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Original Research Article

BURNOUT SYNDROME AMONG RESIDENTS OF A LARGE URBAN HOSPITAL

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Abstract: *The questionnaire-based prospective study was conducted in Shifa Hospital, Islamabad, from January 2022 to July 2022, to evaluate the prevalence of burnout and its associated variables among residents of a major urban hospital in Pakistan. Residents in the hospital were sent a Google form, and their consent for inclusion in the study was taken. The prevalence of burnout was assessed using Copenhagen Burnout Inventory (CBI) scale. Results showed that 40 (60%) residents had a total burnout. 91 (60.6%) had personnel burnout, 66 (44%) had burnout due to interaction with patients, and 64 (42.6%) had occupational burnout. It was concluded that burnout syndrome is prevalent among doctors, and it is important to identify and address symptoms. Stress management strategies like psychological counseling and meditation should be available for residents.*

Keywords: Burnout syndrome, Medical practice, Residents, CBI

Introduction

Medicine practice is more challenging compared to other professions. It offers professional and personnel satisfaction but is also associated with high occupational burnout and stress. Stress is a biological process that occurs in the presence of environmental threats. Occupational stress results from negative interaction between a person's expectations, skills, or knowledge and the work environment. It can affect an individual's health. Burnout syndrome combines depersonalization, emotional exhaustion, and a reduced sense of personal accomplishment (Farhangi and Khajehnasiri, 2020). It occurs due to long-term occupational stress, lack of coordination between pressures and responsibilities, es and personal needs, characteristics, and abilities. The medical workplace has various stressors. Studies even suggest that burnout is initiated during medical studies and increases during residency (Shanafelt et al., 2022). According to the studies, 50-76% of residents experience burnout due to the enormous workload and the demand to learn extensive scientific literature in a limited time (Collins et al., 2021; Morales et al., 2019).

In addition, other factors like low income, physical and psychological pressure from patients and superiors, and strict evaluation without adequate training. Stress may also be due to role conflicts, role overload, and role conflicts and constraints in performing their job and caring for patients' health (Ali et al.; Liu et al., 2019). Thus, many residents suffer from depression and anxiety, impacting patient care. Limited studies evaluate burnout, stress, and psychological issues among medical residents; the literature is mostly limited to interns and medical students (Abed et al., 2021; Karim et al., 2023). A study showed that almost one-third of the residents experience stress (Khalid et al., 2021), and about three fourth of the medical students experience stress (Kamran et al., 2020). This is due to barriers to psychiatric help, associated stigma, lack of awareness, and confidentiality issues. In this study, we evaluated the prevalence of burnout and its associated variables among residents of a major urban hospital in Pakistan.

Methodology

The questionnaire-based prospective study was conducted in Shifa Hospital, Islamabad, from January 2022 to July 2022. Residents in the hospital were sent a Google form, and their consent for inclusion in the study was taken. The ethical board of the hospital approved the study. The questionnaire was sent for six consecutive weekends. Weekly reminders were sent if the participant did not respond the first time. Responses were kept confidential, and personnel information was not disclosed. It was an anonymous survey, but personal details including demographics, working hours and academic qualifications, were recorded. The prevalence of burnout was assessed using Copenhagen Burnout Inventory (CBI) scale. The questionnaire had three sub-dimensions and nineteen questions. Seven questions were about burnout due to work-related stress, six about

exhaustion unrelated to occupation, and six about exhaustion due to patient interaction. All questions had five choices in the form of numerical values. The prevalence of burnout was assessed by calculating the overall score and score in each subdomain. A score between 50-74 was considered moderate, 75-99 high, and 100 as severe burnout. All questions were relevant, straightforward forward, and positively skewed.

Responses were analyzed using SPSS version 23.0. Categorical variables were represented as frequency and percentage, and continuous variables as mean and standard deviation. The chi-square test and ANOVA test were used for studying association. A p-value less than 0.05 was considered statistically significant.

Results

The questionnaire was filled out by 150 residents, of which 81 (54%) were male, and 69 (46%) were female. The mean age of the participants was 28 years. 55 (36.6%) were first-year residents, 51 (34%) were second-year, and 44 (29.3%) were third-year residents. 25 (16.6%) residents worked for 80 hours per week, 52 (34.6%) for 61 to 80 hours per week, and 73 (48.6%) for 41 to 60 hours per week. Scores showed that 40 (60%) residents had total burnout (Table I). 91 (60.6%) had personnel burnout, 66 (44%) had burnout due to interaction with patients, and 64 (42.6%) had occupational burnout. Almost 23.1% of residents experienced physical or verbal abuse by patients or attendants.

Table II shows the mean score in each burnout domain. The results of this study show that personal and work-related burnout scores were relatively higher in first-year residents compared to residents of second and third years. The difference was statistically significant for patient-related (P=0.013) and work-related (P=0.012) burnout scores, while the difference in personal workout scores was not statistically significant (P=0.055).

The prevalence of burnout in males was 32 % and females 45.3%. This difference was not statically significant (P>0.05). Prevalence of burnout among first-year, second-year, and third residents was 54.5%, 29.4%, and 27.2%, respectively. This difference was statistically significant (P=0.05).

Table I Burnout prevalence among three domains

Burnout domains	No. of participants (%) n=150
Personal burnout	91 (60.6%)
Work-related burnout	64 (42.6%)
Patient-related burnout	66 (44%)
Total	40 (60%)

Table II Mean burnout scores in all CBI domains

Year of residency	Personal burnout	Work-related burnout	Patient-related burnout
First	50.06± 10.8	47.73± 10.5	44.5± 12.4
Second	49.1± 17.6	43.0± 14.4	38.7± 19.6
Third	43.4± 14.6	39.9± 13.7	34.6± 18.7
P value	0.05	0.01	0.01

Discussion

Burnout syndrome has an adverse impact on the physical and emotional health of residents. It also hinders patient management. Different scales like the Oldenburg burnout inventory, burnout clinical subtype questionnaire, and Maslach burnout inventory (MBI) have been used previously for evaluating burnout among professionals (Demarzo et al., 2020; Gridwichai et al., 2020; Ogunsuji et al., 2022). In this study, CBI scales were used for evaluating burnout. The result showed that all CBI domains had high scores. Scores showed that 40 (60%) residents had total burnout. These results were consistent with the finding of a previous study that used the MBI scale for assessing burnout among ICU doctors (Dhusia et al., 2019). The results showed the highest score in personnel burnout domain, which shows that most participants were either emotionally or physically exhausted. A previous study also showed similar results (Dhusia et al., 2019). This study showed that 65.8% suffered from depersonalization and 45% from emotional exhaustion.

This study showed that female doctors had higher burnout scores than male residents. This finding is also consistent with the results of a previous study by Butera et al. (Butera et al., 2021). It may be due to higher responsibilities and domestic expectations from females. Doctors in Pakistan have tough working hours and immense workloads; moreover, they face other problems like lack of protection and insurance, unhealthy living conditions and food habits, lack of appreciation, and violence from patients and their relatives. It increases the risk of

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lifestyle disorders like hypertension, cardiovascular disease, hyperlipidemia, fatigue, and burnout. Burnout syndrome is associated with psychological disorders like insomnia, chronic low mood, irritability, and the tendency for self-harm. The limitation of this study is that it is a single-centered study with a small sample size. Doctors across the country face varied issues, but these results give insight into the serious issue of doctor burnout.

Conclusion

Burnout syndrome is prevalent among doctors, and it is important to identify and address symptoms. Stress management strategies like psychological counseling and meditation should be available for residents.

Conflict of interest

The authors declared absence of conflict of interest.

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