Do Nurses Experience Burnout?

Sezgi Cinar Pakyuz[1], Ozden Dedeli[2,*] and Dilan Deniz[3]

[1] Department of Internal Medicine
Manisa Celal Bayar University Faculty of Health
Istasyon Mevkii 45020 Manisa, Turkey

[2] Department of Internal Medicine
Manisa Celal Bayar University Faculty of Health
Istasyon Mevkii 45020 Manisa, Turkey

[3] Department of Internal Medicine
Manisa Celal Bayar University Faculty of Health
Istasyon Mevkii 45020 Manisa, Turkey

**Corresponding author's email: ozdendedeli [AT] yahoo.co.uk*

ABSTRACT—*The aim of this study was to determine the burnout of nurses, to determine whether burnout levels differ according to specific demographic variables and the unit is working and to identify the problems related to the subject. The research was conducted at a university hospital in Manisa. The sample of this study was conducted 204 nursing students. The data were collected by a nurses identification form, Maslach Burnout Scale. ANOVA, Kruskall Wallis, Mann Whitney U and Pearson correlation were used for statistical analysis. According to the results gathered from the findings; nurses live in moderate emotional exhaustion, and depersonalisation, nurses perceive as lower personal accomplishment. With respect to nurses of gender, educational status and work services that it was found that there was a statistically significant between score of scale of personal accomplishment subscale (p<0.05). Graduated degree and female nurses perceived as a high personal accomplishment. As for, age and working years that scores of subscales they received on the scale of nurses is evaluated that it was determined that there was a statistically significant between scores of depersonalization subscale (p<0.05). As the period of working in the job and ages decreased depersonalisation rised in nurses and the burnout was seen to be higher in staff nurses. Nurses within the scope of this research are experiencing burnout. Therefore, actions to prevent and to develop strategies for dealing to burnout of nurses must be planned and implemented in both organizational and individual basis.*

Keywords— Nursing, burnout, professional depersonalization

1. INTRODUCTION

Burnout is a complex phenomenon that involves a prolonged response to chronic interpersonal stressors on the job. The concept of burnout was described as a state of fatigue and frustration among human service professionals [1,2]. The dimensions of the burnout syndrome that are emotional exhaustion (EE=draining of emotional resources), depersonalization (DP= development of cynical attitudes towards the job or the recipients of the service), and perceptions of reduced personal accomplishment (PA) [3]. In recent years, interest in the topic of burnout has increased because we have begun to understand the significant negative impact that it has on employees, service consumers, and organizations. Nursing is a hard emotional, physical, and spiritual work, but it is also very rewarding and satisfying. Nurses have the additional stress of trying to achieve improved productivity without compromising on patient care, education, and their own set of morals and ethics. Traditionally, it was known that nurses are considered to be particularly prone to burnout. In addition, burnout remain significant concerns in nursing, affecting both individuals and organizations. Studies indicated that nurse burnout was negatively related to job satisfaction, the negatively relationship between nurse burnout and patient satisfaction [1,2,4,5]. The determination of the burnout level of nurses is essential in order to take early institutional precautions and to develop training programs for the nurses. There should be a particular focus on the detection of the variables that lead to burnout in nurses in order to develop effective interventions to reduce burnout and increase retention. The aim of this study was to determine the levels of burnout of nurses and to investigate the relationships between the level of burnout and their relation with some sociodemographic variables.

2. MATERIALS AND METHODS

2.1. Population/sample

This study was carried out from March to October 2016 among nurses who worked for a university hospitals in Manisa, Turkey (West Anatolia). No research sample was chosen. All of the nurses were full-time employees in the university hospital at the time of the study. The study purpose, procedural details, the participant's rights and potential benefits and risks of the study were explained and written consent forms were obtained from them. The data were collected through a questionnaires that were given to the participants. Data was also obtained using the face-to-face interview method and interviews lasted approximately 15-20 minutes. The study population, finally, consisted of 204 nurses. Therefore, the sample represented 81.6% of the nurse population at the university hospital.

2.2. Procedure/design

The study is a descriptive and cross-sectional survey. The respondents completed a two-part survey that included a socio-demographic questionnaire and the Maslach Burnout Inventory (MBI). The first section contained questions to determine the demographic features of the participants, such as their age, gender, education, marital status, have a children, working years, working units, working shifts, sleep problems. The second part, the MBI, was used to measure burnout. We used in the current study the Turkish version of the MBI, which was translated and validated by Ergin in 1993, was used [6]. Ergin reported satisfactory internal consistency coefficients for EE and PA (0.83 and 0.72, respectively) but an unsatisfactory coefficient for DP (0.65). The MBI is a 22 item self-administered questionnaire and currently is considered the "gold standard" for assessing burnout symptoms. It has three subscales: EE, DP, and PA. Emotional exhaustion consists of nine items that measure reduced energy, emotional aspects, and cognitive distancing from the job. Depersonalization consists of five items that measure cynicism, a lack of engagement, and distancing from the patients and treating the patients as inanimate, unfeeling objects. Personal accomplishment consists of eight items that measure the perception of having an influence on others, working well with others, and dealing well with problems. Each item has a five-point rating scale (0 = "never", 1 = "a few times per year", 2 = "a few times per month", 3 = "a few times per week", and 4 = "every day"). Higher scores on the EE and DP scales indicate more burnout, while higher scores on the PA scale indicate less burnout. A reliability study that was carried out in Turkey identified no cut-off limit [7,8]. In the present study, alpha coefficient was found 0.81, 0.72 and 0.53, respectively for three subscales: EE, DP, and PA.

2.3. Ethical Considerations

Ethics approval was granted by the Manisa Celal Bayar University of Ethics Committee, Manisa, Turkey. Before the research began, official written permission was obtained from the hospitals in which the study was conducted. All participants were informed of the study's aims, and their informed written consent was obtained.

2.4. Statistical Analysis

The data were analyzed using The SPSS for Windows Version 16.0. Data analysis included percentage, mean value and standard deviations, and the Mann-Whitney u test, the Kruskal-Wallis test, ANOVA, Pearson's correlation analysis and Cronbach's alpha coefficient were used. For all analyses, a p value of less than 0.05 was considered statistically significant.

3. RESULTS

Most of the participants were female (88.7%) and their mean age was 31.1±6.3 years (SD:6.3) (range: 19–50 years). The characteristics of the participants were as follows: 40.2% were married; 48.0% had a child; 52.9% had graduated from university (Table 1).

The distribution of score mean of MBI sub-scales for the nurses. As can be seen, the score means of emotional exhaustion, depersonalisation and personal accomplishment were 18.7±6.7, 6.4±4.1 and 11.2±5.4, respectively. That is, the nurses had a moderate level of emotional exhaustion and depersonalisation, while they had a low level of personal accomplishment are shown in Table 2.

Comparing the personal characteristics of nurses and their mean scores obtained from the MBI, it was determined that there was a statistically significant difference in the scores of PA according to gender and educational status ($p< 0.05$). That is, female nurses had higher the scores of PA than male nurses. Besides, the scores of PA decreased with increasing educational status. When the subscales scores of MBI were evaluated according to the working department, there was a statistically significant difference for the PA scores ($p < 0.05$). These findings indicated that head nurses had higher the scores of PA than the others. When we asked "Do you wake up in the morning as rested?". Approximately, 77.0 % of nurses replied that "no". Also, there was a statistically significant for the EE score and these responses ($p < 0.05$). That is, the nurses had higher the EE score who do not wake up in the morning as rested. The occupational properties, socio-demographic variables and distribution of Burnout Scores of Nurses are shown in Table 3.

Table 4 shows relationships among the age, working years and MBI scores of nurses. The correlation analyses showed that age and working years were negatively correlated with DP (r = -0.20; r = -0.14). Also, there was significant negatively correlation between age and EE (r = -0.16). Besides, there was significant negatively correlation between EE and DP (r = -0.53).

4. DISCUSSION

Numerous recent studies have explored work stress among health care personnel in many countries. Investigators have assessed work stress among medical technicians [8], radiation therapists [9], social workers [20], occupational therapists [11], physicians [12,13], and collections of health care staff across disciplines [14,15]. Nevertheless, work stress and burnout remain significant concerns in nursing, affecting both individuals and organizations [16]. Hence, most of studies focused on nurses. Therefore, this study is important as it may help lead to organizational measures to overcome such shortages. However our study has limitations. The present study was limited to only one city in Turkey, so this study sample is small. The results, hence, cannot be generalized to all nurses. In addition, the current study would also recommend further research to include and to collaborate other health care disciplines.

The nurses that participated in this study showed a moderate level of burnout in the sub-scales of emotional exhaustion and depersonalisation, and a low level of burnout in the sub-scale of personal accomplishment. When compared with other studies that were conducted among other groups of nurses [3,17,18,19,20], the EE and DP scores were similar. However, the PA scores were lower compared to other studies [7,21,22,23,24]. This finding could be explained due to different sample size, hospitals, clinics, units differ from to another.

Burnout and the degree to which nursing professionals are impacted depend on many factors, such as their age, gender, and marital status, as well as the duration of professional life and suitability of the job [25,26]. For instance on gender, some studies found that there was no association between gender and burnout [22,23], although other studies found that women had a higher risk of burnout [21,28,29]. We found that there was a statistically significant difference in the PA subscales for the mean scores according to gender. This finding could be explained that there was female nurses more than male nurses in terms of sample size, thus, they had higher the PA scores than male nurses.

Some studies that investigated educational status and burnout showed different results. For example, burnout levels decreased with increasing educational status [21,28,30]. However, other studies demonstrated that there was no association between educational status and the burnout level [22,31,32]. In the current study, significant relationships were observed between nurses' educational status and the PA scores. This could indicate that nurses whose educational status were over, had more PA scores. Increasing educational levels among nurses might translate into more autonomy and skills in the profession. Besides, head nurses had higher the scores of PA than the others and there was a statistically significant difference for the PA scores ($p < 0.05$). This finding indicated that improvements in occupational education created higher occupational expectations, which also increased the PA scores. Moreover, nurses always have had difficulty in carrying out their individual roles because certain regulations are not in place and they have experienced many educational and organizational difficulties that continue to the present day. However, in 2007, the "Amending Law for the Nursing Law" was enacted in Turkey (according to today's conditions, to rearrange nurses' duties, authority, and responsibilities) [33]. Currently, several hospitals and universities in Turkey provide with appropriate education and training to nurses; however, in the past, this was not the case. Also, nurses' the PA scores could be positive effected by these advances.

In the current study, nurses who do not wake up as rested, had higher the EE score. This finding could be explaned that higher prevalence of emotional exhaustion in these nurses. Recently published studies [34,35,36] have shown that working shifts has a strong influence on nurses' job satisfaction, burnout, intention to leave the hospital or even the profession. Wisetborisut *et al* (2014) found that the prevalence of burnout in shift workers was 25% compared with 15% in non-shift workers, and having more sleeping hours per day was associated with a lower odds of burnout among shift workers [37]. Nurses working shifts, including night shifts, are subject to a cumulative sleep debt, a decreased quantity and quality of sleep, and continuous sleep deprivation [38]. They are vulnerable to work related fatigue and, consequently, experience excessive daytime sleepiness [39].

In the present study, there was a negative correlation between the nurses' working years and their DP scores in this study, where the DP scores decreased with increasing working years. Besides, there was a negative correlation among the nurses' age, their DP and EE scores in this study. That is, the DP and EE scores decreased with increasing ages. Similar to, some studies showed that the burnout level decreased with the increasing duration of professional life [7,21,24,28]. Contrary to, Erickson and Grove (2008) indicated the level of burnout increased according to increased age and years of experience in nurses [40].

5. CONCLUSION

In this paper, the burnout level of nurses working in the university hospital and the occupational properties and demographic variables effect on the burnout was reported. It was found that nurses had a moderate level of emotional exhaustion and depersonalisation, and a low level of personal accomplishment. Moreover, the results showed that burnout at the depersonalisation level decreased with age and the number of years working in the nurses. The results stated that the personal accomplishment level increased with increased educational status, besides, female nurses experienced higher level of the personal accomplishment. According to the findings of the present study is able to make suggestions as following:

-to prevent the adverse effects on sleep caused by working in the hospital for a long period of time, working plans in the form of staff rotation should be established;
-working hours should be rearranged according to workload;
-psychological consultancy services should be available for nurses; and
-educational and in-services training opportunities should be provided with nurses.

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Table 1. The socio-demographic variables among nurses (n=204)

Variables	n	%
Gender		
Female	181	88.7
Male	23	11.3
Education status		
High School	64	30.9
Bachelor's Degree	108	52.9
Master's and Pre- Bachelor's Degree	33	10.2
Marital status		
Married	122	40.2
Single	82	59.8
Presence of children		
Yes	98	48.0
No	106	52.0
Working Department		
Head Nurse	23	11.3
Staff Nurse	153	75.0
Others	28	13.7
Working Shift		
Day shifts	59	28.9
Night shifts	3	1.5
Both of	142	69.6
Working Years		
1 years and below	17	8.3
1-5 years	61	29.9
6-10 years	58	28.4
11 or more	68	33.3
Do you fall asleep quickly?		
Yes	93	45.6
No	111	54.4
Do you wake up in your sleep at night?		
Yes	115	56.4
No	89	43.6
Do you wake up in the morning as rested?		
Yes	47	23.0
No	157	77.0

Table 2. The burnout sub-scale score means of nurses (n=204)

Maslach Burnout Inventory	Mean± SD	Min – Max.
Emotional exhaustion	18.7±6.7	0 – 36
Depersonalisation	6.4±4.1	0 – 20
Personal accomplishment	11.2±5.4	0 – 29

Standart deviation=SD

Table 3. The Occupational Properties, Socio-Demographic Variables and Distribution of Burnout Scores of Nurses (n=204)

Variable	n	%	Emotional exhaustion Mean±SD	Depersonalisation Mean±SD	Personal accomplishment Mean±SD
Gender					
Female	181	88.7	18.6±6.8	6.2±4.1	11.0±5.5
Male	23	11.3	19.6±6.4	7.4±3.7	13.1±4.5
Statistics and significance			U=1841.5 p=0.368	U=1674,0 p=0.125	U=1528,0 **p=0.038**
Education status					
High School	64	30.9	19.0±5.3	6.6±4.6	11.9±4.7
Bachelor's Degree	108	52.9	19.0±6.4	6.4±3.8	11.0±5.6
Master's and Pre- Bachelor's Degree	33	10.2	17.7±7.8	5.9±4.5	8.7±4.7
Statistics and significance			F=0.345 p=0.793	F=0.212 p=0.888	F=5.079 **p=0.002**
Marital status					
Married	122	40.2	18.3±7.0	6.2±4.0	10.7±5.1
Single	82	59.8	19.3±6.2	6.7±4.2	11.9±5.7
Statistics and significance			F=0.962 p=0.328	F=0.650 p=0.421	F=2.531 p=0.113
Having a child					
Yes	98	48.0	18.0±6.7	5.8±3.8	10.8±5.5
No	106	52.0	19.4±6.7	6.9±4.3	11.6±5.3
Statistics and significance			t=1.464 p=0.145	t=1.915 p=0.057	t=1.119 p=0.265

Working Department					
Head Nurse	23	11.3	17.5±8.1	6.0±4.8	7.8±5.0
Clinical Nurse	153	75.0	19.4±6.3	6.7±4.1	11.7±5.3
Others	28	13.7	15.7±7.2	4.7±3.0	11.1±5.4
Statistics and significance			KW=7.026	KW=5.261	KW=9.838
			p=0.030	p=0.72	**p=0.007**
Working Shift					
Day shifts	59	28.9	17.7±7.3	6.0±3.9	10.2±5.5
Night shifts	3	1.5	23.3±2.5	11.0±2.0	10.0±7.0
Both of	142	69.6	19.0±6.5	6.4±4.2	11.7±5.3
Statistics and significance			F=1.5644	F=2.100	F=1.686
			p=0.212	p=0.125	p=0.188
Working Years					
1 years and fewer	17	8.3	19.7±5.8	7.1±4.5	12.4±3.8
1-5 years	61	29.9	20.5±6.8	7.3±4.2	11.6±5.5
6-10 years	58	28.4	17.7±6.6	5.7±3.6	10.4±4.6
11 or more	68	33.3	17.7±6.7	5.9±4.2	11.2±6.2
Statistics and significance			F=2.545	F=2.043	F=0.814
			p=0.057	p=0.109	p=0.487
Do you fall asleep quickly?					
Yes	93	45.6	18.3±7.4	6.0±4.2	10.9±5.3
No	111	54.4	19.0±6.1	6.7±4.0	11.5±5.5
Statistics and significance			t=-0.721	t=-1.092	t=-0.805
			p=0.472	p=0.276	p=0.420
Do you wake up in your sleep at night?					
Yes	115	56.4	19.3±6.7	6.8±4.1	10.6±5.3
No	89	43.6	17.9±6.7	5.9±4.0	12.0±5.5
Statistics and significance			t=1.417	t=1.555	t=-1.764
			p=0.158	p=0.120	p=0.79
Do you wake up in the morning as rested?					
Yes					
No	47	23.0	14,5±6.5	5.8±4.0	10.3±6.3
Statistics and significance	157	77.0	20.0±6.3	6.6±4.1	11.5±5.1
			t=-5.200	t=-1.156	t=-1.275
			p=0.000	p=0.249	p=0.204