

BURNOUT AMONG NURSES IN CLINICAL TRAINING CENTRE, SELANGOR

Fatimah Sham^{1*}, Siti Munirah Abdul Wahab¹, Nur 'Adliah Orwah², Eezalela Ab Rahim², Nur Aimi Kamarul Aizan²

¹*Nursing Lecturer, Faculty of Health Sciences, Universiti Teknologi MARA (UiTM), Malaysia*

²*Faculty of Health Sciences, Universiti Teknologi MARA (UiTM), Malaysia*

*Corresponding Author Email: fatimah2886@salam.uitm.edu.my

ABSTRACT

Burnout can be conceptualized in three different aspects consisting of emotional exhaustion, depersonalization and reduced personal accomplishment. It can lead to increment of the turnover rate, absenteeism and low organizational commitment. Stress and job dissatisfaction will lead to psychological distress and burnout. Nurses are one in the health care profession that is susceptible to burnout because they are dealing with patient management and service care delivery. The aim of this study is to determine whether nurses working in Clinical Training Centre (CTC), Faculty of Medicine, University Teknologi MARA (UiTM) are experiencing burnout. A descriptive study design with convenient sampling technique using self-reported questionnaires adapted from Maslach Burnout Inventory (MBI) was conducted involving 120 of nurses in CTC.

High levels of burnout were identified in 83.3% of the respondent in the area of depersonalization and 42.5% of the respondent in the area of reduced personal achievement. Marital status was significantly associated with emotional exhaustion ($p < 0.05$), working experiences is significantly associated with reduce personal achievement ($p < 0.05$) and depersonalization is significantly associated with grade of the nurses ($p < 0.05$). There is evidence that nurses working in CTC are experiencing burnout with a high score in depersonalization and personal accomplishment. Early detection of burnout among the nurses can avoid burnout syndrome and will help to reduce absenteeism, turnover rates and long term stress.

Keywords: Burnout, Nurses, Stress, Clinical Training Centre (UiTM)

INTRODUCTION

Nurses have been found to be the most vulnerable health care professions to burnout (Abushaikha & Saca Hazboun, 2009). This is because, even in environments with limited resources and reduced supply of nurses and increased responsibility, the nurses are expected to deliver humane care, empathy, cultural sensitiveness, competent and moral care (Khamisa *et al.*, 2015). Such imbalance leads to prolonged stress and burnout. Burnout is a psychological syndrome of emotional exhaustion (chronic fatigue, sleep disorders, and multiple physical symptoms), depersonalization (negative or pessimistic attitudes towards colleagues and clients, feeling guilty and isolated, and lower level of work and daily activity), and decreased feelings of personal accomplishment (dissatisfaction with job,

feelings of failure, loss of judgment and understanding) along with a sense of constant abuses and exploitation, and reduced job performance (Maslach, 1998).

According to Moghaddasi *et al.*, (2013), in the past three decades, nurses have been the researchers target to conduct study on burnout. Burnout among health care providers are important issues since they affect turnover rates, staff retention with severe negative impact on patient care, physical-psychological health of staff, and healthcare costs (Mardani & Mardani, 2014). Supporting the present result, a previous study found out that high percentage of hospital staff nurses had job and more than 1 in 5 hospital staff nurses say they intend to leave their hospital jobs within 1 year related to burnout (Vahey *et al.*, 2004). Conversely, Alam & Mohammad, (2010) investigated the level of

job satisfaction and their intention to leave jobs among Malaysian nurses in a public hospital in Perlis, found that the nursing staffs were moderately satisfied with their job and have lower level of intention to leave.

Olley (2003) reported that on burnout in health professions indicated that nurses had the highest scores on all measures of burnout. However there was a study conducted by Lavery & Patrick (2007) among registered nurses in Victoria, Australia reported that the nurses there, were not experiencing high level of burnout and most of them were satisfied with their career choice. Job dissatisfaction has been also linked to emotional exhaustion and burnout (Aiken, Sloane, & Lake, 1997). New graduate nurses from Denver metropolitan area health care facilities were not satisfied with their working environment due to lack of opportunities for career development, lack of power to make changes and not satisfy with their salary and schedules (Casey, Saunders & O'Hara, 2010).

Consequently, there is evidence upon which many associate the negative impact of burnout in nursing and other evidence suggest that nurses are among those who are easy to get burnout. Thus the study of burnout should be more comprehensive as whether there is a link between sociodemographic factors and burnout. High prevalence of burnout among nurses in a Nigerian tertiary health institution have been shown to significantly affect the likelihood of burnout with the association of some of the socio-demographic variables like sex, age, cadre, educational status, religion and marital status (Okwaraji & En, 2014).

The two objectives in this study is (1) to determine the degree of burnout among nurses in Clinical Training Centre (CTC), Faculty of Medicine, University Technology MARA (UiTM), and (2) to determine the association between burnout with socio – demographic characteristic among nurses in Clinical Training Centre (CTC), Faculty of Medicine, University Technology MARA (UiTM); age, gender, marital status, ethnic, level of education, work experience, area of working place.

MATERIALS AND METHODS

Research Design:

A descriptive study design was carried out for this study.

Settings:

Clinical Training Centre (Sungai Buloh Campus) ; 6

clinics, surgical ward, medical ward, radiology and imaging, Non –Invasive Cardiac Unit, Intensive Care Unit, Coronary Care Unit, Cardiac Rehabilitation Ward, Operation Theatres, Cardiothoracic Intensive Care Unit, Non–Invasive Cardiac Laboratory, Invasive Cardiac Lab, Catheterization Lab, Emergency Cardiac Unit, Rehabilitation Unit, Cardiology Unit, Cardiothoracic Unit, Diabetic Nurse, and Infection Control Unit, Faculty of Medicine (Selayang Campus), nurses who were on attachment at Hospital Selayang and attachment at Hospital Sungai Buloh.

Population and Sample Size:

The population consisted of all the nurses working in Clinical Training Centre (Campus Sungai Buloh), Faculty of Medicine (Campus Selayang), nurses who were attached at Hospital Selayang and at Hospital Sungai Buloh. Total population of nurses are 173 (N = 173) from all grades; Grade U41, U36, U32, and U29. This study took the sample size of 120 (n=120) of nurses as the respondents by using Raosoft software with Confidence Interval of 5% and the Confidence Level 95%, (Raosoft Inc, 2004). This study is using the convenience sampling technique.

Inclusion and exclusion criteria:

The inclusion criteria for our registered nurses who have a work experience of one year and exclusion criteria include those registered nurses who are on leave (annual leave, study leave, confinement leave, etc) and the nurses who do not agree to participate in this study.

Research Instruments:

Data was collected using a self- reported questionnaire. The questionnaire is in Bahasa Malaysia and English. The instruments were divided into four sections:

Section one: This part was intended to get the information about socio-demographic characteristics data including 11 items such as age, gender, marital status, ethnicity, monthly income, working experiences, area of workplace, presence of any positive common chronic medical illnesses or psychiatric illnesses, education level, grade and financial status.

The questionnaire was adapted and modified from the Maslach Burnout Inventory (MBI) by Sulaiman *et al.*, (2015) which is very useful to measure burnout level among nurses.

Section two: There are 7 items for this section to assess

emotional exhaustion among the nurses. A study by Maslach (1998) reported that emotional exhaustion is characterized by lack of energy and enthusiasm along with depletion of emotional resources.

Section three: This part consists of 7 items to assess depersonalization. The depersonalization is “dehumanization” in interpersonal relations. It refers to a negative attitude, callousness, or excessively detached response to various aspects of the job (Maslach, *et al.*, 2001). For examples, “I feel I look after certain patients/clients impersonally, as if they are objects” and “I am at the end of my patience at the end of my work day”.

Section four: This part includes the assessment of personal achievement. This section has 8 items. It refers to a decline in the feelings of competence and successful achievement in ones work with people (El-Demerdash *et al.*, 2013).

Scoring system : The subject's responses in this three sections were scored in set point Likert scale (1-6) ranging from never to everyday, everyday (6), few times a week (5), once a week (4), few times a month (3), once a month (2), few times a year (1), and never (0). Score of burnout subscale as following:

Table: Score of burnout subscale as following

Score	Emotional Exhaustion(EE)	Depersonalization(DP)	Personal Accomplishment(PA)
Low	0-17	0-5	+40
Moderate	18-29	6-11	34-39
High	+30	+12	0-33

Higher scores of EE, DP and a lower score of PA indicate a higher level of burnout.

Ethical Considerations

Permission to conduct the study was obtained from research committee of Faculty of Health Science, UiTM and from the Vice Chancellor (Research & Innovation) Chairman of UiTM. A letter of permission was also obtained from the the responsible authorities, Dr. Izuanuddin Bin Ismail the Deputy of Dean in Clinical Service of Clinical Training Centre, Faculty of Medicine, Sungai Buloh Campus, UiTM.

Data Collection

Data were collected after receiving approval from the head of nursing. Data collection was carried out from March to April 2016. After getting approval from the nurse who voluntarily participated in this study, they were given a package to study after they have completed their shift. The package contains a copy of a letter that explains the goal of the study, participants' right and the instructions to

complete the study. They were also informed about the time to complete the survey (approximately 20 to 30 minutes). Written informed consent was obtained from respondents who agreed to participate in the study. Upon completion of the questionnaire, the survey questionnaire were collected by the researchers.

Statistical Analysis

All data was entered in IBM SPSS statistics version 20.0 to run the statistical test. Descriptive statistic was utilized to describe participants' characteristics using means and standard deviation (continuous variables) and frequencies and percentages (categorical variables). Additionally, frequencies were used to identify areas of burnout among nurses through item analysis. To test the differences in nurses' reported time pressure and burnout subscales based on their categorical demographic characteristics, Chi- Square and Analysis of Variance was utilized.

RESULTS

Demographic Characteristics

A total of 120 respondents who fulfilled the questionnaires in this study with 18 (15.2%) male and 102 (85%) female respondents. The mean age of the 120 respondents was M=30.29 (SD=4.01). The mean years of working experience of the 120 respondents was M=6.72 (SD=3.90). Most of them were Malay (99.2%), married (70.8%) and from ward 2 for areas of working places (14.2%) (Table 1).

Table 1: Demographic characteristics of the respondents (n=120)

Variables	Frequency(%)	Mean ± SD
Age		30.29±4.02
Gender		
Female	102 (85.0%)	
Male	18 (15.2%)	
Marital Status		
Married	85 (70.8%)	
Single	35 (29.2%)	
Race		
Malay	119 (99.2%)	
Others	1 (0.8%)	
Level of Education		
Diploma	110 (91.7%)	
Degree	6 (62.3%)	
Others	4 (4.1%)	
Work Experience		6.72± 3.90
Grade		
U29	117 (97.5%)	
U32	2 (1.7%)	
U36	1 (0.8%)	
Areas of working places		

Expert Clinic 1	3 (2.5%)
Expert Clinic 2	3 (2.5%)
Expert Clinic 3	3 (2.5%)
Radiology	2 (1.7%)
Executive Clinic	2 (1.7%)
Emergency Cardiac Assessment Unit (ECAU)	5 (4.2%)
Unit Rehabilitation	3 (2.5%)
Cardiology Unit	2 (1.7%)
Cardiothoracic Unit	1 (0.8%)
Diabetics Unit	2 (1.7%)
Infection Control Unit	2 (1.7%)
Ward 1	11 (9.2%)
Ward 2	17 (14.2%)
Cardiothoracic Care Unit	8 (6.7%)
Intensive Care Unit	6 (5.0%)
Catheterization Rehabilitation Ward	6 (5.0%)
Intensive Catheterization Lab	8 (6.7%)
Cardiothoracic Intensive Care Unit	6 (5.0%)
Operation Theater	13 (10.8%)
Expert Clinic 1 (Selayang Campus)	4 (3.3%)
Expert Clinic 2 (Selayang Campus)	4 (3.3%)
Hospital Selayang	3 (2.5%)
Hospital Sungai Buloh	3 (2.5%)
Administration	3 (2.5%)
Medical History	
Yes	24 (20.0%)
No	96 (80.0%)
History of Diabetes Mellitus	
Yes	6 (5.0%)
No	114 (95.0%)
History of Hypertension	
Yes	3 (2.5%)
No	117 (97.5%)
History of Asthma	
Yes	10 (8.3%)
No	110 (91.7%)
History of Osteoporosis	
Yes	
No	120 (100%)
History of Nephritis	
Yes	
No	120 (100%)
History of Thyroid	
Yes	2 (1.7%)
No	118 (98.3%)
History of Gout	
Yes	2 (1.7%)
No	118 (98.3%)
History of Thalasemia	
Yes	1 (0.8%)
No	119 (99.2%)

The degree of burnout among nurses in CTC, UiTM

Table 2 shows the majority of the respondent had low level of emotional exhaustion 91 (98.6%) and the mean score of emotional exhaustion was 12.51 (SD:9.01). While a total of 23 (1.4%) respondents have moderate level and 5% of respondents (n=6) have high level of emotional exhaustion. It was found that the depersonalization score were high among the respondents with the mean score of 18.95 (SD:9.22).

Majority of the respondent (n = 16), that is 13.3% have low level of depersonalization, while 4 (3.3%) of the respondents have moderate score and the highest level was reported by 100 (83.3%) of the respondents. The results also showed that scoring for personal achievement was at high level in which the M= 31.25 (SD: 10.30). More than half of the respondents claimed that they had low level of personal achievement (n = 51, 42.5%). About 43 (35.8%) of them revealed that they had moderate personal achievement and 21.7% of them had high level of personal achievement. Examinations of the means revealed that nurses in Clinical Training Centre (CTC), UiTM are experiencing higher depersonalization and lower personal achievement (indicate higher burnout).

Table 2: Means and Standard Deviation for Emotional Exhaustion, Depersonalization and Personal Achievement (n=120)

Variables	Burnout scores n (%)	Mean	Standard Deviation(%)
Emotional Exhaustion Score			
High	6 (5%)	12.51	9.01
Moderate	23 (1.4%)		
Low	91 (98.6%)		
Depersonalization Score			
High	100 (83.3%)	18.95	9.22
Moderate	4 (3.3%)		
Low	16 (13.3%)		
Personal Achievement Score			
High	51 (42.5%)	31.25	10.30
Moderate	43 (35.8%)		
Low	26 (21.7%)		

Association between burnout with socio-demographic characteristic among nurses in Clinical Training Centre (CTC), UiTM

95% confidence interval were used to measure the Z-Value and hypothesis testing using the p-Value approach on whether there is a significant association between marital status and emotional exhaustion. There were two group under marital status; married and single. It is reported that emotional exhaustion had significant difference between the two group under marital status (Table 3); in which nurses who was married had a higher score of emotional exhaustion compare with the nurses who was single (Z-Value: -2.39, p-value: 0.02).

Table 3: Association between emotional exhaustion and marital status

Characteristics	Emotional Exhaustion	
	Z-Value	p-value
Marital Status	-2.39	0.02

In table 4, a correlation coefficient was done to determine the relationship between personal achievement and year of working experiences. In which in this study revealed that there was a negative

association between seniority and personal achievement of the nurses participating in this study ($r = 0.23, p\text{-value}: 0.01$). This also indicate that as the nurses gain more experience in the field with increased years of working, their levels of this burnout component that is personal achievement will decreased.

Table 4 : Association between personal achievement and working experience

Characteristics	Personal Achievement	
	<i>r</i>	<i>p-value</i>
Tenure	-0.23	0.01

Table 5 showed that there was a significant difference between depersonalization ($\chi^2: 5.73, p\text{-value}: 0.01$), with the three level of nurses grades; U29, U32, U36 ($\chi^2(df): 5.79(2), p\text{-value}: 0.05$) by using Chi Square statistic to investigate the distributions of categorical variables that differ from one another. The results revealed that grade U29 nurses had the highest Depersonalization Score (Mean Rank : 61.72). This current study demonstrated that nurses in Clinical Training Centre (CTC) were experienced with high level of depersonalization of burnout. The study also highlighted that marital status was significantly associated with Emotional Exhaustion. Meanwhile, this study reported that working experiences had significant association with Personal Achievement.

Table 5 : Association between depersonalization and nurses grade

Characteristics	Depersonalization	
	$\chi^2(df)$	<i>p-value</i>
Grade	5.79 (2)	0.05

DISCUSSION

The current sample of nurses was similar to a study by El-Demerdash, *et al.*, (2013) in which the sample size was 123 ($n=123$). The majority of the nurses who participated in this study was 30 years and above and have working experience of 6 years and above. This two socio-demographic characteristic results is similar with a previous research that has reported that the average age for registered nurses in Tanta University Hospitals was 30.34 years and their working experience average is of 7 years (El-Demerdash, *et al.*, 2013). Same results were reported from a research done in a public hospital in Perlis where most of the respondents have working experience between 5 to 10

years (Alam & Mohammad, 2010). Years of working experience was negatively associated with personal achievement indicating that older nurses is likely to have more experienced than the junior nurses. They were more competent and have more positive performance outcome in their job as they are more trusted by their team members and patients. The result is similar with Mohammad (2013), who reported that working experience was negatively associated with personal achievement. Moreover, another study by Lavery & Patrick (2007) reported that age and the number of years in practice were strongly associated. Married nurses are experiencing more emotional exhaustion then the single nurses (85% in this study were married). Due to tiredness and some family conflict that occurred resulting in a long term stress lead to emotional exhaustion syndrome among them. In contrast to this, another study in a public hospital in Kuala Lumpur reported that marital status has nothing to do with the occurrence of burnout among nurses (Sharifah *et al.*, 2011). A different finding was indicated in another study where they found that there is a positive association with marital status and emotional exhaustion are significantly related with burnout syndrome (Burke & Greenglass, 1999). However, other studies in Pakistan, reported that there is negative relation between work, family conflict and burnout syndrome ($r=0.463, p<0.000$) (Hanif & Naqvi, 2014). Due to small numbers of sample in this study it is highly recommended that the married nurses are experiencing more emotional exhaustion at work because of the increasing numbers of patients, workload and responsibilities. Added with family conflict and lower coping skills make them more vulnerable to burnout syndrome.

In this study, the nurses consists of the grade U29, U32, and U36. U29 nurses were among the ones who care, manage, treat patients and maintain the cleanliness of the patient especially within their daily duties. They would also help in supervising Assistant Nurses, Midwives and subordinates. This implies that the U29 nurses had the highest score of Depersonalization Score (Mean Rank : 61.72). As majority of sample are nurses from grade U29, it demonstrated that high level of depersonalization of burnout is experience by the nurses in Clinical Training Centre (CTC). A study by Mirab-Zadeh *et al.*, (2007) reported that burnout among the

lower grade nurses is higher than among the administrative nurses and the difference was statically significant. But the mean scores of Maslach inventory among medical and administrative staff was significant in the field of emotional exhaustion and personal achievement but not for depersonalization. Again due to lack of staff and increasing number of patient and workload, it makes the working environment a stressful place. This leads to the negative or detached response to care of the patient and clients.

CONCLUSION

Finding in this study, there are association between burnout with socio-demographic characteristic in marital status, working experience and grade. There is evidence that staff nurses working in CTC are experiencing a high score in depersonalization and personal accomplishment. In conclusion, burnout may occur in all professions with different types of stressors. The nursing profession is among one of the most stressful occupation. Nurses may face various factors that make them prone to burnout. According to this study the nurses at the CTC is not experiencing the highest levels of burnout. About an average of the nurse at the CTC are satisfied with their career choice. Therefore this study will be beneficial to detect early symptoms of burnout to avoid burnout syndrome among the nurses. This will help to reduce absenteeism, turnover rates and long term stress.

Limitation

This study had several limitations that required considerations in the future study. The respondents who participated in this study were more female nurses than male nurses. This might be some limitation due to less number of male nurses in CTC, Sungai Buloh. Furthermore, the sample in this study was collected only in CTC which has limited total of staffs. Besides that, there were some of nurses who refused to participate and cooperated in this study.

RECOMMENDATIONS

Based on the result of this study, the respondents were experiencing burnout. There are association between burnout with socio – demographic characteristic among nurses in CTC especially in marital status, working experiences and grade. From the result indicated that nurses could receive emotional and physically support from each other, the head nurses and the physicians. The work environment can affect the emotional level of staff nurse. There were also showed a burnout in depersonalization and personal achievement. The hospital administration can provide the nurses to upgrade and gain education, they improve their skills and become more knowledgeable, and they will improve and higher their level of competency. High competence will lead to working effectively, as staff nurse continuously has encouragement, appreciation and reward; they feel higher of personal achievement.

REFERENCES

- Abushaikha, L. & Saca-Hazboun, H. (2009). Job satisfaction and burnout among Palestinian nurses. *Eastern Mediterranean Health Journal*, 15(1), pp 190-7.
- Aiken, L. H., Sloane, D. M. & Lake, E. T. (1997). Satisfaction with inpatient acquired immunodeficiency syndrome care: A national comparison of dedicated and scattered-bed units. *Medical Care*, 35(9), pp 948-962.
- Alam, M. M. & Mohammad, J. F. (2010). Level of job satisfaction and intent to leave among Malaysian nurses. *Business Intelligence Journal*, 3(1), pp 123-137.
- Burke, R. J. & Greenglass, E. R. (1999). Work–family conflict, spouse support, and nursing staff well-being during organizational restructuring. *Journal of occupational health psychology*, 4(4), 327.
- Casey, M., Saunders, J. & O'Hara, T. (2010). Impact of critical social empowerment on psychological empowerment and job satisfaction in nursing and midwifery settings. *Journal of Nursing Management*, 18(1), pp 24-34.
- El-Demerdash, S., Abdelaziz, A. & Abdelsalam, G. (2013). The Relationship between Burnout and Organizational Commitment among Nurses at Tanta University Hospitals. *IORS-JNHS*, 2(6), pp 20-8.
- Hanif, F. & Naqvi, S. R. (2014). Analysis of Work Family Conflict in View of Nurses, in Health Sector of Pakistan. *International Journal of Gender and Women's Studies*, 2(4), pp 103-116.

- Khamisa, N., Oldenburg, B., Peltzer, K. & Ilic, D. (2015). Work related stress, burnout, job satisfaction and general health of nurses. *International Journal of Environmental Research and Public Health*, 12(1), pp 652-666.
- Lavery, J. F. & Patrick, K. (2007). Burnout in nursing. *Australian Journal of Advanced Nursing*, 24(3), pp 43-8.
- Leiter, M. P., Maslach, C. & Frame, K. (1998). Burnout. *The Encyclopedia of Clinical Psychology*. John Wiley & Sons, USA
- Mardani, S. & Mardani, N. (2014). The impact of psychological empowerment on job burnout in hospital staff. *International Journal of Hospital Research*, 3(2), pp 69-78.
- Maslach, C. (1998). A multidimensional theory of burnout. In C. L. Cooper (Ed.), *Theories of organizational stress* (68-85). Oxford University Press, Oxford, England.
- Maslach, C., Schaufeli, W. B. & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52(1), pp 397-422.
- Mirab-Zadeh, A., Irani, S., Sami'ei, M. & Feiz-Zadeh, G. (2007). Burnout and It's Effective Factors Among the Personnel of Razi Psychiatric Hospital. *Journal of Rehabilitation*, 8, pp 64-70.
- Moghaddasi, J., Mehralian, H., Aslani, Y., Masoodi, R. & Amiri, M. (2013). Burnout among nurses working in medical and educational centers in Shahrekord, Iran. *Iranian Journal of Nursing and Midwifery Research*, 18(4), pp 294-297.
- Mohammad, A.M. (2013). Quality of Working Life: An Antecedent to Employee Turnover Intention. *International Journal of Health Policy and Management*, 1(1), 43-50.
- Okwaraji, F. E. & En, A. (2014). Burnout and psychological distress among nurses in a Nigerian tertiary health institution. *African Health Sciences*, 14(1), pp 237-245.
- Olley, B. O. (2003). A comparative study of burnout syndrome among health professionals in a Nigerian teaching hospital. *African Journal of Medicine and Medical Sciences*, 32(3), pp 297-302.
- Sulaiman, W.S.W., Rahman, U., Nasir, R. & Omar, F. (2015). Examining the Construct Validity of Burnout Scale Using Confirmatory Factor Analysis. *Journal of Social Sciences and Humanities*, Special Issue 2 (2015), pp 1-9.
- Vahey, D. C., Aiken, L. H., Sloane, D. M., Clarke, S. P. & Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care*, 42(2 Suppl), II57.
- Yahya, S., Zainiyah, S., IM, A. & Chow, C. Y. (2011). Stress and its associated factors amongst ward nurses in a public hospital Kuala Lumpur. *Malaysian Journal of Public Health Medicine*, 11(1), pp 78-85.