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The relationship of burnout, work environment satisfaction and perceived health

Filiz Kantek[1] Nezaket Yıldırım[2] İlkay Kavla[3]

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Abstract

This study aims to investigate the correlation between burnout, workplace satisfaction, and perceived health among nurses. The study was conducted with 322 nurses working in a university hospital. All nurses, except those on annual or sick leave, were included in the study sample. Data were evaluated with a personal information form, the MBI, the Work Environment Satisfaction Scale, and the Perceived Health Scale. The study data were analyzed with mean analysis, correlation and regression analysis, and Cronbach's alpha coefficient. It was reported that the average emotional exhaustion score of nurses was 18.68, depersonalization score was 5.89 and self-actualization score was 20.54. It was also noted that 27.0% of the nurses in the study were satisfied with their work environment and 52.8% of the participants perceived their health in good condition. It was reported that work environment satisfaction was negatively correlated with emotional exhaustion (β=-.534, t=-11.229) and depersonalization (β=-.269, t=-4.988) while it was positively correlated with personal success (β=.191, t=3.478). Moreover, perceived health was also found negatively correlated with emotional exhaustion (β =-.386, t=-7.487) and depersonalization (β=-.146, t=-2.642) while it had positive effects on personal success (β =.130, t=2.336). The study results indicated that burnout syndrome was influenced by work environment satisfaction and perceived health. It is suggested that nursing managers and nursing leaders can ensure early diagnosis of burnout by evaluating perceived health and work environment satisfaction of nurses. It is absolutely recommended to prioritize to enhance work environment satisfaction.

Keywords: *Burnout, Work Environment Satisfaction, Perceived Health, Nurses, Hospital*

1. Introduction

Burnout syndrome has remained to be a major problem for nurses. Many studies concluded that it still poses a threat. For instance, Kavlu (2008) conducted a study with emergency nurses in Turkey and found that 54.3% of the nurses experienced emotional exhaustion, 54.7% experienced depersonalization, and 46% of them experienced reduced personal accomplishment. Girgis et al. (2009) reported that 32.8% of the health professionals experienced emotional exhaustion, 9.8% of them experienced depersonalization, and 56.7% inefficacy in a study carried out in Australia with health professionals in direct practice care (n= 622). Sharma et al. (2008) similarly conducted a study in Great Britain and Ireland with colorectal nurses (n= 177) and noted that 23.3% of the nurses had emotional exhaustion, 7.4% of them experienced depersonalization, and 85.8% experienced problems of self-actualization. Emold et al (2011) also reported frequent experiences of emotional exhaustion by >60% of participants, cynicism by 28%, and self-actualization by >80%.

Studies on burnout syndrome in nursing commonly indicate that it reduces productivity, causes

[1] Corresponding Author; Assoc.Prof., Akdeniz University Nursing Faculty, fkantek@akdeniz.edu.tr
[2] Lecturer, Akdeniz University Nursing Faculty, ozturknezaket@akdeniz.edu.tr
[3] Lecturer, Akdeniz University Nursing Faculty, ikavla@akdeniz.edu.tr

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job dissatisfaction, curbs professionalism, results in patient dissatisfaction, and decreases care quality (Duquette et al. 1994, Lee et al. 2003, Vahey et al. 2004, Piko 2006, Ergin et al. 2009). Additionally, burnout syndrome is considered to be a major reason of the shortage in the number of nurses at work environments (Alimoglu & Donmez, 2005).

Burnout defined as a physical, emotional and intellectual exhaustion syndrome manifested by adverse attitude to professional life and other people with the development of a negative self-esteem in the individual experiencing chronic fatigue, and feelings of helplessness and hopelessness (Maslach&Jackson 1981). Emotional exhaustion can be defined as feeling emotionally overwhelmed and exhausted by work. Depersonalization, also called cynicism, refers to an impassive and impersonal response towards those receiving one's service, care, treatment or instruction. Reduced personal accomplishment, or inefficacy, describes a feeling of reduced competence and lack of successful achievement in one's work with people (Maslach et al. 1996).

Leiter & Maslach (1988) and Maslach (1999) suggest that burnout syndrome arises from the individuals' interaction with their work environment. Recent studies have demonstrated that work environment satisfaction can directly influence the burnout levels and that a poor work environment may lead to burnout syndrome (Hochwälder 2007, Arı & Bal 2008, Oğuzberk & Aydın 2008; Aiken et al. 2012). Moreover, characteristics of a given work environment particularly have a far-reaching effect on the mental and physical health of nurses (El-Jardali et al. 2011).

Perceived health refers to how an individual perceives his or her physical, social, and psychological well-being (Ay 2011). It is often defined as a self-reflection of a comprehensive evaluation or an overall statement of one's health (Vinokur et al. 2009). Perceived health is associated with objective health indices including physical and functional health (Malınauskıene et al. 2011, Arsalanı et al. 2012). While physical health is multidimensional, it is quite possible that perceived health is a unidimensional psychological construct. In evaluating perceived health, individuals are commonly asked to answer such questions as 'In general, would you say your health is poor, fair, good, very good or excellent?' (Vinokur et al. 2009). Therefore, evaluation of perceived health, unlike physical examination, allows a direct assessment of global health, medical problems and bodily functions of individuals (Günay et al. 2005, Vinokur et al. 2009).

Burnout has become a very popular topic of research in years. However, little is known about the correlation between burnout and perceived health and work environment satisfaction, which creates the need for such a study that particularly focuses on the correlation between burnout and perceived health and work environment satisfaction. This study seeks for the answers for two questions 1- Does perceived health have an influence on burnout? 2- Does work environment satisfaction have an influence on burnout? The study results are believed to contribute to development of new strategies to prevent burnout among nurses.

2. Method

Participants

This study was conducted in a university hospital in Turkey. The study data were derived from 322 nurses (all female) with an average age of 30.13± 6.16 years old (min=20, max=59). Their average time of professional experience was 8.37± 6.65 years while average time spent in this institution was 6.21± 5.60 years. It was further noted that 67.7% of the participants were

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university graduates and 90.7% of them were nurses. It was also reported that 58.4% of the nurses were married and 54.7% of them didn't have any children.

Measures

Basic demographic information.

A personal information form was used to collect basic demographic information, which consists of eight items including age, educational status, marital status, children, duration of professional experience, duration of institutional experience, work position and work style.

Burnout

Maslach Burnout Inventory was used to determine the burnout levels of the participants. Maslach Burnout Inventory (MBI) has 22 statements regarding different burnout dimensions, and each item has five choices ranging from ‘‘never’’ (=0 point) to ‘‘always’’ (=4 points). The inventory consists of three subscales measuring emotional exhaustion (EE) (range 0–48), depersonalization (D) (range 0–30) and personal accomplishment (PA) (range 0–42) separately (Maslach & Jackson, 1986). The MBI was translated into Turkish by Ergin (1992). Reliability of the MBI among Turkish physicians and nurses were 0.83, 0.65 and 0.72 for EE, D and PA, respectively. Çam (1991) found reliability coefficients as .89, .71, .72, respectively. Alpha values of EE, D and PA in this study were 0.85, 0.75 and 0.69, respectively.

Perceived Health

Perceived health was evaluated with the question ‘how do you define your general health status?’ which was answered using a five-point scale (‘very bad’, ‘bad’, ‘neither bad nor healthy’, ‘healthy’, ‘very healthy’). “Healthy’ and ‘very healthy’ were accepted as healthy and “bad” and “very bad” were accepted as bad during the analysis.

Work environment satisfaction

The participants were asked a question “how do you define your overall work environment satisfaction?” and the results were evaluated with a five-point scale (“fairly satisfied”, “satisfied”, “neither satisfied nor dissatisfied”, “not satisfied”, “not satisfied at all”). On the other hand, “fairly satisfied” and “satisfied” were accepted as satisfied and “not satisfied” and “not satisfied at all” were accepted as not satisfied during the analysis.

Procedure

The permission in writing was granted by the health institution administration before collecting study data. The participants were informed about the purpose of the study and they were reminded that participation was on a voluntary basis. They were also instructed about the confidentiality that they didn’t have to write their names on the forms and their personal information would be kept confidential and used only for scientific purposes. These instructions were also affirmed in the data collection forms. Furthermore, oral assent was obtained from each participant. Data collection tools were delivered to the nurses in the work environment and collected back by the researchers. There were 445 nurses in the hospital of whom 75 nurses were not present in the hospital at the time due to annual leave or sick leave. Therefore, only 370 forms were handed out and 332 forms were collected back and analyzed. The response rate was 87% (322x100/370).

ISSN: 2149-5939

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Data analysis

The data were analyzed with mean analysis, linear regression analysis, correlation analysis, and Cronbach alpha coefficient. Statistical Package for the Social Sciences for Windows 18.0 (SPSS Inc., Chicago, IL, USA) was used in all statistical analyses. In statistical significance testing, $p < 0.05$ was accepted as statistically significant.

Ethical approval

Participation in the study was voluntary and anonymity was assured. Participants were informed that all data would be treated as confidential and only the researchers would have Access to the data collected. Consent was assumed with the return of the questionnaire.

3. Results

As shown in Table 1, Emotional exhaustion scores were 18.68 (SD=6.24), depersonalization scores were 5.89 (SD=3.86) and self-actualization scores were 20.54 (SD=3.92). 27% of the nurses were satisfied with their work environment and 41.6% were partly satisfied while only 31.4% were dissatisfied with the work environment. 52.8% of the participants perceived their health conditions as good, 40.1% neither good nor bad, and 7.1% bad.

Table 1. Burnout, work environment satisfaction and perceived health scores (n=322).

Burnout	**M**	**SD**
Emotional exhaustion	18.68	6.24
Depersonalization	5.89	3.86
Personal Accomplishment	20.54	3.92
Work environment satisfaction	**n**	**%**
Satisfied	87	27.0
Neither satisfied nor dissatisfied	134	41.6
Not satisfied	101	31.4
Perceived health		
Healthy	170	52.8
Neither bad nor healthy	129	40.1
Bad	23	7.1

The correlation between burnout, work environment satisfaction, and perceived health was analysed (Table 2) and it was concluded that there was a negative correlation between work environment satisfaction and emotional exhaustion (r=-.53) and depersonalization (r=-.27) while a positive correlation was reported between work environment satisfaction and self-actualization (r=.19). Furthermore, there was a negative correlation betwee perceived health and emotional exhaustion (r=- .39) and depersonalization (r=-.15) while there was a positive correlation between perceived health and self-actualization (r= .13).

Table 2. Correlation between burnout, work environment satisfaction, and perceived health (n=322)

	1	2	3	4	5
	r	r	r	r	r
1- Emotional exhaustion	1.00	.56**	-.25**	-.53**	-.39**
2- Depersonalization	.56**	1.00	-.26**	-.15**	-.27**
3- Personal Accomplishment	-.25**	-.26**	1.00	.19**	.13*
4- Work environment satisfaction	-.53**	-.27**	.19**	1.00	.28**
5- Perceived health	-.39**	-.15**	.13*	.28**	1.00

* Correlation is significant at the 0.05 level. ** Correlation is significant at the 0.01 level.

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The influence of work environment satisfaction and perceived health on burnout scores was analyzed with regression analysis (Table 3) and it was noted that work environment satisfaction had negative influences on emotional exhaustion (β=-,534, t=-11,229) and depersonalization (β=-,269, t=-4,988) while it had positive significant effects on personal success (β=,191, t=3,478). The explanatory power of work environment satisfaction was 28,5% (Adj R^2=,283, F=127,666, p=,000) for emotional exhaustion, 7,2% (Adj R^2=,069, F=24,880, p=,000) for depersonalization, and 3,6% (Adj R^2=,033, F=12,099, p=,001) personal success. Besides, it was stated that perceived health negatively affected emotional exhaustion (β =-,386, t=-7,487) and depersonalization (β=-,146, t=-2,642) while it had positive influences on personal success (β =,130, t=2,336). The explanatory power of perceived health was 14,9% for emotional exhaustion (Adj R^2=,146, F=56,057, p=,000), 2,1% (Adj R^2=,018, F=6,982, p=,009) for depersonalization, and 1,7% (Adj R^2=,014, F=5,459, p=,020) for personal success.

Table 3. Regression analysis of the correlation between burnout, work environment satisfaction, and perceived health (n=322)

			Emotional Exhaustion			
Variables	ß	t	R^2	Adj R^2	F	p
Work environment satisfaction	-,534	-11,299	,285	,283	127,666	,000*
Perceived health	-,386	-7,487	,149	,146	56,057	,000*
			Depersonalization			
Work environment satisfaction	-,269	-4,988	,072	,069	24,880	,000*
Perceived health	-,146	-2,642	,021	,018	6,982	,009*
			Personal Accomplishment			
Work environment satisfaction	,191	3,478	,036	,033	12,099	,001*
Perceived health	,130	2,336	,017	,014	5,459	,020*

*p<.05

4. Discussion

This study aimed to investigate the correlation between burnout syndrome and work environment satisfaction and perceived health. The results confirmed a particular correlation between burnout and work environment satisfaction and perceived health.

The study findings also suggested that work environment satisfaction had a negative influence on emotional exhaustion and depersonalization while it implied a positive influence on personal success, which pointed out that higher levels of work environment satisfaction would result in lower levels of emotional exhaustion and depersonalization as well as higher levels of personal success. Çam (1991) indicated a significantly meaningful correlation between work environment satisfaction and burnout. Likewise, Sayıl et al. (1997) concluded that work environment related problems were considerably influential in burnout cases. Emold et al. (2011) found a negative correlation between work environment satisfaction and depersonalization. Demirbaş (2006) conducted a study on burnout syndrome among hospital managers and medical personnel and concluded that those unsatisfied with the work environment had higher levels of burnout in comparison to other groups in the study. Demir et al. (2003) also demonstrated that nurses complained about higher burnout levels when they were dissatisfied with institutional facilities (Demir et al. 2003). Additionally, Ilhan et al. (2008) emphasized that those who were dissatisfied with the physical conditions of work environment reported higher scores of emotional exhaustion and depersonalization and lower scores of self-actualization. Oğuzberk & Aydın (2008) similarly found that emotional exhaustion scores were lower among those who were satisfied with the physical

ISSN: 2149-5939

conditions of work environment than those who weren't. However, Tekin (2009), in a study conducted with nursing managers, suggested that there wasn't a statistically significant difference between burnout and work environment satisfaction.

A further result of the study was that perceived health had negative influences on emotional exhaustion and depersonalization while promoting personal success. In other words, higher levels of perceived health produced higher levels of personal success and lower levels of emotional exhaustion and depersonalization which complied with the results of previous studies. Vinokur et al (2009) also found that perceived health was practically influential on burnout. Demir et al. (2003) reported high burnout scores among nurses with medical problems. Ilhan et al. (2008) stated that when nurses' perception of their health as poor influenced their burnout levels. Demirbaş (2006) also noted a difference between burnout scores in relation to medical problems. Many studies similarly indicated that medical problems increased the risk of burnout (Sayıl et al. 1997, Alimoğlu & Dönmez 2005, Aslan et al. 2005, Taycan et al. 2006, Sinat 2007, Şahin et al. 2008, Tekin 2009).

The regression analysis of the correleation between burnout and variables demonstrated that the explanatory power of work environment satisfaction 28,5% for emotional exhaustion, 7,2% for depersonalization, and 3,6% personal success. It was additionally reported that the explanatory power of perceived health was 14,9% for emotional exhaustion, 2,1% for depersonalization, and 1,7% for personal success. It can be inferred that work environment satisfaction and perceived health variables affected emotional exhaustion most and that work environment satisfaction had greater impact on burnout in comparison to perceived health, which can be reasonably expected considering that burnout results from an interaction between work environment and individual (Leiter & Maslach 1988, Maslach 1999). Furthermore, it is recommended that health managers and nursing leaders prioritize to enhance work environment satisfaction while planning initiatives to prevent burnout among health professionals.

Limitations of the study

Although the study provides some useful and interesting data, several limitations should be noted. Our study is limited by the absence of a cut-off value for the Turkish MBI to dichotomize the burnout status (burnout vs.no burnout). Another limitation of the study is that the study sample was confined to the nurses in only one hospital. Moreover, the study results particularly disregarded other related factors and only focused on burnout, work environment satisfaction and perceived health among nurses.

5. Conclusion

In light of the study results, it was concluded that work environment satisfaction and perceived health affected the development of burnout. Work environment satisfaction had greater impact on burnout in comparison to perceived health. Improving perceived health and increasing work environment satisfaction are certainly considered to be elemental in preventing burnout among nurses. Frequent complaints of nurses about the work environment and their health problems may imply the potential of experiencing burnout. Therefore, nursing managers and team leaders should regularly monitor the work environment satisfaction and health problems of their employees. Early recognition of such complaints will certainly prevent potential burnout cases, which eventually forestalls certain consequences of syndrome such as low job satisfaction, low health care

ISSN: 2149-5939

quality, and low productivity. It is strongly suggested to conduct future studies with larger samples and with nurses from a variety of work environment so as to test the validity of the results.

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