

Relationship Between Self-Efficacy and Burnout Among Nurses in Behbahan City, Iran

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Abstract

Background: Burnout is a leading cause of physical and psychological injuries and evaluating the relationship between the self-efficacy and burnout of nurses could provide new knowledge on the organization of the subject.

Objectives: The aim of this study was to determine the relationship between self-efficacy and burnout among nurses in Behbahan city, Iran, in 2014.

Methods: In this cross-sectional study, 151 nurses were randomly selected from 3 hospitals in Behbahan city proportionate to their staff number. Data were collected using the Maslach burnout and the Scherer self-efficacy questionnaires. Data were analyzed using ANOVA, t-test and Spearman correlation coefficient by SPSS software version 16. $P < 0.05$ was considered as statistically significant.

Results: From a total of 151 nurses, 39 cases were male and 112 were female. The mean age was 33.5 ± 8.7 years and the mean of self-efficacy was 60.89 ± 6.58 . Most nurses had low burnout in the subscales of depersonalization (63.6%) and emotional exhaustion (64.2%); however, regarding lack of personal accomplishments most of them (65.6%) reported higher levels of burnout. The results also showed a significant and inverse difference between the self-efficacy and three dimensions of burnout, depersonalization ($P < 0.001$, $r = -0.29$), emotional exhaustion ($P < 0.001$, $r = -0.49$), and lack of personal accomplishments ($P = 0.01$, $r = -0.26$).

Conclusions: The findings of the present study show that increasing self-efficacy among nurses can lead to a decrease in burnout in the subscales of depersonalization, emotional exhaustion, and lack of personal accomplishment. Adopting strategies for increasing the self-efficacy would help reduce the burnout and increase motivation and satisfaction among nurses.

Keywords: Self-Efficacy, Burnout, Nurses

1. Background

Hospital is one of the most important health care institutions where nurses play an important role in restoring the physical and mental health of the patients. However, they are under severe stress because of their workforce stress and the services they provide (1). Pressures such as work conditions, lack of personal accomplishment, few opportunities for promotion and strict rules may lead to burnout (2). A burnout syndrome is recognized with symptoms of fatigue, forgetfulness of one's own needs, commitment to an external factor, long-term hard work, a sense of self-pressure, being influenced by the managerial staff and excessive attention to the clients' needs (3). Burnout includes three categories of emotional exhaustion, depersonalization and lack of personal accomplishment (4).

Studies have shown that the amount of burnout is not similar for people working under the same conditions. In other words, burnout is caused by the interaction of nu-

merous factors, including those related to individual, interpersonal and career characteristics (5). This means that the universal phenomenon of burnout is generally dependent on the unique personality of a person and the individual's capacity to cope with difficulties may reduce the problem of burnout (6). Self-efficacy is one of the factors that affect the way an individual deals with pressures (7).

Self-efficacy is an assurance one feels about certain activities which affects his level of personal efforts and performance (8). In other words, self-efficacy influences motivation and the stronger the belief, the more motivated and active the person will be (9). People with higher self-efficacy are more successful when faced with challenges. This is especially true in the profession of nursing where they always have to deal with unforeseen situations, which could be factors leading to burnout. Given that the main motivation for the progress and development of human society is the promotion and protection of human health and since health care professions have the highest rates

of burnout (5), investigating the effect of self-efficacy on burnout can be a beneficial way of empowering nurses with the aim of reducing the incidence of burnout.

2. Objectives

The present study aimed to examine the relationship between self-efficacy and burnout among nurses in Behbahan city, Iran.

3. Methods

In this cross-sectional study, 151 nurses were randomly selected from three hospitals (Shahidzadeh, Farideh Behbahani and Tamin Ejtamaee hospitals) in Behbahan city, Iran, in 2015. This study has been approved by the ethical committee of Behbahan faculty of medical sciences (No: 9405, Date: 23.5.2015). In a pilot study performed on 30 people, the population variance was found out to be 0.1 ($\sigma^2 = 0.1$). Accordingly, the confidence interval was 0.95 ($z = 1.96$) and the acceptable error rate was 0.05 ($d = 0.05$). The sample size was calculated to be 150 according to the following formula (Equation 1).

$$n = \frac{\sigma^2 z^2}{d^2} \quad (1)$$

The nurses were randomly selected from 3 hospitals proportionate to their staff number. Shahidzadeh, Farideh Behbahani and Tamin Ejtamaee Hospitals had 189, 102 and 74 nurses respectively, out of which 79, 42 and 30 nurses were randomly selected to enter the study after the purpose of the study was explained to them. Data were collected using the Maslach burnout and the Scherer self-efficacy questionnaires. The Scherer self-efficacy questionnaire contains 17 questions scored based on a 5-point Likert scale ranging from completely agree (1) to completely disagree (5). Scores ranged from 17 to 85 and higher scores were indicative of higher self-efficacy and lower scores indicated lower self-efficacy of the nurses. Internal consistency of the questionnaire was reported to be 0.89 according to Cronbach's alpha in previous studies (7, 10).

The Maslach burnout questionnaire consists of three independent measurement scales, composed of 22 items, to measure various aspects of the burnout syndrome. The items of the questionnaire included 9 items on emotional exhaustion, 5 items on depersonalization and 8 items on lack of personal accomplishments. Scores of the items on burnout were classified as high (30 or higher), average (18 - 29) and low (17 or lower). Similarly, depersonalization scores were scored as high (12 or higher), average (6 - 11) and low (5 or lower). Lack of personal accomplishments, however, was scored according to the following criteria: high

(33 or lower), average (34 - 39) and low (40 or higher). Validity of the questionnaires was confirmed in Iran (11) and reliability of the questionnaires was checked using Cronbach's alpha and found out to be 0.89 for depersonalization, 0.78 for emotional exhaustion and 0.83 for lack of personal accomplishments.

Data were analyzed using ANOVA, t-test and Spearman correlation coefficient by SPSS software version 16. $P < 0.05$ was considered as statistically significant.

4. Results

From a total of 151 nurses participated in the study, 39 cases were males (25.8%) and 112 were females (74.2%). The mean (SD) age and mean experience of the study subjects were 33.48 (8.74) and 8.74 (5.19) years, respectively. Results showed that 63.6% of the nurses had low burnout in the subscale of depersonalization, 64.2% had low burnout in the subscale of emotional exhaustion and 9.9% had low burnout in the subscale of lack of personal accomplishment (Table 1).

Table 1. Frequency of Different Subscales of Burnout^a

Subscales of Burnout	High Burnout	Average Burnout	Low Burnout
Depersonalization	19 (12.6)	36 (23.8)	96 (63.6)
Emotional exhaustion	17 (11.3)	37 (24.5)	97 (64.2)
Lack of Personal Accomplishment	99 (65.6)	37 (24.5)	15 (9.9)

^aValues are expressed as No. (%).

The comparison of the means for self-efficacy scores is shown in Table 2. The results of ANOVA and Tukey's post hoc analysis showed that there was a significant difference between the self-efficacy scores of the nurses in the subscale of depersonalization. The highest self-efficacy scores were allocated to those who had reported low burnouts ($P < 0.001$). Furthermore, there was a significant difference between the mean of self-efficacy scores among the nurses in the subscale of emotional exhaustion. High self-efficacy was seen among those who had lower burnouts ($P < 0.001$). Moreover, there was a significant difference between the self-efficacy scores of the nurses in the subscale of lack of personal accomplishments ($P < 0.05$).

No significant relationship was found between age and burnout in different subscales. Work experience, however, had a positive and reverse relationship with burnout in the subscale of emotional exhaustion, meaning that emotional exhaustion decreased with the increase of work experience ($P = 0.006$, $r = 0.22$). Demographic information

Table 2. Comparison of Self-Efficacy Scores Among Different Subscales of Burnout

Subscales of Burnout	Self-Efficacy, Mean (SD)	P Value ANOVA
Depersonalization		< 0.001
High Burnout	56.1 (8.16)	
Average Burnout	59.86 (5.71)	
Low Burnout	62.22 (6.07)	
Emotional exhaustion		< 0.001
High Burnout	52.82 (6.31)	
Average Burnout	58.16 (6.37)	
Low Burnout	63.35 (5.05)	
Lack of Personal Accomplishment		< 0.05
High Burnout	59.63 (6.29)	
Average Burnout	61.86 (8.09)	
Low Burnout	63.86 (5.76)	

(gender, education, marital status and type of employment) of the subjects and their relationship with burnout are shown in [Table 3](#). No significant relationship was found between burnout and gender, marital status and the type of employment. Significant positive relationships were found between education and the subscales of depersonalization and lack of personal accomplishments ([Table 3](#)).

5. Discussion

The aim of the present study was to determine the relationship between self-efficacy and burnout among nurses in Behbahan city, Iran, and the findings showed that there is a significant relationship between self-efficacy scores of nurses in three categories of high, average and low burnout among different categories of burnout. In other words, the highest self-efficacy scores were seen among those who reported low burnout in all of its aspects. These results are in line with those of Aghdami Bahonar et al. who also found out that high self-efficacy scores are associated with low burnout. However, unlike our study, in their study no negative correlation was found between self-efficacy, depersonalization and emotional exhaustion (12). Skaalvik and Egyed and Short also found a high negative correlation between self-efficacy and burnout among teachers in that lower burnout would lead to higher self-efficacy (13,14). Another study reported that increasing self-efficacy among municipal employees would lead to a decrease in emotional exhaustion and consequently reduces the amount of burnout (7). The Spearman correlation test showed that all subscales of burnout are significantly and

inversely related with self-efficacy, so that by increasing self-efficacy the rate of burnout would decrease in all aspects. Moreover, the results of the Rathi's study showed a significant relationship between self-efficacy and personal accomplishments (15). Consiglio et al. also proved that the amount of an individual's success in his job is a strong predictor for burnout (16). According to the results, it can be argued that self-efficacy is an important variable in the formation of a sense of competence and success in human beings. For an effective performance, one needs to have both skills and the ability to perform those skills. Thus, self-efficacy with the increase of a feeling of success helps individuals use their skills at their best in order to solve the problems. In other words, self-efficacy creates the belief that one has the ability to perform his duties under different conditions (12).

Adeyemo, in his study, investigated job stress among faculty members of Nigeria University and found out that self-efficacy alone or in combination with emotional intelligence is a powerful predictor of job stress; in other words, self-efficacy and job stress have a reverse relationship (17). However, it is clear that job stress leads to burnout and reduces job satisfaction. Zerat et al. (9), Ghanji and Farahani (18) and Ackfeldt and Coote (19) have reported a significant relationship between self-efficacy, job stress and job satisfaction, showing the inverse relationship between self-efficacy and depression (20). Shikai's study on Japanese nurses also showed that nurses with higher self-efficacy would less frequently face depression (21). In a study by Kokkonen et al. results showed that high levels of burnout were associated with lower levels of self-efficacy. This study was conducted to evaluate the effects of caring for the elderly with dementia and showed that nurses who take care of these patients are more prone to exhaustion and burnout, which consequently affects their quality of care (22).

Another finding of the present study was the positive correlation between gender and the different subscales of burnout. Although emotional exhaustion was higher among male nurses, the difference was not statistically significant. However, in another study, a significant difference was reported among male and female nurses (5). Dickinson-Bannack et al. believe that women are more vulnerable in their emotional trait compared to men. Workplace stresses and the conflict that exists between workplace and family life makes women more prone to mental stresses (23). On the contrary, another study reported that gender is not an important predictor of burnout (24). In the present study, no significant correlation was found between the age of the subjects and different subscales of burnout, which are in line with the results of two other studies (25, 26). Results of the present study also showed

Table 3. Demographic Information and Its Relationship With Burnout^a

Demographic Information	Burnout, No. (%)	Depersonalization	Emotional Exhaustion	Personal Accomplishment
Gender				
Male	39 (25.8)	5.94 (4.96)	12.84 (8.55)	28.30 (7.15)
Female	112 (74.2)	5.50 (5.21)	16.0 (10.4)	29.49 (7.79)
P value	0.64	0.09	0.40	
Educational Status				
Diploma	9 (6)	6.44 (5.24)	15.44 (10.82)	20.33 (5.24)
Associate's Degree	22 (14.6)	8.54 (8.07)	17.40 (13.50)	28.27 (10.09)
Bachelor's Degree	111 (73.5)	4.96 (4.28)	14.72 (9.42)	30.14 (7.01)
Master's Degree	9 (6)	5.77 (3.70)	15.33 (7.26)	28.44 (4.06)
P value	< 0.05	0.72	< 0.05	
Marriage Status				
Married	75 (49.7)	5.86 (5.38)	14.58 (11.49)	28.62 (7.8)
Single	76 (50.3)	5.38 (4.90)	15.78 (8.37)	29.73 (7.46)
P value	0.56	0.46	0.37	
Employment Status				
Permanent Contract	61 (40.4)	6.18 (4.93)	16.42 (8.77)	30.0 (8.15)
Fixed Term Contract	58 (38.4)	5.03 (5.10)	15.24 (11.05)	28.89 (6.56)
Temporary Contract	32 (21.2)	5.12 (5.63)	12.75 (10.19)	28.15 (8.44)
P value	0.54	0.24	0.51	

^aValues are expressed as mean (SD).

that the relationship between job experience and burnout is only meaningful in the emotional subscale meaning that as job experience increases, burnout decreases. These results are in line with Hoseini et al. study reported that people with more job experience have better capacity to deal with stressful events, which occur in their workplace (27). The results of the Consiglio et al. study confirmed that individual factors influence burnout (16). Laschinger et al. in their study, which was conducted in the hospitals of 10 Canadian provinces, demonstrated that proper management of the hospitals has various positive effects on employment, improves self-efficacy and reduces burnout among nurses (28). In Ebrahimzade et al. study, which investigated the effect of leadership styles on burnout in the nursing profession, it was proved that transactional leadership decreased the amount of burnout among nurses because of the motivation it created (29).

In conclusion, the findings of the present study show that increasing self-efficacy among nurses would lead to a decrease in burnout in the aspects of depersonalization, emotional exhaustion and lack of personal accomplishments. Therefore, it is very much essential to adopt strate-

gies to increase self-efficacy, motivation and satisfaction in the nursing profession.

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