

CARING FOR THE CAREGIVERS: EXAMINING BURNOUT AND WORK-LIFE BALANCE AMONG HEALTHCARE PROFESSIONALS

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ABSTRACT

Background: Work-life balance involves creating and maintaining a supportive and healthy work environment so that employees can maintain a balance between work and personal responsibilities. The struggle to achieve the fine balance between personal and professional commitments often leads to stress in the employees' life.

Objectives: To explore factors and stressors associated with burnout at workplace. And to find out the relationship between work life balance (WLB) and burnout.

Methodology: A cross sectional study was conducted on healthcare professionals of one of the tertiary care hospitals and affiliated medical college. Convenient sampling method was used and all the healthcare professionals enrolled during the study period were included in the study. Burnout and work life balance were assessed in the study.

Results: A statistically significant association was observed between all three sub-dimensions of Work-Life Balance (WLB) and two sub-dimensions of burnout, namely emotional exhaustion and depersonalisation.

Conclusion: Feeling of burnout symptoms among health care professionals may bring about work-life imbalance and vice versa. The inability to balance between personal or family life and work life among health care professionals is mostly responsible for exhaustion.

KEYWORDS: Exhaustion, Mental health, Occupational stress, Job satisfaction, Quality of life

INTRODUCTION

Healthy work-life balance (WLB) is made challenging when healthcare professionals sacrifice their personal needs for their work (1, 2). Since work and personal life can function as a buffering and compensatory safety space for each other, a balance between them is necessary (3).

"Ensure healthy lives and promote well-being for all at all ages" is the third of Sustainable Development Goals proposed by United Nations General Assembly Open Working Group (OWG) (4). Employee's reaction to characteristics at the workplace that seem both physically as well as mentally threatening is known as work stress (5). Employees may feel less productive, poorly motivated, less safe at work and unhealthy due to high level of work stress (6).

Burnout in healthcare professionals due to work-life imbalance is related to both quality of the healthcare delivery system and quality of care provided due to loss of meaning in work, feelings of ineffectiveness, emotional exhaustion and the tendency to view people as objects (2, 7-12). Burnout is identified by feelings of energy depletion, exhaustion, negative feelings related to job, increased mental distance from one's job or decrease in professional efficacy (13).

Research shows that work life balance is negatively associated with depression, anxiety and other mental health problems, and positively associated with job satisfaction, life satisfaction and above all overall wellbeing (14-16). It is of utmost importance to understand connection of burnout with work life balance (WLB) because of its diverse and severe consequences (17). Research also shows that poor work life balance (WLB) leads to greater burnout, which ultimately leads to reduction in empathy. Healthcare professionals' empathy could reduce distress and anxiety of patients, improve their compliance and satisfaction, improve diagnostic accuracy and clinical outcomes, and in the end empower both physicians and patients (3).

Objectives

The objectives of the present study were to explore factors and stressors associated with burnout at work place and to find out the relationship between burnout and work life balance (WLB) among healthcare professionals.

MATERIALS AND METHODS

A cross sectional study was conducted during May 2023 to August 2023 at one of the tertiary care hospitals and a medical college situated in central Gujarat. Sampling method used was convenient sampling. The study population was healthcare professionals working at the tertiary care hospital and the medical college. All the healthcare professionals were included in the study. Those who were not willing to participate and did not give the consent were excluded from the study. The ethical approval was obtained from the institutional ethical committee before conducting the study.

After obtaining the permission from ethical committee the data collection was started. Data were collected by personal interview with every individual. Informed consent was taken prior to obtaining information regarding the study. Data were collected with the help of a pre-formed, pre-tested, semi structured questionnaire designed as a Google form. Maslach Burnout Inventory (MBI) was used to assess the burnout and a 15-item scale adapted by Hayman (2005) was used to assess the work life balance among health care professionals.

Burnout was assessed using the 22-item Maslach Burnout Inventory (MBI), which was initially developed by Maslach and Jackson. The participants responded to the inventory based on their present circumstances, using a 7-point scale for each question. The MBI is structured into three subscales: Emotional Exhaustion (feelings of emotional depletion evaluated by nine items), Depersonalization (impersonal attitudes towards patients assessed by five items), and Personal Accomplishment (feelings of competence and achievement measured by eight items) (18).

A 15-item scale was utilized to assess work-life balance, which was adapted by Hayman (2005) from an earlier tool initially developed by Fisher-McAuley et al. (2003). The original instrument comprised 19 items and was structured to evaluate three key aspects of work-life balance: Work Interference with Personal Life (WIPL – seven items), Personal Life Interference with Work (PLIW – four items), and Work/Personal Life Enhancement (WPLE – four items). Responses were recorded using a 5-point Likert scale ranging from one (Strongly Disagree) to five (Strongly Agree). For the WIPL and PLIW dimensions, higher scores indicated greater interference, which reflects a lower degree of work-life balance. In contrast, a higher score on the WPLE dimension suggested stronger positive interaction between work and personal life, indicating a better work-life balance (19).

Definitions

Emotional Exhaustion: Emotional exhaustion is typically connected to a relationship with work that is perceived as fatigue at the very idea of work, chronic fatigue, stressful, trouble sleeping, physical problems. As it is likely that during holidays these symptoms would be decreased, therefore it is seen as different from depression by Maslach (18).

Depersonalization: Depersonalization or loss of empathy is characterized by a loss of regard for others. It can also be mentioned as “dehumanization” in interpersonal relations. Excessive emphasis on detachment can result in cynicism, negative attitudes towards patients or colleagues, feelings of guilt, avoidance of social interactions and withdrawal into oneself (18).

Personal Accomplishment: The person evaluates themselves unfavourably, sensing an inability to progress the situation. This aspect reflects the discouraging impact of facing a challenging, recurring circumstance resulting in perceived failure despite earnest attempts. Doubts arise regarding their true capabilities to achieve goals. This aspect is a feeling that acts as a “safety valve” and contributes to bringing about a balance if occupational exhaustion and depersonalization occur. It guarantees satisfaction in the workplace and fosters a positive perception of professional accomplishments (18).

Work Interference with Personal Life (WIPL): The WIPL dimension measures how much one’s work obligations disrupt personal life (19).

Personal Life Interference with Work (PLIW): The PLIW dimension captures the extent to which personal responsibilities hinder work-related tasks (19).

Work/Personal Life Enhancement (WPLE): The WPLE component focuses on the mutually beneficial influence between work and personal life, indicating the degree to which experiences in one domain positively contribute to the other (19).

Statistical Analysis

Collected data were compiled and processed using Microsoft Office Excel 2016. We utilized descriptive and analytical statistical techniques to compile the findings. In descriptive methods overall percentage were calculated for variables used in the study i.e. age, gender, place of residence, religion, marital status, type of family, education etc. In analytical methods t-test and one-way ANOVA test were used to compare continuous variables with normal distribution among inter-group comparisons. We employed the chi-square (χ^2) test to compare categorical variables. Scores of study participants by MBI and Hayman scale were compared for various variables used in the study separately. All three sub-dimensions of MBI were compared with all three sub-dimensions of WLB separately. A P value < 0.05 was considered as statistically significant. Data are presented in tabulated format. Result for statistical significance between two variables

is mentioned in the individual table.

RESULTS

Table 1 shows general characteristics of total 314 study participants. Out of total study participants 173 (55.1%) were males and 141 (44.9%) were females. It also shows gender wise distribution of study participants in terms of various study variables included i.e. age, place of residence, religion, marital status, type of family etc.

Table 2 indicates the burnout scores by the characteristics of study participants including some basic demographic characteristics. The mean ($\pm$ s.d.) burnout score of all study participants was 53.23 ($\pm$ 12.03). It also shows that study participants aged 31 to 40 years, residing in urban areas, doctors and post graduates had higher scores on MBI which was statistically significant.

Table 3 shows the work-life balance scores by the characteristics of study participants including some basic demographic characteristics. The mean ($\pm$ s.d.) work-life balance score of all study participants was 43.61 ($\pm$ 6.86). Study participants residing in semi-urban areas, unmarried, having monthly family income between ₹3,00,000 to ₹5,00,000 and doctors had higher scores on WLB which was statistically significant. Table 4 and table 5 show association of emotional exhaustion and depersonalisation with all three dimensions of work-life balance, i.e. WIPL, PLIW and WPLE respectively. The prevalence of high and moderate degree of emotional exhaustion and depersonalisation were higher among the study participants having high score of WIPL and PLIW. Whereas the prevalence of low degree of emotional exhaustion and depersonalisation was higher among the study participants having high score of WPLE. Observed all the differences were statistically significant.

Table 6 indicates association of personal accomplishment assessment with all three dimensions of work-life balance, i.e. WIPL, PLIW and WPLE. The prevalence of high and low degree of personal accomplishment assessment was higher among the study participants having high score of WIPL. Observed difference was statistically not significant. Whereas the prevalence of moderate and low degree of personal accomplishment assessment was higher among the study participants having low score of PLIW and WPLE. Observed differences were statistically significant.

DISCUSSION

The findings from this study provide valuable insights into the characteristics and well-being of the participants, particularly concerning burnout and work-life balance (WLB). The demographic distribution showed a slight male predominance among the participants, with a majority residing in urban areas. Middle-aged professionals with higher qualification, particularly in demanding roles such as healthcare, were more susceptible to burnout. Many participants struggled to maintain a healthy balance between work and personal life.

Interestingly, the association between personal accomplishment assessment and WIPL did not reach statistical significance, suggesting that while personal accomplishment assessment impacts WLB, other factors like personal characteristics, health and well-being and time management might mediate this relationship. However, the analysis of emotional exhaustion and depersonalization with WLB revealed significant associations.

In a study conducted by Muayad Azzam et al. (2023), which surveyed 625 practicing physicians in Jordan, it was found that work-life conflict was a widespread issue among Jordanian doctors. The research emphasized the crucial role of maintaining a healthy work-life balance (WLB) in enhancing physicians' well-being and professional effectiveness. Furthermore, the study pointed out that the adverse consequences of poor WLB and elevated stress levels not only affect the physicians themselves but also pose risks to patient safety, lead to an increase in medical errors, and hinder the educational development of resident doctors (20).

Maki Matsuo et al. (21) in their study involving full-time nurses examined how burnout, sense of coherence (SOC), and striving for work-life balance (S-WLB) influence the intention to leave. Burnout was shown to impact the intention to leave through direct ($\beta = 0.5$, $P < 0.01$) as well as indirect ($\beta = 0.03$, $P < 0.05$) pathways. Additionally, S-WLB was identified as a mitigating factor that lessened burnout's influence on the intention to leave ($\beta = -0.35$, $P < 0.01$). In the present study there is positive association between burnout and work-life balance.

The findings from the study done by Changwu Wei and Jian-Hong Ye (22) showed that sustainable development of the well-being of college teachers can be achieved by proper WLB. Their findings also indicated that in reducing Emotional Exhaustion (EE) and enhancing Well-Being (WB) WLB plays an important role. In the present study WLB has showed positive association with Emotional Exhaustion and Depersonalisation.

Hwo-Yeon Seo et al. (3) in their study involving health professionals found that the subjective WLB score was significantly associated with older age ($F = 6.94$, $P < 0.001$), higher education ($t = -2.1$, $P = 0.038$) and marital status ($t = -3.1$, $P = 0.003$). Higher MBI scores were related to younger age ($F = 7.13$, $P < 0.001$).

Their findings also indicated that WLB had a positive association with both empathy and personal accomplishment (one of the burnout sub-dimensions) serving as a significant mediating variable in this relationship. These results are similar to the results in the present study.

Niamh Humphries et al. (23) in their study involving hospital doctors found that majority of the study participants (i.e. 73%) were having a feeling of strain due to work–life imbalance. These results are resembling to the results of the present study.

A 2018 report by Reith TP (24) published in Cureus showed that more than half of physicians and one in three nurses experienced symptoms of burnout. Various articles included in this report for review showed that emotional exhaustion and burnout have emerged as a major problem. When working in pressurized, life-or-death situations, it's inevitable that one will eventually feel disconnected from his/her work and lose a sense of why he/she entered the field in the first place. For the sake of their career and the sake of their patients, avoiding burnout is a must. The burnout epidemic should be taken care of to discontinue ill effects to both physicians and patients.

Marafi H (25) identified issues faced by employees in education sector when they have to work on weekends or take any special classes other than the scheduled ones. These workers encounter challenges with balancing work and personal life, leading to health concerns. This leads to family disturbance and ultimately leads to de-motivation and scope of turnover. However, if adequate compensation is provided and prior information is given this would help to reduce the negative effect on work life of employees.

Limitations

Despite providing valuable insights into burnout and work-life balance (WLB) among healthcare professionals, this study has several limitations. First, the cross-sectional design limits the ability to infer causal relationships between the variables. Longitudinal studies are needed to understand how burnout and WLB evolve over time and the long-term effects of interventions.

Second, the sample showed a slight male predominance and was largely urban-based, which may not be representative of the broader healthcare professional population. This limits the generalizability of the findings to other settings or demographics.

Third, while the study identified significant associations between certain demographic characteristics and burnout or WLB, it did not account for potential confounding factors such as organizational culture, support systems, and individual coping mechanisms. These factors could significantly influence both burnout and WLB and should be considered in future research.

CONCLUSION

The study results showed that study participants aged 31 to 40 years, residing in urban areas, doctors and post graduates had higher scores on MBI which was statistically significant. Study participants residing in semi-urban areas, unmarried, having monthly family income between ₹3,00,000 to ₹5,00,000 and doctors had higher scores on WLB which was statistically significant. Association of all three sub-dimensions of WLB with two sub-dimensions of burnout, emotional exhaustion and depersonalisation, appeared statistically significant. Feeling of burnout symptoms among health care professionals may bring about work-life imbalance and vice versa. The inability to balance between personal or family life and job or work life among health care professionals is mostly responsible for exhaustion.

To overcome this there is requirement of a reduction of work stress of health care professionals in terms of work-life and effort-reward imbalance. In this regard, hospital organizations must focus on listening, and responding, to the needs of the health care professionals. Further studies are needed to establish the causal relationship between various variables used in the study.

Table 1: General characteristics of the study participants (N=314)

Study Variables	Male		Female		Total	
	No.	%	No.	%	No.	%
Age (Years)						
<=30	140	53.85%	120	46.15%	260	100%
31-40	23	62.16%	14	37.84%	37	100%
41-50	5	45.45%	6	54.55%	11	100%
>50	5	83.33%	1	16.67%	6	100%
Place of Residence						
Rural	5	71.43%	2	28.57%	7	100%
Urban	92	55.76%	73	44.24%	165	100%

Semi-Urban	76	53.52%	66	46.48%	142	100%
Religion						
Hindu	121	55.50%	97	44.50%	218	100%
Muslim	3	60.00%	2	40.00%	5	100%
Jain	43	51.81%	40	48.19%	83	100%
Others	6	75.00%	2	25.00%	8	100%
Marital Status						
Unmarried	136	55.06%	111	44.94%	247	100%
Married	33	54.10%	28	45.90%	61	100%
Divorced	2	33.33%	4	66.67%	6	100%
Type of Family						
Joint	59	58.42%	42	41.58%	101	100%
Three Generation	15	55.56%	12	44.44%	27	100%
Nuclear	99	53.23%	87	46.77%	186	100%
Monthly Family Income (Rupees)						
<=100000	30	51.72%	28	48.28%	58	100%
100000-300000	125	54.35%	105	45.65%	230	100%
300000-500000	12	70.59%	5	29.41%	17	100%
>500000	6	66.67%	3	33.33%	9	100%
Education						
Graduate	20	43.48%	26	56.52%	46	100%
Post Graduate	153	57.09%	115	42.91%	268	100%
Post in Occupation						
Doctor	160	59.26%	110	40.74%	270	100%
Nurse	13	29.55%	31	70.45%	44	100%
Department						
Clinical	152	57.36%	113	42.64%	265	100%
Non & Para Clinical	21	42.86%	28	57.14%	49	100%

Tables 2: The burnout scores by the characteristics of study participants (N=314)

Study Variables	Mean & SD	t or F	p value
Total	53.23 ± 12.03		
Sex			
Male	52.9 ± 13	-0.54331	0.587305
Female	53.64 ± 10.76		
Age			
<=30	53.25 ± 11.67	5.23408	0.001546
31-40	57.19 ± 11.86		
41-50	45.73 ± 14.4		
>50	39.2 ± 12.11		
Place of Residence			
Rural	49.29 ± 21.9	3.92234	0.020782
Urban	55.27 ± 8.23		
Semi-Urban	51.64 ± 13.91		

Religion			
Hindu	53.18 ± 12.72	1.84877	0.138274
Muslim	52.4 ± 20.85		
Jain	52.47 ± 9.18		
Others	62.88 ± 10.27		
Marital Status			
Unmarried	53.1 ± 12.14	0.10237	0.902727
Married	53.85 ± 12.15		
Divorced	53.33 ± 5.43		
Type of Family			
Joint	53.23 ± 13.29	1.13042	0.32422
Three Generation	56.48 ± 13.01		
Nuclear	52.76 ± 11.12		
Monthly Family Income			
<=100000	54.02 ± 21.72	1.21494	0.304364
100000-300000	52.87 ± 8.17		
300000-500000	51.84 ± 7.58		
>500000	60.11 ± 9.51		
Education			
Graduate	47.52 ± 15.94	-3.54716	0.000449
Post Graduate	54.21 ± 10.97		
Post in Occupation			
Doctor	53.9 ± 11.15	2.46726	0.014152
Nurse	49.11 ± 15.96		
Department			
Clinical	53.28 ± 11.68	0.18374	0.854333
Non & Para Clinical	52.94 ± 13.89		

Table 3: The work-life balance scores by the characteristics of study participants (N=314)

Study Variables	Mean & SD	t or F	p value
Total	43.61 ± 6.86		
Sex			
Male	43.23 ± 6.9	-1.09535	0.274208
Female	44.08 ± 6.81		
Age			
<=30	43.87 ± 6.95	1.5526	0.200933
31-40	43.27 ± 5.76		
41-50	40.36 ± 7.09		
>50	39.6 ± 7.14		
Place of Residence			
Rural	42.29 ± 8.9	3.97887	0.019667
Urban	42.48 ± 5.72		
Semi-Urban	44.64 ± 7.52		
Religion			
Hindu	43.64 ± 7.03	0.14399	0.93348

Muslim	43 ± 2		
Jain	43.71 ± 6.81		
Others	42.13 ± 5.14		
Marital Status			
Unmarried	44.09 ± 6.88	4.09763	0.017517
Married	42.26 ± 6.19		
Divorced	37.67 ± 9.05		
Type of Family			
Joint	42.65 ± 6.52	1.55272	0.213308
Three Generation	44.63 ± 6.9		
Nuclear	43.98 ± 7.01		
Monthly Family Income			
≤100000	41.31 ± 7.14	4.92102	0.002357
100000-300000	43.82 ± 6.13		
300000-500000	48.12 ± 11.45		
>500000	44.56 ± 7.68		
Education			
Graduate	42.59 ± 7.59	-1.09291	0.275275
Post Graduate	43.79 ± 6.73		
Post in Occupation			
Doctor	43.99 ± 6.83	2.4783	0.01373
Nurse	41.25 ± 6.67		
Department			
Clinical	43.79 ± 6.99	1.12908	0.259731
Non & Para Clinical	42.59 ± 6.05		

Table 4: Association of Emotional Exhaustion with sub-dimensions of Work-life balance

WLB	Emotional Exhaustion						Total	χ^2	df	<i>p</i> value
	High degree		Moderate degree		Low degree					
	n	%	n	%	n	%				
WIPL										
High Score	7	4.79	28	19.18	111	76.03	146	8.929	2	0.01151045
Low Score	3	1.79	16	9.52	149	88.69	168			
Total	10		44		260		314			
PLIW										
High Score	6	5.41	21	18.92	84	75.68	111	6.661	2	0.03577521
Low Score	4	1.97	23	11.33	176	86.70	203			
Total	10		44		260		314			
WPLE										
High Score	2	1.21	17	10.30	146	88.48	165	9.019	2	0.01100396
Low Score	8	5.37	27	18.12	114	76.51	149			
Total	10		44		260		314			

Table 5: Association of Depersonalisation with sub-dimensions of Work-life balance

WLB	Depersonalisation						Total	χ^2	df	<i>p</i> value
	High degree		Moderate degree		Low degree					
	n	%	n	%	n	%				
WIPL										
High Score	11	7.53	10	6.85	125	85.62	146	7.387	2	0.02488475
Low Score	5	2.98	4	2.38	159	94.64	168			
Total	16		14		284		314			
PLIW										
High Score	13	11.71	9	8.11	89	80.18	111	21.879	2	0.00001774
Low Score	3	1.48	5	2.46	195	96.06	203			
Total	16		14		284		314			
WPLE										
High Score	3	1.82	4	2.42	158	95.76	165	11.642	2	0.00296464
Low Score	13	8.72	10	6.71	126	84.56	149			
Total	16		14		284		314			

Table 6: Association of Personal Accomplishment with sub-dimensions of Work-life balance

Table 6. Association of Personal Accomplishment with sub-dimensions of work-life balance										
WLB	Personal Accomplishment						Total	χ^2	df	<i>p</i> value
	High degree		Moderate degree		Low degree					
	n	%	n	%	n	%				
WIPL										
High Score	99	67.81	20	13.70	27	18.49	146	2.893	2	0.23539272
Low Score	107	63.69	35	20.83	26	15.48	168			
Total	206		55		53		314			
PLIW										
High Score	86	77.48	12	10.81	13	11.71	111	10.812	2	0.00448956
Low Score	120	59.11	43	21.18	40	19.70	203			
Total	206		55		53		314			
WPLE										
High Score	118	71.52	26	15.76	21	12.73	165	6.016	2	0.04939036
Low Score	88	59.06	29	19.46	32	21.48	149			
Total	206		55		53		314			

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