

Frequency Of Burnout Among Healthcare Professionals In A Tertiary Care Hospital, After The COVID-19 Pandemic

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Abstract

Objective: In this study, we plan to estimate the frequency of burnout among healthcare providers in a specialized teaching Hospital.

Methods: A questionnaire based on the Copenhagen Burnout Inventory (CBI) including personal, work and client subscale was administered to various healthcare workers including staff nurses, residents and consultants.

Results: When the demographic data of 100 participants was analyzed it showed that there were 39 (39 %) males and 61 (61 %) females. The mean age of participants was 32.2 years. Professional categories enrolled were 40 nurses, 32 consultants and 28 postgraduate trainees. The mean level of personal burnout was 47.15 ± 15.73 , 38.53 ± 17.64 and 41.06 ± 15.78 among nurses, postgraduate trainees and consultants respectively. The level of work-related burnout was 45.95 ± 19.01 , 36.60 ± 14.93 and 36.75 ± 14.99 among nurses, postgraduate trainees and consultants respectively. Whereas client-related burnout was found to be 42.62 ± 16.63 , 27.67 ± 12.22 and 30.71 ± 18.04 among nurses, postgraduate trainees and consultants respectively. Burnout severity was higher among nurses, and also more commonly seen among females as compared to males. Lastly, younger respondents were more burned out compared to older respondents.

Conclusion: In conclusion, addressing burnout among healthcare professionals, particularly nurses, is crucial for the well-being of the healthcare force and the safety and quality of patient care. The study's recommendation for personal and institutional interventions is an essential step in mitigating this issue and ensuring a healthier, more effective healthcare system.

Keywords: Burnout severity, moderate burnout, Copenhagen Burnout Inventory.

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1. Introduction

Medical teaching and practice are considered a challenging profession in the global world today.¹ On one hand it brings personal and professional satisfaction but on the other hand, it also brings a high degree of stress and burnout. Health professionals in the medical field are the backbone of health systems, their health and well-being are of utmost importance for better patient care. Burnout has reached epidemic levels in health care.^{2, 3} Among European medical specialists burnout rates are between 25 – 60 %.⁴ Burnout is often described as a feeling of failure at both physical and emotional levels. American psychologist Herbert Freudenberg 1974 used the term burnout for the first time.⁵ Burnout is defined as a “syndrome characterized by a feeling of energy depletion, exhaustion, cynicism often related to a person’s job and reduced professional work capacity resulting from chronic work-related stress”.⁶ Burnout at the workplace results from chronic work-related stress and there are symptoms such as “feeling

of energy depletion or exhaustion, increased mental distance from one’s job or feeling of negativity and reduced professional efficacy”.⁷ According to WHO, burnout should not be classified as medical illness or mental disorder and it should be used specifically in occupational context and should not be used to apply any person’s experiences in other areas of life.⁸ Burnout is often seen among various professional workers like social workers, doctors, nurses, teachers, bus drivers police officers and research workers, but primarily amongst medical professionals. Burnout has deleterious effects on doctors, patients and health care systems.^{8,9} Internationally there is a growing tendency to investigate prevalence and causative agents of burnout. Hence once the prevalence rates are identified, proactive measures should be implemented to both prevent and address the issue, ultimately enhancing the quality of patient care and well beings of healthcare care workers¹⁰ Looking at the international picture burnout has reached a high level among US health care professional, and over 40 to 50

% of physicians and 30 to 40 % of nurses are experiencing mild or acute symptoms of Burnout.¹¹ A large cross-sectional survey carried out by Australian midwives showed that 46 % of midwives with moderate burnout 17% showed high burnout and 1.4% showed severe levels of burnout.¹² A large number of research studies conducted to estimate the prevalence and risk factors of burnout among healthcare providers in Pakistan.^{13,14} A comprehensive research study conducted by Kane, showed that there are 38% of burnout among physicians¹³. Another study on nurses showed high levels of Burnout and stress in a hospital in Karachi.¹⁴

This study is planned to find the frequency of burnout among healthcare professionals at Rawalpindi Institute of Cardiology. We are collecting data from a variety of healthcare professionals, including nurses, postgraduate residents and consultants, to compare the prevalence of burnout within these different groups.

2. Materials & Methods

Descriptive cross-sectional study, conducted at Rawalpindi Institute of Cardiology starting from 5th July 2021 to 5th September 2021. The sampling strategy is being adopted through non-probability convenience sampling. The sample size was calculated by the formula $S = Z^2 \times P \times (1-P) / M^2$. Out of 100 healthcare workers, including 40 staff nurses, 28 postgraduate trainees and 32 consultants, were included in this research. Healthcare professionals who gave consent (informed written consent) for participation like nurses, postgraduate residents and consultants were included in the study. The health professionals who were diagnosed case of depressive illnesses, Hypertension, diabetes mellitus and other chronic medical illnesses were excluded. Data collection tools were taken by the Copenhagen Burnout Inventory, which consists of 19 items. It evaluates personal-related (6 items), work-related (7 items), and client-related (6 items) burnouts. Twelve items have responses of frequency along a five-point Likert scale ranging from 100' (always), 75 (often), 50 (sometimes), 25 (seldom) and 0 (never/rarely). Seven items use response categories according to intensity like very low degree to very high degree (Score of 0 to 49 are mild burnout), (Scores of 50

to 74 are moderate burnout), (Scores of 75 to 99 are high burnout) and (scores of 100 are severe burnout).

Data will be collected by quantitative method. 100 participants were selected, including 40 staff nurses, 28 postgraduate trainees, and 32 consultants responded. Both proformas and online questionnaires were used from which 60 participants responded via written questionnaire and 40 responded via Google form. It was sent via WhatsApp. All questionnaires were analyzed, degree of burnout was calculated as mild, moderate or severe based on the calculation at the end of the form. Then all the data was entered on SPSS version 19. Data was analyzed. Descriptive statistics were calculated.

3. Results

In this study, a total of 100 healthcare workers were enrolled to assess burnout levels. There were 39 (39.0%) males and 61 (61.0%) females. The mean age of respondents was 32.2 ± 4.2 years. The professional categories enrolled were assessed. There were 40 (40.0%) nurses, 32 (32.0%) consultants and 28 (28.0%) postgraduate trainees. The level of burnout was assessed in the study respondents. The mean level of personal burnout was 42.79 ± 16.56 . The level of work-related burnout was 40.39 ± 17.16 whereas client-related burnout was found to be 34.63 ± 17.20 . The severity of burnout in terms of mild, moderate, high and severe burnout was assessed. Two-thirds of the respondents (65.0%) had mild levels of personal burnout, (26.0%) respondents had moderate and (9.0%) had high levels of personal burnout.

Table 1: Distribution of professional categories in the study (n=100)

Designation	Number of cases	Percentage (%)
Nurses	40	40.0%
Postgraduate trainees	28	28.0%
Consultants	32	32.0%

Similarly, there were (69.0%) of respondents with mild levels of work-related burnout whereas (26.0%) had a moderate level and (4.0%) had a high level, and (1.0%) had a severe level of work-related burnout. Moreover, of the total 100 respondents (79.0%) had a mild level of client-related burnout, (17.0%) had a moderate level,

and (2.0%) had a high level and severe level of client-related burnout.

Table 2: Comparison of burnout severity according to professional categories

	Nurses (n=40)	PGT (n=28)	Consultant (n=32)	p-value
Personal burnout				
Mild	21 (52.5%)	23 (82.1%)	21 (65.6%)	0.07
Moderate	15 (37.5%)	2 (7.1%)	9 (28.1%)	
High	4 (10.0%)	3 (10.7%)	2 (6.2%)	
Severe	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Work-related burnout				
Mild	25 (62.5%)	22 (78.6%)	22 (68.7%)	0.56
Moderate	11 (27.5%)	6 (21.4%)	9 (28.1%)	
High	3 (7.5%)	0 (0.0%)	1 (3.1%)	
Severe	1 (2.5%)	0 (0.0%)	0 (0.0%)	
Client related burnout				
Mild	28 (70.0%)	27 (96.4%)	24 (75.0%)	0.15
Moderate	8 (20.0%)	1 (3.6%)	8 (25.0%)	
High	2 (5.0%)	0 (0.0%)	0 (0.0%)	
Severe	2 (5.0%)	0 (0.0%)	0 (0.0%)	

Table 3: Comparison of mean level of burnout in different professional categories

	Nurses (n=40)	PGT (n=28)	Consultant (n=32)	p-value
Personal burnout				
Mean ± SD	47.15 ± 15.73	38.53 ± 17.64	41.06 ± 15.78	0.08
Work-related burnout				
Mean ± SD	45.95 ± 19.01	36.60 ± 14.93	36.75 ± 14.99	0.02
Client related burnout				
Mean ± SD	42.62 ± 16.63	27.67 ± 12.22	30.71 ± 18.04	<0.001

Further analysis was done to see the level of burnout according to the age and gender of respondents. It was noticed that females had significantly higher levels of personal, work-related and client-related burnout compared to their male counterparts.

Similarly, the younger respondents were found more burned out compared to older respondents. Nurses have more burnout than postgraduate trainees and consultants.

4. Discussion

Healthcare workers have had an immense effect on the quality of care given to patients. The mean level of personal burnout was 47.15±15.73, 38.53 ± 17.64 and 41.06 ± 15.78 among nurses, postgraduate trainees and consultants respectively. The level of work-related burnout was 45.95 ± 19.01, 36.60 ± 14.93 and 36.75 ± 14.99 among nurses, postgraduate trainees and consultants respectively. whereas client-related burnout was found to be 42.62 ± 16.63, 27.67 ± 12.22 and 30.71 ± 18.04 among nurses, postgraduate trainees and consultants respectively. Our findings were supported by international research data where they found burnout above 36% in all three levels of burnout; this research was carried out to investigate the prevalence and predictors of burnout among healthcare workers.^{15,16}

In another systemic review,¹⁷ found prevalence rates between 40 to 60 %. In this research study, they have found the prevalence of burnout among physicians, nurses, and medical students, which was missing in our study. This study showed that a large number of doctors across the Middle East were facing the problem of burnout on a large scale; it is linked with workload, job satisfaction, and adverse health issues. So, there is a great need to address this issue of burnout. We should do frequent assessments of burnout among workers, especially doctors, and nurses, and then should take effective measures to solve this issue through effective strategies like recognition, resilience^{18,19} etc. Resilience is the ability to handle stress by taking care of own physical and emotional health.²⁰

In this review study severity of burnout in terms of mild, moderate and severe burnout was assessed. Two-thirds of respondents (65 %) had a mild level of personal burnout, 26% had moderate and 9% had a high level of burnout. Similarly, there were (69.0%) of respondents with mild levels of work-related burnout whereas (26.0%) had moderate levels and (4.0%) had high levels, and (1.0%) had severe levels of work-related burnout. Moreover, of the total 100 respondents (79.0%) had a mild level of client-related burnout, (17.0%) had a moderate level, and (2.0%) had a high level and severe level of client-related burnout. These findings were

supported by a systematic review.¹⁷ In this systematic review, they have used CBI as we have used in our study, their sample size is quite large, they have studied burnout among 647 physicians, the prevalence of personal burnout was 44 %, and work-related burnout 46% and client-related burnout was estimated to be 34 %. The only difference from our study was that they have studied only physicians unlike our study, where we calculated burnout among three different categories of healthcare workers.

The results of the study showed that burnout severity was highest among nurses as compared to postgraduate trainees and consultants; this finding is supported by international and national research. Nursing is considered a stressful profession, probably due to work overload²¹ stressful working environment, dual responsibilities of home and hospital, conflicts in home and job, conflicts with colleagues, and dealing with sick patients.²² The resulted in job stress and burnout leading to decreased productivity, tiredness, harsh behaviour with patients and attendants, anxiety, frequently absent from job, health issues²³ lack of job satisfaction, and often depression if effective preventive strategies not adopted at both individual and institutional levels.²²

This finding is supported by another study showing a high level of emotional exhaustion among nurses, where they used MBI to assess burnout among nurses; more than 100 nurses were studied and found a high level of burnout among nurses in two large departments.²³ Another study conducted among nurses from five large hospitals showed a moderate level of burnout among nurses and an inverse ratio between burnout and job satisfaction.²⁴

Another important finding from the results of the study is that burnout is more commonly seen in females as compared to males, and also severity of all three forms of burnout is more common in female respondents.²⁵

This finding is supported by international research that found that stress and burnout are more common among female²⁶ this study was conducted in 21 primary health care centres and found that female physicians are showing more burnout symptoms as compared to males, and another observation we got from the study is that young people are showing more symptoms of burnout as compared to senior consultants, so we must take preventive measures and coach them coping skills and making working environment friendly and conducive, to help combat burnout symptoms.

As this study was carried out in the cardiac centre, burnout rates are high among nurses; post-graduate residents and consultants; more commonly noted among junior consultants, our findings are supported by international studies,²³⁻²⁶ as burnout leading to serious untoward effects on physical and emotional health of cardiologists. It may be due to increased workload, the complex nature of cardiac diseases, dealing with sick patients and dealing with deaths often. To avoid this, we must address the issues, explore the causes, and preventive measures like stress management and a healthy life style should be incorporated, above all working environment should be made conducive.

5. Conclusion

The advent of new technology has transformed the world into a closely interconnected global community. This shift has had a significant impact on various professionals, particularly those in the medical field, including doctors, nurses, and other paramedical staff. These healthcare professionals often find themselves overwhelmed by the constant influx of information, driven by the internet and the emergence of novel viruses. Burnout has become an important problem and a challenge for public health. Burnout in health care workers is harmful to the professional, the institution, and the patient. Risk situations should be identified and preventive measures should be implemented early to avoid future harm. This situation may aggravate when the flow of critically ill patients starts to exceed available capacities, as is for instance the case with the recent COVID-19 pandemic.

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Contributions:

Y.A, L.M, A.B, S., S.T.M, A.J - Conception of study

Y.A, L.M, A.B, S., S.T.M, A.J - Experimentation/Study Conduction

Y.A, L.M, A.B, S., S.T.M, A.J -

Analysis/Interpretation/Discussion

Y.A, L.M, A.B, S., S.T.M, A.J - Manuscript Writing

Y.A, L.M, A.B, S., S.T.M, A.J - Critical Review

Y.A, L.M, A.B, S., S.T.M, A.J - Facilitation and Material analysis

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