

# Assessment of Occupational Burnout among Nurses Work at Critical Care Unites in Al Najaf Governorate

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**Abstract-** The current descriptive cross-sectional study aimed to assess Occupational Burnout among Nurses Work at Critical Care Unites., as well as, to find any significant relation for Nurses socio-demographic characteristic with a state of physical fatigue and mental exhaustion result from the occupational Burnout Therefore, by using SPSS a simple Non-Probability (convenience Sample) of nurses who are working at the critical care units., and then (270) nurses were selected randomly. The findings of the present study indicated that the overall assessment of Nurses' occupational Burnout are moderate to high. In addition, the overall assessment of the sources of nurses' occupational burnout are partially affected. In addition, there is indicated a non-significant association between the nurses' occupational burnout and their demographic data, except with their gender, years of experience, and visits to psychiatrist, there is a significant association.

**Index Terms-** Occupational Burnout, Nurses, Critical Care Unites, Mental Exhaustion

## I. INTRODUCTION

Nursing is one of the professions and is specifically vital in the medical and mental health care delivery. Nurses are involved in the various units of the hospital administration as clinical staff and the nature of their work make them highly vulnerable to burnout syndromes (1). Nursing may involve issues such as prolonged direct personal contact of an emotional nature with a large number of patients, role ambiguity, responsibility for other's live, work overload, shift work, staff issues, overtime, low salaries and lack of opportunities for advancement (2). These issues may create some mismatch between the realities of the job and the individual's expectations which may in turn lead to frustration, disappointment and a feeling of dissatisfaction; a tendency that is often linked with decreased productivity, loss of confidence and negative behavioral changes which are harmful to the individual, organization and their clients (3,4). Organizational factors that can lead to job burnout are management style, inflexible rules of job, lack of job security and few opportunities for promotion World Health Organization, (5) (MOH). Based on the utilization of the concept in peer reviewed publications, Burnout was measured using the Maslach Burnout Inventory-Human Services Survey (MBI-HSS), which is a 22- item scale designed to measure 3 dimensions of burnout: emotional exhaustion (eg, "I feel used up at the end of the day"), depersonalization (eg, "I have become more callous toward people since I took this job"), and lack of personal

accomplishment (eg, low scores on the items as "I feel I'm positively influencing other people's lives through my work (6). In a general form, not restricted to any particular kind of work, the dimensions of burnout are labelled exhaustion, cynicism, and diminished professional efficacy (7)

In changes in attitudes towards work and oneself as a worker. Cynicism develops as a dysfunctional way of coping in exhausting situations, which further reduce the possibilities to find creative solutions at work and build professional efficacy (8). Some researchers have proposed that exhaustion and cynicism would be the primary dimensions of burnout, while diminished professional efficacy would be a separate but related entity (9). Supporting this suggestion, professional efficacy has loaded on a different factor than exhaustion and cynicism in structural equation modelling. However, this occurrence could also reflect a statistical artefact because, in contrast to the positively worded items of the exhaustion and cynicism dimensions, the items of professional efficacy are worded negatively (10).

## Objectives of the Study:

This study aimed to assess Occupational Burnout among Nurses Work at Critical Care Unites in Al Najaf Governorate. and also, to find out the relationship between occupational burnout among nurse's work and their socio demographic data

## Methodology:

By using a descriptive design, a cross-sectional study was carried out with analytic utility. A self-administered questionnaire composed of three parts was used, the first part included inquiry regarding socio-demographic characteristic of participants, and the second part included questions concerning Burnout was measured using the Maslach Burnout Inventory-Human Services Survey (MBI-HSS), which is a 22- item scale designed to measure 3 dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment, a high level of burnout is indicated by high scores on the emotional exhaustion and depersonalization subscales and low scores on the personal accomplishment, while the last part included of the questionnaire is comprised of (5) domains, including the Lack of control, lack social relationship, work overload, values conflict, and insufficient reward. All of these domains are measured the five-point Likert scale.

## Sample Size and Sampling Technique:

Sample size was calculated according to the standard equation cross-sectional studies was used, (11,12,13,10). in Al-Najaf Al-Ashraf Governorate Hospitals. The Nurses

with occupational burnout selected by simple random sampling technique, 270 nurses who are working at the critical care units were selected and provided with a self-administered questionnaire. The data collected from (2016-1-19) until (2016-4-5). Each subject spends around (20-25) min. as a maximum time to complete the questionnaire. Finally, only (270) questionnaires were acceptable for analysis due to missing or incomplete data.

**Statistical Analysis:**

By using statistical package for social sciences (SPSS), version 16. All the scale variables were normally distributed with small Skewness and Kurtosis in some variables. Appropriate statistical tests were used accordingly, P-value  $\leq 0.05$  considered significant difference or relationship.

II. RESULTS

Table (1): Socio-demographic characteristics of the Nurses' (N = 270)

Demographic Data	Rating And Intervals	Frequency	Percent
Gender	Male	122	45.2
	Female	148	54.8
Social class	Married	152	56.3
	Single	114	42.2
	Widowed	4	1.5
Age / years	$\leq 24.00$	115	42.6
	25.00 - 31.00	78	28.9
	32.00 - 38.00	39	14.4
	39.00 - 45.00	26	9.6
	46.00+	12	4.4
Certification	Secondary school	84	31.1
	Diploma in nursing	125	46.3
	Bachelor in nursing	61	22.6
Experience	$\leq 7.00$	200	74.1
	8-14	43	15.9
	15-21	14	5.2
	22-28	8	3
	29 And More	5	1.9
Salary	Less than 500,000 ID	215	79.6
	501,000-750,000 ID	47	17.4
	751,000-1,000,000 ID	5	1.9
	More than 1,000,000 ID	3	1.1
Official responsibility	1	5	1.9
	2	38	14.1
	3	15	5.6
	4	212	78.5
Unit	Emergency	105	38.9
	Operation room	58	21.5
	CCU	35	13
	ICU	21	7.8
	Hemodialysis	27	10
	Premature units	24	8.9
Residency	Urban	235	87
	Rural	35	13
Shift	Morning	231	85.6
	Night	39	14.4
Physical illness	Yes	35	13.0
	No	235	87.0
Visits Psychiatrist	Yes	5	1.9

	<b>No</b>	<b>265</b>	<b>98.1</b>
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A total of 270 nurses were enrolled in this study, with a mean age less than or equal (24) years. Majority of participants aged less than or equal 24 years. Females represented 54.8% of the studied group, (56.3%) were married. Regarding to the subject's certification, the majority of study sample are, graduated from diploma in nursing (46.3%). The most of study sample have (<=7) years of experience (74.6%), (79.6%)of the participants had a monthly income less than 500 thousand IQD, while (17.4%) had an income of < 700,000 IQD the most of

study sample official responsibility are (4) this main not have any official responsibility (78.5%), most of the study sample in related to their unit are work in emergency unit (38.9), the majority of the study sample are living in urban residential are (87%), the majority of the study sample are work in morning shift (87%), the results show that most of the study sample are no have disease (78%), the most of the study sample are no have any psychiatric problems (98.1%) .

**Table (2) Assessment of Nurses' Occupational Burnout**

Studied Domains	Levels Of Burnout	Freq.	Percent	m.s	assessment
Emotional exhaustion	High	84	31.1	2.32	Moderate
	Moderate	118	43.7		
	Low	68	25.2		
Depersonalization	High	202	74.8	2.59	High
	Moderate	51	18.9		
	Low	17	6.3		
Personal accomplishment	Low	7	2.6	2.80	Low
	Moderate	56	20.7		
	High	207	76.7		
<b>Total</b>		<b>270</b>	<b>100</b>		

According to the current study outcomes the majority of the nurses expressed moderate emotional exhaustion burnout, high depersonalization burnout, and low personal accomplishment burnout. Moreove.

**Table (3) Assessment of the Sources of Nurses' Occupational Burnout**

Studied Domain	Overall Assessment Of Burnout Sources	Frequency	Percent
Lack of control	Affected	155	57.4
	Partially Affected	65	24.1
	Unaffected	50	18.5
Lack social relationship	Unaffected	71	26.3
	Partially Affected	163	60.4
	Affected	36	13.3
work overload	Affected	73	27
	Partially Affected	119	44.1
	Unaffected	78	28.9
Values conflict	Unaffected	141	52.2
	Partially Affected	84	31.1
	Affected	45	16.7
Insufficient reward	Affected	136	50.4
	Partially Affected	72	26.7
	Unaffected	62	23
<b>Total</b>		<b>270</b>	<b>100</b>

One hundred the sources of burnout are affected at the Lack of control, and Insufficient reward domains, while at the Lack social relationship, values conflicts, and work overload domains the study subjects' responses are partially affected.

**Table (4) Overall Assessment of the Sources of Nurses' Occupational Burnout**

main domain	overall responses	Frequency	Percent
Sources of nurses burnout	Unaffected	63	23.3
	Partially Affected	162	60
	Affected	45	16.7
	Total	270	100

Additionally, the current findings demonstrate that the (60%) of the nurses' overall response to the sources of the nurses' occupational burnout are partially affected.

**Table (5) Relationship between Nurses' Occupational Burnout and their Demographic Data**

Demographic Data	Rating Intervals	Nurses' Burnout			Total	Chi-Square Value	D.F	P-Value
		High	Moderate	Low				
Gender	Male	41	48	33	122	8.358	2	0.015 S
	Female	36	47	65	148			
	Total	77	95	98	270			
Social Class	Married	42	57	53	152	2.802	4	0.591 NS
	Single	33	38	43	114			
	Widowed	2	0	2	4			
	Total	77	95	98	270			
Age / Years	<= 24.00	24	41	50	115	13.491	8	0.096 NS
	25.00 - 31.00	27	23	28	78			
	32.00 - 38.00	15	16	8	39			
	39.00 - 45.00	9	8	9	26			
	46.00+	2	7	3	12			
	Total	77	95	98	270			
Certificate	Secondary school	17	33	34	84	7.668	4	0.105 NS
	Diploma in nursing	45	42	38	125			
	Bachelor in nursing	15	20	26	61			
	Total	77	95	98	270			
Years Of Experience	<= 7.00	52	68	80	200	17.530	8	0.025 S
	7.01 - 14.00	16	13	14	43			
	14.01 - 21.00	8	5	1	14			
	21.01 - 28.00	1	5	2	8			
	28.01+	0	4	1	5			
	Total	77	95	98	270			
Salary	Less than 500,000 ID	58	77	80	215	1.634	6	0.95 NS
	501,000-750,000 ID	16	16	15	47			
	751,000-1,000,000 ID	2	1	2	5			
	More than 1,000,000 ID	1	1	1	3			
	Total	77	95	98	270			
Responsibility	1	2	1	2	5	5.587	6	0.471 NS
	2	10	19	9	38			
	3	4	6	5	15			
	4	61	69	82	212			

	<b>Total</b>	<b>77</b>	<b>95</b>	<b>98</b>	<b>270</b>			
<b>Unit</b>	<b>Emergency</b>	<b>28</b>	<b>36</b>	<b>41</b>	<b>105</b>	<b>16.868</b>	<b>10</b>	<b>0.077 NS</b>
	<b>Operation room</b>	<b>15</b>	<b>17</b>	<b>26</b>	<b>58</b>			
	<b>CCU</b>	<b>12</b>	<b>15</b>	<b>8</b>	<b>35</b>			
	<b>ICU</b>	<b>2</b>	<b>10</b>	<b>9</b>	<b>21</b>			
	<b>Hemodialysis</b>	<b>8</b>	<b>8</b>	<b>11</b>	<b>27</b>			
	<b>Premature units</b>	<b>12</b>	<b>9</b>	<b>3</b>	<b>24</b>			
	<b>Total</b>	<b>77</b>	<b>95</b>	<b>98</b>	<b>270</b>			
<b>Residency</b>	<b>Urban</b>	<b>61</b>	<b>85</b>	<b>89</b>	<b>235</b>	<b>5.910</b>	<b>2</b>	<b>0.052 NS</b>
	<b>Rural</b>	<b>16</b>	<b>10</b>	<b>9</b>	<b>35</b>			
	<b>Total</b>	<b>77</b>	<b>95</b>	<b>98</b>	<b>270</b>			
<b>Shift</b>	<b>Morning</b>	<b>60</b>	<b>83</b>	<b>88</b>	<b>231</b>	<b>5.309</b>	<b>2</b>	<b>0.07 NS</b>
	<b>Night</b>	<b>17</b>	<b>12</b>	<b>10</b>	<b>39</b>			
	<b>Total</b>	<b>77</b>	<b>95</b>	<b>98</b>	<b>270</b>			
<b>Diseases</b>	<b>Yes</b>	<b>13</b>	<b>12</b>	<b>10</b>	<b>35</b>	<b>1.719</b>	<b>2</b>	<b>.423 NS</b>
	<b>No</b>	<b>64</b>	<b>83</b>	<b>88</b>	<b>235</b>			
	<b>Total</b>	<b>77</b>	<b>95</b>	<b>98</b>	<b>270</b>			
<b>Visit psychiatrist</b>	<b>Yes</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>6.900</b>	<b>2</b>	<b>.032 S</b>
	<b>No</b>	<b>73</b>	<b>95</b>	<b>97</b>	<b>265</b>			
	<b>Total</b>	<b>77</b>	<b>95</b>	<b>98</b>	<b>270</b>			

The current findings and results shows that there is an insignificant relationship concerning the nurses' occupational burnout and their demographic data, except with their gender, years of experience, and visits to psychiatrist .

### III. DISCUSSION

The current study results show that the majority of the nurses are married female, this is consistent with the finding of Jordanian researchers (14), who found that more than half of participants from stressful areas were female. as well the Chinese researchers (15), who found that above sixty percent of respondents were married. this can be clarified by using of non-probability sampling by current study. In addition, dominant age of the sample is less than or equal (24) years. This result is compatible to the findings of Iranian research done in (16) who found that the majority of participants were below 30 years of age. Regarding to the subjects' certification, the majority of the study sample have Diploma in Nursing, this results agree with finding of Chinese researchers (17). whereas above 60% of participant's nurses in the study held diploma in nursing. In regard to the subjects' experience, the most of the study sample have (<=7) years of experience, which is steady with results of a Turkish research conducted (18) where they found that more than 90% of nurses included in the study had less than 10 years of experience.

Regarding to the salary, the vast majority of participants' salary is less than 500000 IQD, this is inconsistent with (17) who found that the majority of nurses included in the study had higher salaries comparing to the current study (17). In addition, the `study results show that the most of the study sample they don't have any official responsibility, which is compatible with the results of Finnish researcher (19) who found that almost four-fifths of the respondents did not have an official responsibility. In

addition, the majority of the study sample in related to their unit are working in emergency units. Also, regarding residency of participants the majority of them were urban resident. In regarding to the subjects shift, the majority of nurses were working in morning shift, which disagreed with the results of Jordanian work done by (20) and found that majority of sample were working in night shift (20). As well, for participants' disease, greatest proportion of them had no disease.

In addition, the majority of study sample in regarding to their psychiatric status, the study results indicate that they have no any psychiatric problems. As well as, the Iranian researchers (21). reached to the same outcome when they studied participant nurses burn out in relation to the job rotation. Consistently, they find that the majority of the study subjects are female, married, and have years of experience less than 10 years. While for the nurses who are working at the emergency units, this result comes because the emergency units characterized by a high number of clients so it requires a large number of nurses as compared with other units.

According to the current study outcomes the majority of the nurses expressed moderate emotional exhaustion burnout, high depersonalization burnout, and low personal accomplishment burnout. Moreover, the results show that the majority of the study subjects are exhibiting occupational burnout, and personal accomplishment is the dominant one. (21) find that the nurses who are working at the critical care units are suffering from occupational burnout and the personal accomplishment is the dominant occupational burnout which is consistent with the current study results (21). While, another work done by Embriaco and others agreed with current results, they found that the majority of critical unit staff (from nurses and doctors) expressed high level of burnout (22), this may refer to increasing in work stress among Iraqi health personnel which is similar to their counterparts in France.



The Canadian research conducted by (23) studied how to anticipating the dimensions of job burn out through the dynamic link among job control, self-determination for the job and job requirements. Totally, they find that the job control diminishes the unhealthy influence of job requirements in anticipating depersonalization and emotional exhaustion, precisely for personnel with higher stages of job self-determination.

The Romanian research by (24) studied the occupational burnout among medical workers, they studied both nurses and doctors in emergency department, ambulance and intensive care unit and the national survey result revealed that the vast majority of participants exhibited moderate to high level of burnout, on one hand, this is consistent with present findings where the mainstream of study sample possessed moderate to high level of burn out. While on the other hand, Popa and others almost agreed with our result, which they found that the nurses are suffering from occupational burnout and the most affected domains are the emotional exhaustion and the personal accomplishment.

The study results indicate that the study subjects' overall responses to the sources of burnout are affected at the lack of control, values conflicts, and lack of positive reinforcement domains, while at the lack social relationship and work overload domains the study subjects' responses are partially affected. Additionally, the current findings demonstrate that the (60%) of the nurses' overall response to the sources of the nurses' occupational burnout are partially affected. From researcher point of view, the following issues are the reason that the respondents affected by most of sources of burnout. These reasons can be detailed as: there is no arrangement in nurses time; there is no harmony between nurses and patients, and visitors who are coming to work position, also nurses are subjects to work overload. As well, the traditions, norms and values of society can also affect negatively on the work and ethics of the workers. In addition, absence of rewarding and the insert good workers gives a bad impression; consequently, this affects the exerted efforts.

The current findings and results shows that there is an insignificant relationship concerning the nurses' occupational burnout and their demographic data, except with their gender, years of experience, and visits to psychiatrist, the study results indicate that there is a significant relationship. (21), find that the nurses' burnout was significantly related to their gender. (23), find that there is a significant relationship between the nurses' burnout and their years of experience. While for the relationship with the visiting of psychiatrist, this results comes because that the burned nurses who do not visiting the psychiatrist are more vulnerable to have bad progressive burnout otherwise they may control on their burnout (23,21).

#### IV. CONCLUSIONS AND RECOMMENDATIONS

The study concludes that the nurses' gender, years of experience, and visiting of psychiatrist are affecting their perception of occupational burnout. The study recommends that an intensive wide-ranging population-based (national level) studies conducted to assess the nurses' occupational burnout. How to decrease the levels of this type of burnout, programs of health education should be applied to increase knowledge of the nurses about the impact of their burnout on the job productivity

and also to increase their awareness to how avoid and manage their burnout.

#### REFERENCES

- [1] Khamisa, N., Peltzer, K., & Oldenburg, B. (2013). Burnout in relation to specific contributing factors and health outcomes among nurses: a systematic review. *International journal of environmental research and public health*, 10(6), 2214-2240.
- [2] Rothmann, S., Van Der Colff, J. J., & Rothmann, J. C. (2006). Occupational stress of nurses in South Africa. *Curationis*, 29(2), 22-33.
- [3] Coker, B., Fear, N. T., Jones, M., Murphy, D., Hull, L., Iversen, A. C.,... & Greenberg, N. (2010). What are the consequences of deployment to Iraq and Afghanistan on the mental health of the UK armed forces? A cohort study. *The Lancet*, 375(9728), 1783-1797.
- [4] Wood, B. D., & Killion, J. B. (2006). Burnout among healthcare professionals. *Radiology management*, 29(6), 30-4.
- [5] World Health Organization, (1999) (MOH).
- [6] Maslachi, C., Jackson, S. E., & Leiter, M. P. (1996). *MBI Maslach Burnout Inventory*. CPP, Incorporated.
- [7] Schaufeli, W. B., & Buunk, B. P. (1996). Professional burnout. *Handbook of work and health psychology*, 311-346.
- [8] Schaufeli, Wilmar B., and Arnold B. Bakker. "Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study." *Journal of organizational Behavior* 25.3 (2004): 293-315.
- [9] Halbesleben, J. R., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg Burnout Inventory. *Work & Stress*, 19(3), 208-220.
- [10] Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: three of a kind or three different kinds of employee well-being? *Applied Psychology*, 57(2), 173-203.
- [11] Inoue, K. C., Versa, G. L. G. da S. and Matsuda, L. M. (2014) 'Stress level among intensive care nurses in the municipality of Paraná ( Brazil )', *Invest Educ Enferm*, 32(1), pp. 69-77.
- [12] Maslach, C Goncalo, J. A., & Polman, E.,... (2010). Can confidence come too soon? Collective efficacy, conflict and group performance over time. *Organizational Behavior and Human Decision Processes*, 113(1),
- [13] Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of applied psychology*, 93(3), 498.
- [14] Hamaideh, S. H. and Ammouri, A. (2011) 'Comparing Jordanian nurses' job stressors in stressful and non-stressful clinical areas', *Contemporary Nurse*, 37(2), pp. 173-187.
- [15] Wu, H., Sun, W. and Wang, L. (2012) 'Factors associated with occupational stress among Chinese female emergency nurses', *Emergency Medical Journal*, 29, pp. 554-559. doi: 10.1136/emj.2010.094391.
- [16] Mosadeghrad, A. M. (2013) 'Occupational Stress and Turnover Intention : Implications for Nursing Management', *International Journal of Health Policy and Management*, 1(2), pp. 179-186.
- [17] Hsu, H., Chen, S., Yu, H. and Lou, J. (2010) 'Job stress, achievement motivation and occupational burnout among male nurses', *Journal of Advanced Nursing*, 66(7), pp. 1592-1601. doi: 10.1111/j.1365-2648.2010.05323.x.
- [18] Alacacioglu, A., Yavuzsen, T., Dirioz, M., Oztop, I. and Yilmaz, U. (2009) 'Burnout in nurses and physicians working at an oncology', *Psycho-Oncology*, 18(October 2008), pp. 543-548.
- [19] Hyrkas, K. (2005) 'Clinical Supervision, Burnout, And Job Satisfaction Among Mental Health and Psychiatric Nurses in Finland', *Issues in Mental Health Nursing*, 26, pp. 531-556. doi: 10.1080/01612840590931975.
- [20] Hamaideh, S. H. (2011) 'Burnout, Social Support, and Job Satisfaction among Jordanian Mental Health Nurses', *Issues in Mental Health Nursing*, 32, pp. 234-242. doi: 10.3109/01612840.2010.546494.
- [21] Delpasand, M., Raiisi, P., Begdely, F., and Shahabi, M., (2010). The Impact of Job Rotation on Nurse Burnout of Kashani Hospital in Tehran, Iran, *Occupational Health Journal*, 7, 4, 121-88.
- [22] Embriaco, N.; Papazian, N.; Barnes, Kentish, N.; Pochard, F.; Azoulay, E.; Burnout syndrome among critical care healthcare workers, Lippincott Williams & Wilkins, 2007, p.p. 484 - 486.

- [23] Fernet, C., Guay, F. and Senécal, C. (2004) 'Adjusting to job demands: The role of work self-determination and job control in predicting burnout', *Journal of vocational behavior*, Elsevier, 65(1), pp. 39–56.
- [24] Popa, F., Arafat, R., Purcărea, V. L., Lală, A. and Bobîrnac, G. (2010) 'Occupational Burnout levels in Emergency Medicine—a nationwide study and analysis', *Journal of Medicine and Life*. Romania: Carol Davila University Press, 3(3), pp. 207–215. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3019006/>

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