

The Prevalence and Determinants of Burnout Among Nurses Working at Al Hada Hospital, Taif, Kingdom of Saudi Arabia

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ABSTRACT

Background: Nurses, by the virtue of being in the front line in healthcare provision, are exposed to substantial occupational stressors that render them liable for occupational burnout.

Objectives: To estimate the prevalence and determine the associated factors with burnout among nurses.

Method: Descriptive questionnaire-based cross-sectional survey was performed including a sample of nursing staff working at Al-Hada Military Hospital in Taif, Saudi Arabia. Burnout was assessed using Maslach burnout inventory (MBI).

Results: The study included 230 registered nurses. Table (1) presented their demographic characteristics. More than half of them (57.4%) aged between 30 and 39 years. Majority of the participants were females (75.7%). More than a third (37%) of the participants expressed high EE, 42.1% had high depersonalization and 84.8% had low personal accomplishment. Overall, the prevalence of burnout (high EE, high DP and low PA) was 20% among nurses. A quarter of married nurses compared to only 11% of singles expressed burnout, $p=0.046$. Almost one-third of nurses working in intensive care units/emergency departments (32.8%) compared to only 8.6% of those working in outpatient departments had burnout, $p=0.018$. Other studied factors (age,

gender, educational level, income and experience) were not significantly associated with burnout.

Conclusion: Burnout is a common prevalent problem among nurses; however, in majority of them it is of mild level. Some factors were determined to be associated with burnout. Hospital management needs to identify effective occupational interventions to improve the work environment to nursing workforce.

Keywords: Burnout, Emotional Exhaustion, Depersonalization, Personal Achievement, Nursing Staff, Saudi Arabia.

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INTRODUCTION

Being overload at work and constantly exposed to emotional stressors for a long period of time may lead to mental collapse which known as occupational burnout. Burnout doesn't occur in a day, it's a buildup of emotions as feeling exhausted, helplessness, on the edge, losing motivation that drift you away from your goal.^{1,2}

Nurses are the first line in providing medical care, they accomplish the optimal health and quality of life for patients. They are dealing with different types of stressors such as long working hours, angry patients, large number of patients, work pressure, night shifts, exposure to traumatic situations and sometimes staff shortage. and they have to maintain good quality for work and patient care. By repeatedly expressed these stressors, it will lead to burnout.³⁻⁶

Work atmosphere is very crucial to provide a high-quality service therefore, poor environment could lead to reduce staff ability to work and endanger their health mentally and physically⁷ and that is showing how important is to look after employee's health mentally and physically.^{8,9} Maslach burnout inventory (MBI) is one of the famous instruments known to evaluate burnout. It is divided into 3 sectors: emotional exhaustion (EE) measures emotional depletion as result from excessive workload, depersonalization (DP) Measures the feelings that seem unreal or not to belong to oneself. Personal accomplishment (PA) measures feelings of desire to compete and accomplish in work.¹

Different studies have been conducted worldwide to measure burnout level in nurses and showed that it is a serious problem.

However, there are fewer studies done in Saudi Arabia, therefore we attempted to conduct the present study.

SUBJECTS AND METHODS

This study was a cross-sectional questionnaire-based descriptive one. It included a random sample of nursing staff working in Al-Hada Military Hospital, Taif governorate, Saudi Arabia. A simple random sample of registered nursing staff working at Al-Hada Military hospital was selected.

A standard questionnaire was utilized for data collection. It is composed of two main parts. The first part gathered personal data and determinants (sex, age, experience, marital status, nationality, level of education, Monthly income, and department). The second part gathered data of burnout using Maslach burnout inventory (MBI) which is a valid and reliable instrument that utilized to evaluate burnout. It is divided into 3 sections: emotional exhaustion (EE) which measures emotional depletion as result

from excessive workload, depersonalization (DP) which measures the feelings that seem unreal or not to belong to oneself and personal accomplishment (PA) which measures feelings of desire to compete and accomplish in work. To calculate the prevalence of burnout using the MBI scale, we followed suit of previous studies.^{10,11} A nurse is considered a case for burnout if they scored high (27 or above) on the emotional exhaustion subscale or high (10 or more) in the depersonalization subscale.

Approval to conduct the study has been obtained from the Regional Research and Ethics Committee, Al-Hada Armed Forces hospital, Taif governorate, Saudi Arabia. Written informed consent has been obtained from each participant.

Data was analyzed using the Statistical Package for Social Sciences (SPSS), version 26. Categorical data were summarized using frequencies and percentage. Chi-square test was applied to test for the association between categorical variables and the level of significance was set at $P \leq 0.05$.

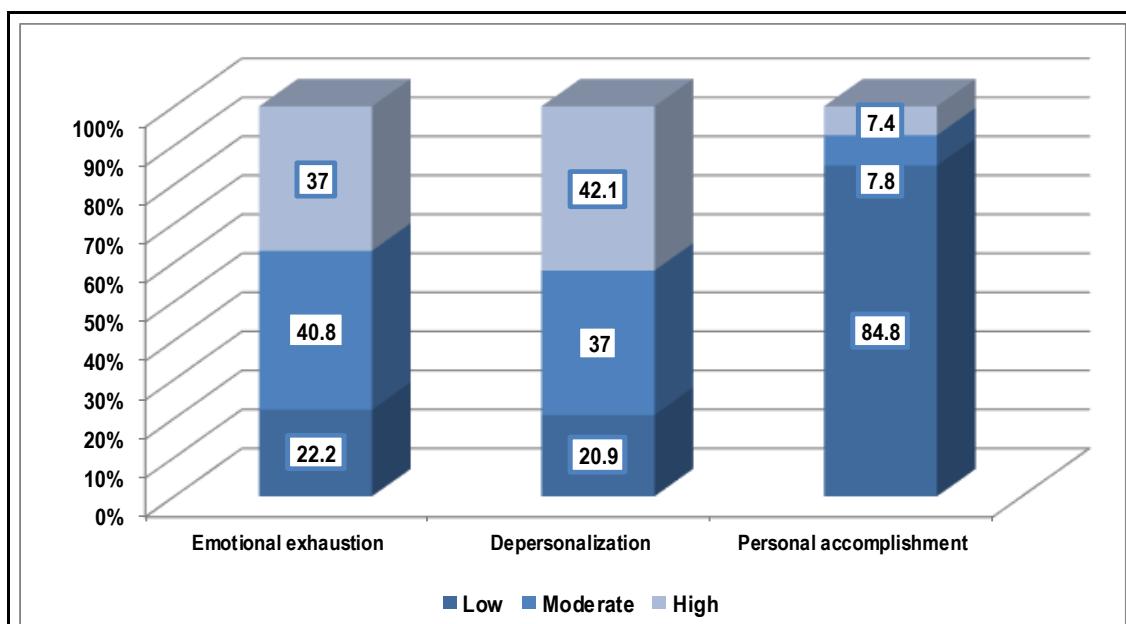
Table 1: Baseline demographics of the study participants

Variables	n	%
Age (years)		
20-29	54	23.5
30-39	132	57.4
≥ 40	44	19.1
Gender		
Male	56	24.3
Female	174	75.7
Experience (years)		
<5	61	26.5
5-10	92	40.0
>10 years	77	33.5
Marital status		
Single	73	31.7
Married	144	62.7
Divorced/widow	13	5.6
Nationality		
Indian	43	18.7
Philippines	100	43.4
Saudi	74	32.2
Others	13	5.7
Education		
Diploma	33	14.3
Bachelor	191	83.1
Higher degree	6	2.6
Income in Saudi Riyals/month		
< 6000	42	18.3
6000 to 10000	132	57.4
> 10000	56	24.3
Department		
Critical intensive care unit/Emergency department	61	26.5
Outpatient department	35	15.2
Ward	88	38.3
Others	46	20.0

Table 2: Factors associated with burnout among nurses working in Al-Hada Armed Forces Hospital, Taif, KSA

	Burnout		p-value*
	No N=184	Yes N=46	
	N (%)	N (%)	
Age (years)			
20-29 (n=54)	46 (85.2)	8 (14.8)	0.306
30-39 (n=132)	106 (80.3)	26 (19.7)	
≥ 40 (n=44)	32 (72.7)	12 (27.3)	
Gender			
Male (n=56)	45 (80.4)	11 (19.6)	0.939
Female (n=174)	139 (79.9)	35 (20.1)	
Experience (years)			
<5 (n=61)	54 (88.5)	7 (11.5)	0.151
5-10 (n=92)	71 (77.2)	21 (22.8)	
>10 years (n=77)	59 (76.6)	18 (23.4)	
Marital status			
Single (n=73)	65 (89.0)	8 (11.0)	0.046
Married (n=144)	108 (75.0)	36 (25.0)	
Divorced/widow (n=13)	11 (84.6)	2 (15.4)	
Nationality			
Indian (n=43)	30 (69.8)	13 (30.2)	0.294
Philippines (n=100)	81 (81.0)	19 (19.0)	
Saudi (n=74)	62 (83.8)	12 (16.2)	
Others (n=13)	11 (84.6)	2 (15.4)	
Education			
Diploma (n=33)	29 (87.9)	4 (12.1)	0.197
Bachelor (n=100)	148 (78.0)	42 (22.0)	
Higher degree (n=6)	6 (100)	0 (0.0)	
Income in Saudi Riyals/month			
< 6000 (n=42)	36 (83.3)	7 (16.7)	0.154
6000-10000 (n=132)	100 (75.8)	32 (24.2)	
> 10000 (n=56)	49 (87.5)	7 (12.5)	
Department			
Critical intensive care unit/Emergency department (n=61)	41 (67.2)	20 (32.8)	0.018
Outpatient department (n=35)	32 (91.8)	3 (8.6)	
Ward (n=88)	74 (84.1)	14 (15.9)	
Others (n=46)	37 (80.4)	9 (19.6)	

*Chi-square test

**Figure 1: Degrees of emotional exhaustion, depersonalization and personal accomplishment among nurses working in Al-Hada Armed Forces Hospital, Taif, KSA**

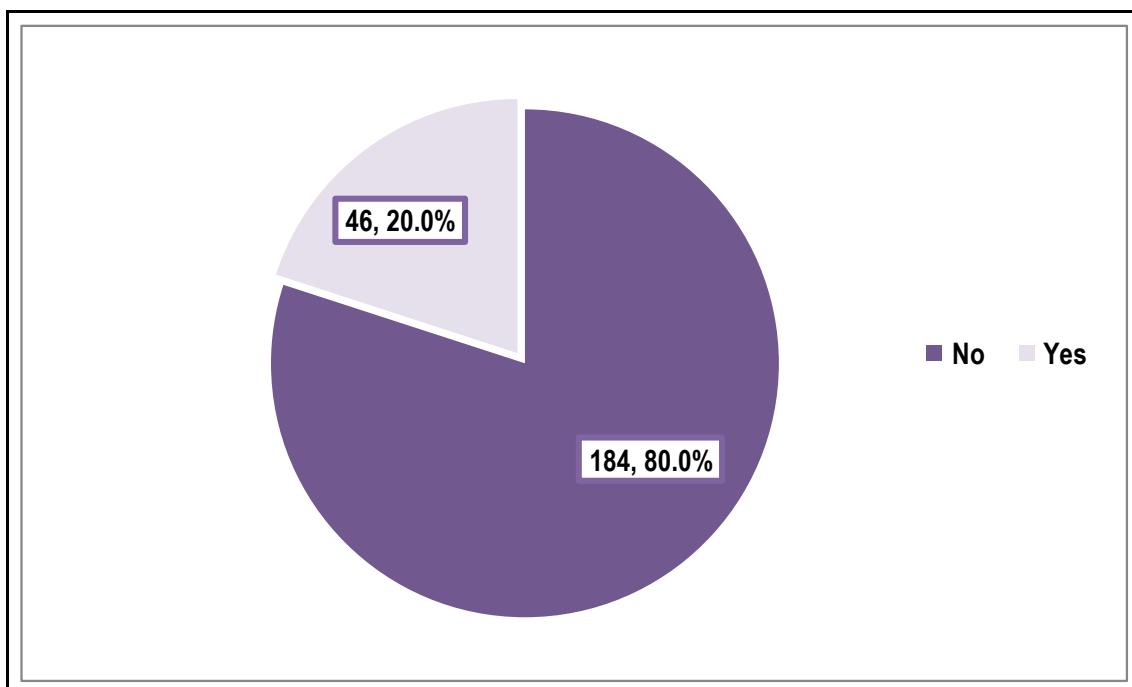


Figure 2: Overall prevalence of burnout among nurses working in Al-Hada Armed Forces Hospital, Taif, KSA

RESULTS

The study included 230 registered nurses. Table (1) presented their demographic characteristics. More than half of them (57.4%) aged between 30 and 39 years. Majority of the participants were females (75.7%). Forty percent had clinical experience ranged between 5 and 10 years and two-thirds (62.7%) were married. Saudi nationals represented almost one third of them (32.2%) while Philippine nationals represented 43.4% of the participants. Majority of them (83.1%) were Bachelor holders. The monthly income of 57.4% of the nurses ranged between 6000 and 10000 Saudi Riyals.

Prevalence and Severity of Burnout

From Figure 1, it is obvious that 37% of the participants expressed high EE, 42.1% had high depersonalization and 84.8% had low personal accomplishment. Overall, the prevalence of burnout (high EE, high DP and low PA) was 20% among nurses as seen in Figure 2.

Factors Associated with Burnout

Two factors were significantly associated with burnout among nurses; marital status and working department. A quarter of married nurses compared to only 11% of singles expressed burnout, $p=0.046$. Almost one-third of nurses working in intensive care units/emergency departments (32.8%) compared to only 8.6% of those working in outpatient departments had burnout, $p=0.018$. Other studied factors (age, gender, educational level, income and experience) were not significantly associated with burnout. Table 2

DISCUSSION

The current survey was carried out within a tertiary care military hospital, which clearly represent governmental hospitals in Saudi Arabia. It included multinational nurses of variable responsibilities and educational background, which increase the external validity of our findings. We conceptualized the 'burnout syndrome' as a constellation of feelings of energy exhaustion as a direct result of

nursing tasks, in addition to nursing job-related cynicism, and chronic stress related deterioration in professional efficacy.¹²

The prevalence of high EE in the present study among nurses as 37% whereas that of high DP and low PA were 42.1% and 84.8%, respectively and the overall prevalence of burnout was 20%. The figure reported in this study, although it is high, is lower than those reported by others as it ranged between 35% and 45%.¹³⁻¹⁵ The reasons of such high figures could be attributed, according to some authors, to the stressful working atmosphere, and understaffed workplace, which consequently lead to high workload as well as values conflict.¹⁶⁻¹⁸

Additionally, a local study carried out in Saudi Arabia have shown a higher rate of burnout among nursing staff, than that reported in the present study (29%).¹⁹ However, this latter figure was obtained from surveying nursing staff working in a specialized oncology unit, which would explain the higher rate of burnout than our current s rate. In another Saudi survey carried out among emergency department nursing staff, among other healthcare workers, in Aseer region in Southern Saudi Arabia, the burnout syndrome affected 16.3% of the staff, which is little bit lower than our figure.²⁰

In the present survey and contrary to what has been reported by others²¹, married nurses expressed higher burnout rate than single nurses. Married marital status led to highest burnout rates, as it was associated with extra household responsibilities burden in addition to work burden.²²

Working in intensive care/emergency departments led to high emotional exhaustion and depersonalization scores and overall burnout among nurses as illustrated in the present study. This is consistent with an international research²³, who reported that nursing staff working in the general ward reported lower levels of stress far more than nursing staff working in critical areas such as the emergency department, intensive care and operating theatres. One recent study attempted to evaluate the effect of moving to

open ward on intensive care unit nursing stress and concluded that isolation rather than ward area was more impactful on the stress perceived by nurses.²⁴

An established finding in the field of nurse stress research is that the highest levels of stress are found among nurses working in the emergency department.²⁵ This is usually linked to nurses' perception that working environment in the emergency area is the worst compared to other areas. Certainly, this line of enquiry should be followed with further qualitative and longitudinal studies, particularly in Saudi Arabia.

We had many strengths in the current survey. We included nursing staff from across several specialties, thereby avoiding the notorious limitation of past studies of including a single specialty nursing staff. Moreover, we used the full version of the validated 22-item MBI scale.²⁶

One significant limitation in the current research is lack of in-depth exploration of personality factors and job satisfaction as they were shown to have a direct relationship with burnout among nursing staff.²⁷

Future research should adopt a longitudinal design and be more qualitative in nature. Use of complex modelling technique to evaluate the interplay of job satisfaction, family background, and burnout should also be adopted. Research should also evaluate interventions to reduce emotional exhaustion and depersonalization among nursing professionals.

In conclusion, Burnout is a common prevalent problem among nurses; however, in majority of them it is of mild level. Some factors were determined to be associated with burnout. Hospital management needs to identify effective occupational interventions to improve the work environment to nursing workforce.

Based on the study findings, the following are recommended:

1. Hospital management in Saudi Arabia needs to identify effective occupational interventions to improve the support available to nurse workforce.
2. Particular care should be provided to the at-risk of burnout groups, such as married and those working in intensive care/emergency units.
3. Nurse management should encourage teamwork and support to general ward nursing staff.
4. Research should be conducted to evaluation the relationship between job satisfaction, financial support, and burnout syndrome among nursing staff in Saudi Arabia.

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