# PROFESSIONAL BURNOUT AMONG DOCTORS IN REHMAN MEDICAL INSTITUTE, PESHAWAR, KHYBER PAKHTUNKHWA

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## ABSTRACT

**Introduction:** Burnout is a monster which ultimately saps an individual's productivity and reduces one's energy, leaving an individual feeling increasingly helpless, hopeless, and resentful. Burnout is a gradual process that takes years to build up. This study was done to determine the extent and types of professional burnout among the medical professionals of a tertiary care private hospital of Peshawar, Khyber Pakhtunkhwa.

Materials & Methods: It was a cross-sectional study, conducted in Rehman Medical Institute (RMI) Peshawar, from March to June 2015. All the doctors working in Rehman Medical Hospital were included; the sample size was 150 and universal sampling technique was used. The questionnaires had four parts related to Socio-demographic data, Professional data, Free time activities, and the Maslach Burnout Inventory (MBI). For analysis of data related to MBI, we added up each component (emotional exhaustion, depersonalization, and reduced personal accomplishment). The reference values of the Center of Advanced Studies on Burnout Syndrome (NEPASB) were used for comparing obtained values.

**Results:** The response rate out of 150 questionnaires was 62% (n=93 participants); among them 57(61%) were male and 36(39%) were female; it was found that 33% of doctors had severe professional burnout, 36% moderate burnout and 31% mild professional burnout. Regarding emotional exhaustion (EE), 48.4%, 26% and 26% have severe EE, moderate EE and mild EE respectively. Also 32.3%, 39.8% and 28% doctors have severe, moderate and mild depersonalization respectively. As far as personal accomplishment is concerned; 20.4% have mild, 41% moderate, and 39% have high personal accomplishment.

**Conclusions:** Majority of doctors had moderate level professional burnout, and males were having more professional burnout than females.

Keywords: Burnout, Professional: Depersonalization; Professional Practice.

#### INTRODUCTION

Burnout is a monster which ultimately saps an individual's productivity and reduces one's energy, left an individual with feeling of increasingly helpless, desperate and resentful. As a result, an individual may feel like he/she has nothing more to give. Burnout is a gradual process that takes years to build up. The signs and symptoms of burnout are few at first, but they get worse as time goes on.<sup>1</sup>

The study conducted in hospital personnel of Spain show that the average burnout was 47.16  $\pm$  7.93, with the highest percentage related to emotional exhaustion and lack of self-fulfillment.<sup>2</sup>

The information obtained suggests that to have a post of high level, to be unmarried and to be women are risk factors for higher levels of emotional exhaustion.<sup>3, 4, 5</sup>

The study conducted in the Canadian hospital based child protection professionals showed that, one third (34.1%) of respondents exhibited burnout. Job satisfaction was high, with 68.8% finding their job quite satisfying, whereas 26.2% found their job quite stressful.<sup>6</sup>

Professional burnout rates among orthopedic surgeons are range from 50-60%, which is higher than general surgeons (range from: 30-40%), with

the highest rate of emotional exhaustion and depersonalization scores.<sup>7</sup>

A study of anesthesiologists shows that, 57.9% experienced exhaustion, 44.8% dearth of personal accomplishment and 90.9% depersonalization. Depersonalization among anesthesiologists is very high.<sup>8</sup>

Doctors working in emergency medicine had burnout levels in excess that is 60% as compared with physicians in general (38%). But still, most emergency medicine physicians were satisfied with their jobs. Both job-related that is years of practice, duration of work etc., and non-jobrelated factors that is age, sex, lifestyle factors are associated with burnout.<sup>9</sup>

Cardiology residents in Argentina have high degree of burnout, because they have high emotional exhaustion and depersonalization, found in the majority of respondents.<sup>10</sup>

Research done in New Zealand among medical consultants showed that the proportion of burnout in each of the three categories was as follows: High Emotional Exhaustion 29.7%; High Depersonalization 24.4%; and Low Personal Accomplishment 31.2%. One in five consultants was evaluated as having high overall burnout.<sup>11</sup>

A cross sectional study carried out amongst public doctors of Hong Kong showed that 31.4% of the respondents had high burnout. Among them 52.2% of high-burnout suffering doctors were very discontented with their profession. Excessive stress due to global workload and feeling that their work was not esteemed by others were the major factors associated with high emotional exhaustion and depersonalization.<sup>12</sup>

A cross sectional study conducted in Islamabad among the health professionals working in government hospitals revealed that overall satisfaction rate was 41% only, while 45% were somewhat satisfied and 14% of professionals highly unsatisfied with their work. And those who were unsatisfied, job environment, working description and time pressure were the important reasons. Other factors affecting the degree of satisfaction were lesser salaries, deficiency of training opportunities, inadequate supervision and lack of financial rewards.<sup>13</sup>

Survey conducted amongst house officers of district Abbottabad, showed that they had professional burnout symptoms and because of this reason their job performance was reduced; the study also showed that all factors affected males more as compared to females house officer.<sup>14</sup>

Keeping in sight the above facts and figures this research was conducted to find the extent of professional burnout amongst doctors in Rehman Medical Institute, Peshawar, Khyber Pakhtunkhwa; its causes and risk factors; the association between professional burnout and gender related responsibilities; and the association between professional burnout and the years of professional practice.

## **MATERIALS & METHODS**

The cross sectional study was conducted in Rehman Medical Institute (RMI) Peshawar from March to June 2015 and included all doctors working in RMI Hospital. Universal sampling technique was used to distribute the selfadministered questionnaires. All doctors who were not present during data collection or on leave were excluded.

The questionnaire used had four parts. Part 1 was for Socio-demographic data; Part 2 was for Professional data; Part 3 was for Free time activities; and Part 4 was the Maslach Burnout Inventory (MBI)<sup>15</sup>.

The Maslach burnout inventory (MBI) which has 22 questions designed by Maslach and Jackson<sup>15</sup> to assess the three aspects of burnout syndrome i.e., emotional exhaustion, depersonalization and lack of personal achievement. Separate subscales measure these aspects. Emotional exhaustion encompasses those feelings that result from

depletion of emotional resources. Depersonalization measures impersonal and uncaring attitude. The personal accomplishment subscale assesses feelings of competence and successful achievement in one's work with people. Mild changes were made to the questionnaire according to the work environment that the doctors have in Rehman Medical Institute.

All measures were taken to exclude any sort of bias in the data collection process. Scoring of all items surveyed were based on a Likert scale ranging from 6 to 0: (6) every day, (5) some times in a week, (4) once in a week, (3) some times in a month, (2) once in a month or less, (1) once in a year or less, and (0) never. All answers were coded and entered in SPSS version 17. For analysis of data related to MBI, the three components (emotional exhaustion, depersonalization, and reduced personal accomplishment) were added up. Obtained values were compared with the reference values of the Center of Advanced Studies on Burnout Syndrome (NEPASB), presented in Table 1.

Table 1: Maslach Burnout Inventory cutoff values

Categories	Low	Moderate	High
Emotional Exhaustion	0- 15	16-25	26- 54
Depersonalization	0-02	03-08	09-30
Personal Achievement	0- 33	34-42	43-48

# RESULTS

The sample comprised of 93 professionals (response rate 62%), with mean age  $32 \pm 6.8$  years. Socio-demographic data is shown in Table 2; gender wise distribution showed 57(61%) were male, while 36(39%) were females. Regarding marital status, 57(61%) were married, while 36 (39%) were unmarried. Out of 57 married, 50 (87.7%) were having children. Financial stress was present in 24(26%) subjects, 67(72%) did not have any financial stress, while 2 (2%) did not respond

to this question. Regarding duty time, majority doctors (83, 89%) were of morning shift and only 10(11%) were of night shift. The majority of subjects (83, 89%) did not play sports, with only 10(11%) playing sports like cricket, badminton and football. Regarding after-work activities, 27(29%) studied, 19(20%) watched TV/films, 15(16%) slept, 15(16%) spent time with family, 07(08%) travelled, 02(2%) played games and 08(09%) did not respond.

Table 2:	Socio-Dem	ograj	phic c	haracteristic	s of
	subj	ects (	n=93)	)	

Variables		Frequency (%)
Condon	Male	57 (61.3)
Gender	Female	36 (38.7)
Married	Yes	57 (61.3)
Have Children	Yes	50 (87.7)
Financial Stress	Yes	24 (25.8)
Duty shift	Morning	83 (89.2)
	Night	10 (10.8)
Take part in sports	Yes	10 (10.8)
	Studying	27 (29.0)
After Work Activities	Sleeping	15 (16.1)
	Watching TV/films	19 (20.4)
	Games	02 (2.2)
	With family	15 (16.1)
	Traveling	07 (7.5)

Regarding workload symptoms (Table 3), 57(61%) reported experiencing headaches; irritability was present in 63(67%), change in appetite in 52(56%), fatigability in 71(76%), and sleeping difficulty in 44(47%). Question asked about stomach problems, 36 (38%) answered yes they had them, while 57 (61%) answered no. Question regarding problem with concentration and memory when asked 52 (56%) answered yes they had this problem, while 41 (44%) answered no. Question regarding, about smoking when feeling stressed 20 (21%) answered yes, while 73 (7(%) answered no (P=0.005). Regarding use of antidepressants 3 (3%) answered yes while 90 (96%) answered no (p = 0.039).

Variables	Frequency (%)
Headache	57 (61.3)
Irritability	63 (67.7)
Change in appetite	52 (55.9)
Fatigability	71 (76.3)
Sleeping difficulty	44 (47.3)
Stomach problems	36 (38.7)
Problem with concentration and memory	52 (55.9)
Do you smoke when feeling stressed	20 (21.5)
Use of Antidepressants	03 (03.2)

Table 3:	Symptoms	Related to	Work Load
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Specialty wise distribution of doctors is as following; Medicine 18 (19%), Pediatric 14 (15%), Surgery 11 (12%), Anesthesia 11 (12%), Gynecology 9 (10%), Cardiology 8 (9%), Pathology laboratory 8 (9%), ENT 4 (4%), Oncology 4 (4%), Emergency 3 (3%), Eye 2 (2%) and Radiology 1 (1%). (Table 4)

Variable	Frequency (%)
Medicine	18 (19.4)
Pediatric	14 (15.1)
Surgery	11(11.8)
Anesthesia	11 (11.8)
Gynecology	09 (9.7)
Cardiology	08 (8.6)
Pathology Laboratory	08 (8.6)
ENT	04 (4.3)
Oncology	04 (4.3)
Emergency	03 (3.2)
Eye	02 (2.2)
Radiology	01 (1.1)

Data analysis revealed that 33% of doctors had severe/high professional burnout, 36% had moderate professional burnout, while 31% had mild/low professional burnout (Figure 1).



#### Figure 1: Professional burnout distribution

Evaluating the Emotional exhaustion (EE) it shows that 48.4% have high/severe EE, 25.8% have moderate EE while 25.8% have mild/low EE (Figure 2).



Exhaustion

Questions regarding Depersonalization (DP) gave; the results that, 32.3% have severe/high DP, 39.8% have moderate DP and 28% have mild/low DP (Figure 3).



Regarding Personal accomplishment (PA) it was noticed that 20.4% have mild/low PA, 40.9% have moderate PA and 38.7% have severe/high PA (Figure 4).



Regarding females (total=36) most were in the moderate state of professional burnout i.e.17 (47%), 10 (28%) were in mild/low professional burnout and 9 (25%) were in severe/high professional burnout level. (P=0.032) (Figure 5).





When correlation between professional burnout and years of practice in practical field was determined, it showed that doctors having <1 year experience (total=24) 10(42%) were in severe/high level of professional burnout. And those having 2-5 years' experience (total=44) 15(34%) were in severe/high professional burnout level.

Among those having 6-10 years of practice (total=9) 3(33%) were in high/severe level of professional burnout; of those having >10 years

of practice (total=16) 3(25%) were in high/severe level of professional burnout (Figure 6).



## Figure 6: Distribution of Years of Practice & Professional Burnout

## DISCUSSION

This study investigated the prevalence of burnout amongst different medical specialties and examined the associated factors related to burnout.

To our knowledge, this is the first report to compare most of the medical specialties in a hospital setting in Peshawar.

This study shows that 33% of professionals have high level of professional burnout. When compared to another study conducted by Grassi et al, on the Physicians working in Portuguese hospitals who participated in the study, present a high level of burnout (31%).<sup>16,17</sup>

In spite of this, when the results of this study were compared with those of Embriaco *et al*, a lower percentage of professionals were found to have burnout. A high level of burnout was identified in 29% of the respondents. While the number of professionals with a low level of PPA was more (42% vs. 20% in this study), those displaying DEP were lower in number (27% vs 32% in this study). Finally, the major difference between the two studies was the high level of EE found in 33% of the respondents (compared with 48% in this study).<sup>18</sup> In this study the female professionals have low level of professional burnout i.e. 25.6% as compared to male professionals i.e. 37.7%. Similar findings have been given by Thomas NK et al, which demonstrated that females have low professional burnout in comparison to males.<sup>19</sup> It corresponds with the studies of Tironi *et al*, in which the greatest prevalence rates of burnout were observed among younger male physicians.<sup>20</sup> In comparison to this study, Michalsen A et al, conducted a similar type of study on German medical professionals, showing an opposite findings in relation to this study and others by Thomas and Tironi, that, female status of burnout was higher than male.<sup>21</sup>

In this study the emotional exhaustion of high level was found to be in 46.8% of medical professionals. Regarding depersonalization, high level was found in 32.3%. Taking in consideration, the personal accomplishment, 20.4% were in low level. These findings were comparatively higher than other studies conducted by Campbell DA et al,<sup>22</sup> on medical professionals, which were found to be 32%, 13% and 4%, the emotional exhaustion, depersonalization and personal accomplishment respectively.<sup>21</sup>

# Limitations of the Study

1. Although this study has some strength, there are still several limitations that need to be addressed. First, our participants were from a single regional hospital; therefore, it is not possible to generalize the conclusions for medical professions across the whole of

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Peshawar hospitals. Therefore, the design for further study can expand to include more institutions.

- 2. Second, stressful life events and work-family conflicts, which may affect the outcome of burnout, as found in other studies, were not examined in this research.
- 3. Proper arrangement for the active participation of doctors should be done, since they are busy in their profession due to which filling the questionnaire was not that much up to mark.

# Conclusion

Professional groups were each affected in different ways by burnout sub dimensions, thus promoting the need for different interventions amongst professional teams in order to decrease burnout. These measures need to focus on decreasing EE, increasing PPA and on decreasing DEP amongst doctors.

# Recommendations

- 1. Further research is also necessary to explore and understand burnout and related risk factors amongst professional groups.
- 2. This might be fruitful if same kind of study is done every year to know the about the situation that what is going on.
- Other related medical professionals like nurses and paramedical staff may also be included in this type of study, because their profession is also full of stress.
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