

Burnout among nurses working at Dow and Civil Hospitals in Karachi: A cross-sectional study

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Abstract

Objective: To identify the frequency of burnout and its associated factors among nurses.

Methods: The analytical cross-sectional study was conducted in Karachi from February 1 to March 31, 2018, and comprised nurses from Dow University Hospital and Dr. Ruth Pfau Civil Hospital who had minimum one-year working experience in a tertiary care setting. Maslach Burnout Inventory was used to measure burnout among the nurses. Data was analysed using SPSS 21.

Result: Of the 227 nurses, 155(68.3%) were males, 115(50.7%) had 3-5 years of professional experience, and 145(63.9%) had moderate burnout. There was significant association of burnout with duration of professional experience ($p=0.004$), job nature ($p=0.044$) and equipment facility in the assigned units ($p=0.22$).

Conclusion: Moderate level of burnout was found among two-third of the nurses working in tertiary care hospitals in Karachi.

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Introduction

Burnout is a condition that produces several effects in a person's physical, psychological and social life that can lead to a decrease in quality of care, work absenteeism, low spirit and ultimately quitting the job.¹ It is a state of both physical and emotional exhaustion that mainly occurs due to stress which produces a negative attitude and behaviour.^{2,3} Furthermore, burnout is based on three dimensions: emotional exhaustion (EE) defined by listlessness, lack of enthusiasm and exhaustion of emotional resources; depersonalisation (DP) characterised by negative attitudes toward peers and colleagues; and diminished personal (PA) accomplishment. All this can eventually lead a worker to negative self-evaluation and discontentment with their own performance at work.⁴

In the nursing profession, individuals are greatly exposed to circumstances that cause the occurrence of burnout due to increasing patients' demand and also due to the emotional nature of their job.⁵ It is very important to work out burnout among nurses as their well-being affects the stability in the healthcare workforce and, therefore, the quality of care provided.⁶ Burnout is a significant issue. Researchers have endeavoured to

contain the degree of burnout to shorten its impeding outcomes.⁷ There are many associated factors of burnout among nurses such as age, years of service, lack of adequate staff, the hierarchy of nurses, level of education, inadequate clinical supervision, male gender, demanding patients, working in rotational duties, and lack of administrative support.⁸⁻¹⁰ Other factors are emotional stress, excess workload, poor leadership, unevaluated work, low salary package, conflict with patients and other hospital staff, conflict with doctors and other nurses, accepting responsibility, the existence of stressors linked to personal life and feeling of job insecurity.^{11,12}

A previous study showed high levels of burnout among nursing professionals and some associated factors included gender, age, marital status, type of work shift, level of healthcare, administrative tasks, and healthcare service areas.¹³ Some other studies indicate that the prevalence of burnout is very high among nurses, especially those who were working in night shifts.¹⁴⁻¹⁶ Different elements may add to it, for instance, nurses being away from home and their families ceaselessly. It causes a sense of powerlessness to invest adequate energy in family, circadian rhythm disruption and severe fatigue. Subsequently, they burn out quicker and the likelihood of it happening is higher when compared to nurses who work on day shifts. In addition, a study conducted among nurses working in Lahore, Pakistan, revealed a higher level of burnout and low-level quality of life among nurses working in

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gynaecology and surgery departments, and especially among those nurses who worked longer shift duties.¹⁷ Nurses in these departments find the environment to be more testing in view of different variables, like taking care of patients in agony, different pregnancy-related difficulties, ceaseless medical procedures, alongside noteworthy commotion. In the surgery department, death during work shift can cause incredible stress for the staff. Multiple deaths may bring about EE.

Moreover, nurses devote themselves professionally, with a holistic approach, including psychological, physical and emotional elements, for the care of patients. This often leads to long working hours and neglect of personal and emotional needs and all of this make nurses more susceptible to burnout. On account of these consequences, a large number of nurses leave the profession, which ultimately affects the quality of patient care and the patients' level of satisfaction with regard to nurses. The current study was planned to determine the frequency of burnout and its associated factors among nurses working in a tertiary care setting.

Subjects and Methods

The analytical cross-sectional study was conducted in Karachi from February 1 to March 31, 2018, and comprised nurses from Dow University Hospital and Dr. Ruth Pfau Civil Hospital. After approval from the ethics review board of Dow University of Health Sciences (DUHS), Karachi, sample size was calculated using Open-Epi software,¹⁸ at 95% confidence interval (CI), and 5% margin of error with expected moderate to high levels of burnout among nurses being 82%.¹⁹ The sample was raised using non-probability purposive sampling technique. Those included were nurses of either gender having at least one-year clinical experience and working in either fixed or rotational duties. Those who did not meet the criterion and those who were not willing to participate were excluded. After written informed consent from the subjects, data was collected using Maslach Burnout Inventory (MBI).²⁰ MBI consists of 22 questions divided into EE, DP and PA subscales. EE has 9 questions and a total score of 63. A 0-16 score is considered low level, 17-26 moderate, and 27 or over high level. DP subscale consists of 5 questions with a total score of 35. A 0-6 score is considered low level, 7-12 moderate and 13 or over high level. PA consists of 8 questions with a total score of 56. A 0-31 score is considered low level, 32-38 moderate, and 39 or over high level.

Data was analyzed using SPSS 21. For each participant, scale scores were measured for burnout. Overall percentage of burnout was calculated. Mean scores and frequency analysis were performed. Pearson chi-square test was used to identify the association of burnout with demographic and other variables. $P \leq 0.05$ was considered statistically significant.

Result

Of the 227 nurses, 115(%) were from Dr. Ruth Pfau Civil Hospital and 112(%) from Dow University Hospital; 155(68.3%) were males; and 115(50.7%) had 3-5 years of professional experience (Table-1).

Overall, 145(63.9%) had moderate and 34(15%) had high level of burnout (Table-2).

Job nature, duration of professional experience and equipment facility were significantly associated with overall burnout ($p < 0.05$) (Table-3).

Table-1: Socio-demographic characteristics.

Variables	Category	Frequency	Percentage
Age (Years)	20 to 30	105	46.3
	31 to 40	94	41.4
	41 to 50	28	12.3
Sex	Male	155	68.3
	Female	72	31.7
Educational Level	Diploma	112	49.3
	Post-RN BSc.N	115	50.7
Marital Status	Single	96	42.3
	Married	131	57.7
Job Nature	Regular Job	166	73.1
	Contract Job	61	26.9
Professional Experience	1 to 2 Years	46	20.2
	3 to 5 Years	115	50.7
	6 to 10 Years	49	21.6
	>than 10 Years	17	7.5
Working Shift	Fixed	120	52.9
	Rotation	107	47.1
Equipment Facility	Yes	149	65.6
	No	78	34.4

RN: Registered Nurses, B.Sc: Bachelor of Science. N: Nursing.

Table-2: Burnout and its subscales.

Sub-scales	Low	Moderate	High
Emotional Exhaustion (EE)	81 (35.7%)	97 (42.7%)	49 (21.6%)
Depersonalisation (DP)	56 (24.7%)	108 (47.6%)	63 (27.7%)
Personal Accomplishment (PA)	182 (80.2%)	23 (10.1%)	22 (9.7%)
Burnout (Total)	48 (21.1%)	145 (63.9%)	34 (15%)

Table-3: Distribution of overall burnout by socio-demographic characteristics.

Variable		Burnout Total			P-value
		Low	Moderate	High	
Age (Years)	20 to 30	24 (22.8%)	70 (66.7%)	11 (10.5%)	0.257
	31 to 40	17 (18.1%)	61 (64.9%)	16 (17%)	
	41 to 50	7 (25%)	14 (50%)	7 (25%)	
Sex	Male	33 (21.3%)	100 (64.5%)	22 (14.2%)	0.888
	Female	15 (20.8%)	45 (62.5%)	12 (16.7%)	
Educational Level	Diploma	22 (19.6%)	74 (66.1%)	16 (14.3%)	0.789
	Post-RN BSc.N	26 (22.6%)	71 (61.7%)	18 (15.7%)	
Marital Status	Single	21 (21.8%)	64 (66.7%)	11 (11.5%)	0.445
	Married	27 (20.6%)	81 (61.8%)	23 (17.6%)	
Job Nature	Regular Job	31 (18.7%)	114 (68.7%)	21 (12.6%)	0.044*
	Contract Job	17 (27.9%)	31 (50.8%)	13 (21.3%)	
Professional Experience	1 to 2 Years	17 (37.0%)	24 (52.2%)	5 (10.8%)	0.004*
	3 to 5 Years	21 (18.3%)	83 (72.2%)	11 (9.5%)	
	6 to 10 Years	7 (14.3%)	29 (59.2%)	13 (26.5%)	
	>10 Years	3 (17.7%)	9 (52.9%)	5 (29.4%)	
Working Shift	Fixed	27 (22.5%)	80 (66.7%)	13 (10.8%)	0.178
	Rotation	21 (19.6%)	65 (60.8%)	21 (19.6%)	
Equipment Facility	Yes	38 (25.5%)	94 (63.1%)	17 (11.4%)	0.022*
	No	10 (12.8%)	51 (65.4%)	17 (21.8%)	

RN: Registered Nurses, B.Sc: Bachelor of Science. N: Nursing.

Discussion

The prevalence of moderate burnout was more prominent among nurses aged <40 years compared to participants aged >40 years. This finding suggested that the occurrence of moderate level burnout lessened with older age. The finding is in line with literature.^{5,21} The current study showed that moderate burnout was more prevalent in male participants; a finding in line with an earlier study.¹³ Moderate level of burnout was found in diploma holders compared to nurses having a bachelor's degree. This finding is not consistent with results of a previous study¹ that showed higher burnout levels among participants with comparatively higher educational status. In our study, high level of burnout was found in married participants compared to unmarried ones. These findings are similar to a study¹⁹ that suggested a higher level of burnout among married participants. In contrast, some other studies^{7,22} conducted in Ethiopia and Nigeria revealed that married individuals were less likely to experience burnout compared to those who were single. In our study, variables such as age, gender, education level, marital status, duration of the current job, monthly

income, working shift and administrative support did not show statistically significant association with burnout ($p>0.05$).

The current study revealed significant association between burnout and job nature. High level of burnout was prominent among nurses having contract jobs. A study²³ on Lebanese nurses reported that nurses with jobs on contract basis had the highest levels of burnout.

The current study found that moderate level of burnout was more prevalent among participants who had professional experience of 3-5 and 6-10 years. Furthermore, high level of burnout was found more frequent among participants who had work experience of >10 years. The professional experience variable also showed significant association with burnout. These findings were not dissimilar to a study⁵ which showed that nurses with less work experience are less likely to adapt to the difficulties of their job and subsequently get frustrated. Moreover, a study⁹ showed that the frequency of high level of burnout was prominent among nurses with greater professional experience. In contrast to these findings,

few studies^{5,19,24,25} indicated that more years of work experience among nurses decreased the levels of burnout. Such nurses are also less likely to leave their job position than those with lesser years of experience.

Another significant variable in the current study was equipment facility in a working environment. It was found that burnout among those participants who had no equipment facility in their respective units was more prevalent.

Overall, the study findings revealed low level of burnout among one-fifth of the participants, whereas nearly two-thirds of the study participants showed moderate level of burnout. Similar results were found in another study¹⁶ which indicated that moderate level of burnout among study participants was most frequent.

The current study has its limitations. Since it was a cross-sectional study, it depicted experiences of only those nurses who were present at the time of assessment; therefore, a contributory relationship cannot be established between burnout and its variables. Moreover, the data was obtained from nurses working in two public hospitals only and the findings must be tested in other health facilities in Karachi.

Conclusion

There was moderate level of burnout among two-third of the nurses working in two tertiary care hospitals. Duration of professional experience, nature of job and facilities of equipment in the working area were found to be contributing factors to higher frequency of burnout.

Disclaimer: The text is part of an MS-Nursing thesis was completed in 2018 at the Institute of Nursing, Dow University of Health Sciences (DUHS), Karachi.

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