors relevance with the burn out among health professionals.

Methodology: The cross-sectional study was conducted government medical colleges and hospitals of Lahore, from Feb 2017 to Nov 2017. Participants were selected through purposive sampling assessment of burnout. The abbreviated nine items inventory "abbreviated Maslach Burnout Inventory (aMBI) was used and the short form of "Zukerman Kuhlman Personality Questionnaire" (ZKPQ) was used to assess the personality characteristics of participants. "Regression Analysis" was used for assessment of predictive relationship between personality and burnout.

Results: A total of 240 participants were included. Two personality factors Neuroticism-anxiety (N-anx) and Activity (Act) appeared as significant predictor of "Emotional Exhaustion" among house officers and final year medical students ($p < .001$) and other personality factors of Impulsive sensation seeking (ImpSS), Aggression-hostility (Agg-host), and Sociability (Sy) showed non-significant relationship with "Emotional Exhaustion". Neuroticism-anxiety (N-Anx) appears as significant predictor of "Depersonalization" among house officers and final year medical students ($p < .001$), Activity (Act) appears as significant predictor of "Personal Accomplishment" among house officers and final year medical students ($p < .003$).

Conclusion: Combination of high neuroticism-anxiety and high activity are the predicting personality factors for burnout.

Key words: Personality, burnout, house officers, medical students.

Introduction

Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that occurs mostly in response to emotional stress of dealing with other human beings having problems. Burnout uniqueness is that it occurs in social interaction when one is healer and other is recipient. Burnout is not only limited to professional caregivers; it is actually applicable to every person who is providing extensive health care to another person.¹ Likewise Maslach while studying the problems of social services staff also mentioned the process of indifferent and disrespect of

staff towards the client. Burnout is actually outcome of dissonance between job nature and job's holder nature.² As number of studies on burnout mostly focused on environmental factors, it is likely that individual difference in personality characteristics also play an important role in the development of burnout. Indeed, recent research focused on the relationship of personal characteristics like personality and burnout.^{3,4} Previously variables like self-efficacy, locus of control, emotional stability, extraversion, conscientiousness, positive affectivity, and negative affectivity play a significant role

as predictors of burnout. In a close examination, it is assumed that all factors which trigger burnout assumed to be environmental. But this scenario raised the question, “why under same environmental conditions, one individual burns out whereas other shows no symptoms of burnout”.⁵ This question does not rule out the significance of the environmental factors on burnout but it simply focuses the direction of investigation on exploring the factors within individual that can affect burnout.⁶

Personality is one of important factor reported to be related to burnout and mental health.⁷ In numerous considers, indeed situational components which might have an impact on burnout were controlled for; identity characteristics are pertinent to burnout scores essentially.⁸ Shimizutani and colleagues found the correlation between the personality characteristics like low neuroticism and high extroversion to burnout in the nursing staff.⁹ Ghorpade et al conducted the research on faculty of large state university. His results revealed the significant relationship between personality and burnout.⁶ Personality exert significant influence on both the student’s behavior and their susceptibility to burnout.¹⁰ Additionally, with respect to relationship of burnout and identity characteristics among maternity specialists conducted by Esfahani and colleagues found the significance of identity and burnout among maternity specialists.¹¹ Further research confirmed that personality factors play a predicting role in burnout.^{12,13}

This issue is gaining recognition as a serious clinical problem, so current study aims to obtain informative results to devise valid measures to prevent such burnout. So, a study was planned to analyze burnout among final year MBBS students and house officers in Lahore.

Methodology

A cross-sectional survey based study was conducted in public and government sector medical colleges and hospitals of Lahore, from Feb 2017 to Nov 2017. The purposive non probability sampling technique was used. For sample half participants were final year students of MBBS and other half were house officers from private and government sector medical colleges and hospitals of Lahore.

The sample was collected from the four medical colleges (2 government & 2 private sectors) and four hospitals (2 government & 2 private sectors) of Lahore. Consent was taken from the authorities of these educational and health care institutes and later consent was taken from the participants on the individual level

during data collection. The demographic, Zukerman-Kuhlman Personality Questionnaire, and Maslach Burnout Inventory was administered individually on medical students of final year and house officers.

The statistical Package for Social sciences (SPSS, version 19.0) was used to analyze the data. The descriptive statistics and regression analysis was used for analysis of predictive relationship between personality and burnout.

Results

Multiple regression analysis revealed that some personality characteristics predict burnout significantly. As shown in Table I neuroticism-anxiety (N-anx) and Activity (Act) were significantly predicting emotional exhaustion. Personality traits like neuroticism is a significant risk factor for experiencing high level of burnout including emotional exhaustion and also for depersonalization as indicated in Table II. On the other hand, Activity (Act) is also a significant predictor of personal accomplishment in students and house officers as shown in Table III.

N-anx and Act both (p <.001) appears as significant predictor of Emotional Exhaustion among house officers and final year medical students. Other factors like ImpSS (p>.038), Agg-host (p>.272) and Sy (p>.084) revealed non-significant relationship with the “Emotional Exhaustion” which is one of the sub-scale of burnout.

Personality Factors	R	R ²	Adjusted R ²	F	p
ImpSS	.134	.018	.014	4.33	.038
N-anx	.288	.083	.079	21.46	.000
Agg-host	.071	.005	.001	1.21	.272
Sy	.112	.013	.008	3.017	.084
Act	.28	.052	.048	3.01	.000

Note. ,ImpSS (Impulsive sensation); N-anx (neuroticism-anxiety);Agg-host (Aggression hostility); Sy (Sociability); and Act (Activity).

Personality Factors	R	R ²	Adjusted R ²	F	p
ImpSS	.028	.001	-.003	.190	.663
N-anx	.199	.039	.035	9.76	.002
Agg-host	.040	.002	-.003	.378	.539
Sy	.106	.011	.007	2.710	.101
Act	.091	.008	.004	1.979	.161

Note. ImpSS (Impulsive sensation); N-anx (neuroticism-anxiety); Agg-host (Aggression hostility); Sy (Sociability); and Act (Activity).

Neuroticism-anxiety (N-Anx) ($p < .002$) appears as significant predictor of depersonalization among house officers and final year medical students. Whereas other factors of personality ImpSS ($p > .663$), Agg-host ($p > .539$), Sy ($p > .101$), and Act ($p > .161$) showed no significant relation with the depersonalization which is one aspect of burn out.

Personality Factors	R	R2	Adjusted R2	F	p
ImpSS	.077	.006	.002	1.43	.232
N-anx	.018	.00	-.004	.07	.781
Agg-host	.046	.002	-.002	.54	.474
Sy	.057	.003	.00	.78	.378
Act	.188	.035	.035	8.74	.003

Note. ImpSS (Impulsive sensation); N-anx (neuroticism-anxiety); Agg-host (Aggression hostility); Sy (Sociability); and Act (Activity).

Activity (Act) ($p < .003$) appears as significant predictor of personal accomplishment among house officers and final year medical students. While on the other hand other factors of personality ImpSS ($p > .232$), N-anx ($p > .781$), Agg-host ($p > .474$), and Sy ($p > .378$) showed non-significant predictive relationship with personal accomplishment.

Discussion

Literature indicates the possibility that stressful working environment are more significant predictors of burnout than is personality, this aspect highlights the significance of this dimension for researchers to consider individual variation. During last decades, many researches revealed the personality as significant predictor of burnout in field of medicine.¹⁴⁻¹⁷

Study showed very significant relationship of burnout with neuroticism than any other characteristics of personality. A tendency to experience negative emotions and to possess associated behavioral and cognitive traits characterizes neuroticism. Mostly individuals high in neuroticism are fearful, irritable, with low self-esteem, social anxiety, and poor inhibition of impulses.¹⁸ In general, individuals who scored high on neuroticism tend to set exceptionally high targets for themselves and also

tend to undervalue their own performance.¹⁹ Additionally ineffective coping strategies like denying, wishful thinking, and self-criticism in stressful situations in the work environment makes individuals who are high in neuroticism more vulnerable to the symptoms that are typically associated with burnout.^{20,21} Furthermore, neuroticism seems to be associated with strong emotional reactions to stressful situations eventually leading to mental and physical health issues.²²⁻²⁴

Prior research work regarding the relationship of burnout with neuroticism revealed that individuals high on neuroticism are likely to report high on the subscale of emotional exhaustion, to report low on subscale of personal achievement, and being healthcare providers dehumanize their patients (depersonalization) and so scored high on the subscale of depersonalization. Furthermore, in the longitudinal study Goddard and colleagues indicated the similar pattern of results which indicated a significant positive relationship between neuroticism and depersonalization, and emotional exhaustion completely mediated the relationship.²⁵ Previous research also highlights the significant negative relationship between neuroticism and personal accomplishment²⁶ and the current study also revealed the similar pattern of findings.

One of the limitations of the current study was that fact that all indicators like personality and burnout relied on self-report so probably individuals who are high in neuroticism are more likely to report high levels of burnout. Secondly the current study only focused on the effects of personality on burnout so it is not possible to assess the extent to which other working conditions like differences in clinical settings of government sector and private sector, high demands, lack of support effect burnout in house officers and final year medical students. So, it is recommended to explore further aspects which play role in the burnout of individuals working in medical field.

Conclusion

Certain personality characteristics may act as predictors for burnout in medical field. high prevalence of burnout in medical students effects their physical and mental health as well as on the doctor-patient relationship. Research has shown the effectiveness of training programs in reducing burnout, and individuals who are more vulnerable for burnout may benefit from intensive, well-structured programs and workshops for improving their coping skills in dealing with stressful

work situation in clinical settings and reducing their negative emotional response to such stressful situations in medical profession.

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