

Original Article

The association between professional value and occupational burnout among nurses working in the emergency department

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Abstract

Background: Burnout is one of the most common illnesses due to stress among nurses. Nurses should be able to respond to ethical conflicts by using professional value. This study aimed to determine the relationship between professional value and occupational burnout of nurses working in the emergency department of educational hospitals at Shahid Beheshti University of Medical Sciences in Tehran.

Methods: This cross-sectional study included 241 nurses from 6 educational hospitals during 2018 by using convenience sampling. The Maslach Burnout questionnaire and a professional nursing questionnaire were used for collecting data. The data were described by mean \pm SD, frequency (percentage) and analyzed by Pearson correlation coefficient and linear regression using SPSS Inc. Released 2009. PASW Statistics for Windows, Version 18.0.

Results: Of all participants 132 (54.8%) were female. The mean \pm SD of occupational burnout score was 70.71 \pm 15.25. The mean \pm SD of score for emotional exhaustion was 27.78 \pm 11.57, depersonalization was 13.34 \pm 5.37, the personal accomplishments was 29.64 \pm 10.63, and the professional value was 88.25 \pm 22.0. There was a significant reverse relationship between professional value score and occupational burnout score ($r=-0.19$, $P=0.01$, 95% CI=-0.23_-0.03). The demographic data was no associated with the occupational burnout (all $P>0.05$).

Conclusion: Overall, occupational burnout in emergency department in nurses was high. According to the attained data, the professional value is one of the factors which has been associated to the occupational stress and burnout.

Keywords: Burnout, Emergency Service; Nursing; Occupational Stress; Professional Value`

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Introduction

The stress in the place of work is an important consideration in all health care professions (1). Nursing is one of the most stressful occupations and could induce occupational burnout (OB) among nurses (2). Some studies have pointed out

to a fourfold increase of OB in nurses in the United States compared to other professions (3, 4). Appreciably, 7.4% of nurses become absent from the work due to OB and stress-related complications per week, which is 80% higher than other occupational groups.

OB not only jeopardizes the health of employees in the social service sectors but also contributes to patients' anxiety and tension. The time that nurses experience burnout, they offer a lower quality of care that could eventually cause damage to the health care settings; therefore, the organization should pay for the complications that occur (5).

OB includes emotional exhaustion, depersonalization, and personal accomplishment. Apparently, emotional exhaustion includes stress, feeling pressure, and loss of emotional power in a person's work quality. Depersonalization is a negative and pessimistic attitude towards colleagues and clients; personal accomplishment refers to feelings of incompetence and a lack of achievement and productivity in the work and negative self-evaluation (6). In a study conducted by Aghajani et al. they found that emergency nurses had the highest OB among the hospital departments and also job inadequacy (3). Nursing in the emergency department face with many stressful situations; such as, unpredictable number of patients, rapid, and unpredictable changes in patient's condition, referral of the accident injured and conflicts (7). The present study is underpinned by one theoretical frameworks which is Jobs Demand-Resources model (8).

Professional value and its dimensions are standards for working that are accepted by the professional team and provide a framework for measuring values and beliefs which could influence on behaviors (2). These values are reflected in individuals' attitudes and their choices, behaviors, and practices. In the case of moral problems, nurses are expected to respond by using these expected professional values as part of their decision-making process (5).

To the best of our knowledge, studies regarding professional value in Asia and especially Iran are limited (9). A study done by YanSheng et al. reported that stress has a negative effect on clinical performance

and professional value could reduce stress and improve clinical performance (10). Additionally, Fang Cheng et al. report indicated that there was a significant reverse relationship between professional values and OB (11).

Stress and consequent OB in emergency department between nurses is high, and causes burnout in nurses which can; therefore, reduces the efficiency and quality of nursing care; additionally, leads to physical and psychological damages and dissatisfaction of services. It is indispensable to keep in mind the factors that may be related with OB. According to Fang Cheng et al. study, one of the principals that affect OB is the professional values. Therefore, we aimed to investigate the association between professional values and burnout in nurses in some of Shahid Beheshti University Hospitals in 2018.

Methods

This cross-sectional study was conducted among emergency ward nurses of educational hospitals in Shahid Beheshti University of Medical Sciences from April to June 2018. The research units were selected through convenience sampling. The minimum required sample was determined to be 224, by using G Power software with a correlation value of 0.187, based on Amirkabiri et al. study (18), a 95% confidence interval and a power of 80%.

$$n \geq \left[\frac{(Z_{1-\alpha} + Z_{1-\beta})}{0.5 \times \ln \left[\frac{(1+r)}{(1-r)} \right]} \right]^2$$

This study contained 241 participants that inclusion criteria consisted of the following characteristics: 1) all nurses had to have at least bachelor education, 2) none of them were suffering from chronic or acute illnesses that could affect their physical and mental status during data collection, 3) participants had to be employed in the emergency departments of educational hospitals in Shahid Beheshti University of Medical Sciences, 4) the participants

had to have at least one year of continuous work experience in the emergency department.

Data was collected in this study using three questionnaires.

1. The first questionnaire collected demographic information, including age, gender, marital status, educational level, work experience, work experience in the emergency department, employment status, shift work, and overtime hours.

2. The second questionnaire was the Maslach Burnout Questionnaire, a 22-item scale of burnout. The most common definition of burnout was related to Jackson and Maslach, which considered the burnout as a psychological syndrome consisting of three dimensions of 1) emotional exhaustion, 2) depersonalization, and 3) feelings of decreased personal accomplishment. The most important sign of burnout was the emotional exhaustion, a general reaction to stress, shown as a feeling of pressure. Depersonalization was a negative and merciless response and indifferent to those who were the recipients which are usually of care and services and refers to a negative attitude of the person towards the client. This dimension of burnout is specific to works related to human services. The sense of failure is a reduction in the sense of desirability and successful performance, which is a negative self-assessment. For the Maslach Burnout Questionnaire, the first nine questions measure the emotional exhaustion; additionally, the next eight questions measure the degree of personal accomplishment, and the last five questions measure the depersonalization. The following questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 18, 19, 20, 21, and 22 are reverse-coded and questions 10 and 17 are directly calculated for scoring.

3. The third questionnaire used the Nursing Professional Values Questionnaire. This 26-item questionnaire included a question from the code of ethics of the American Nursing Association and also included care dimensions (9 items), pragmatism (5

items), trust (5 items), professionalization (4 items), and justice (3 items). The scoring was done by a Likert-type five-point scale, scored as follows: 1=not important, 2=less important, 3=relatively important, 4=important, 5=very important. The total possible points ranged from 26 to 130, with a higher score indicating that nurses were more familiar in the professional values.

The validity and reliability of the Maslach Burnout Questionnaire has been examined in numerous studies. Maslach and Jackson reported the internal reliability of the questionnaire with a Cronbach's alpha coefficient ranging from 0.71 to 0.90 and a re-test coefficient of 0.60 to 0.80(12). Filian translated the Maslach Questionnaire into Farsi and submitted to the University of Tehran professors for scientific validity. She reported: the questionnaire was redistributed among nurses who participated in the first phase within a week and the final results of both stages were used. The correlation coefficients were calculated from $r=96\%$ to $r=83\%$ and the reliability of the questionnaire was confirmed (13). In a study done by Rahmani et al. the reliability of the questionnaire with Cronbach's alpha coefficient was 78% (14).

The validity and reliability of the Maslach Burnout Questionnaire has been examined in some studies in Farsi (15, 16). The reliability coefficient was estimated using Cronbach's alpha of 0.78 (17). The professional values questionnaire designed and standardized by Weiss and Shank is valid and reliable with a Cronbach's alpha coefficient of 0.92. Hosseini et al. quoting Shank & Weiss, reported a Cronbach's alpha of 0.92 (18).

The ethical code was obtained from the ethical committee of Shahid Beheshti University of Medical Sciences (IR.SBMU.RETECH.REC.1396.350). The participants were from 6 educational hospitals: Loghman Hakim, Shohdaye Tajrish, Mofied, Modares, Taleghani, and Imam Hossein. The participants were randomly selected in this study. Firstly, the nurses were given a detailed description of the research and assurance of confidentiality of their

information, then an informed consent was obtained from the participants. The questionnaires were given in person by the researcher to nurses who consented to participate. Convenience sampling was used to recruit participants. Therefore, those who were willing to participate in the study were selected and the questioner was present in the hospital. In case of ambiguity in the question, the problem was resolved by the questioner. The questions that were not filled out by the participants were eliminated from statistical analysis.

SPSS Inc. Released 2009. PASW Statistics for Windows, Version 18.0. was used to analyze the data. To describe data, mean and standard deviation were calculated for quantitative data, and frequency and percentage were used for qualitative data. The professional values and dimensions of occupational burnout were categorized into 3 categories; high (mean score $\geq 70\%$), moderate (mean score 41-69%), and low (mean score $\leq 40\%$). In order to compare among subgroups, parametric tests of Independent Samples Test, ANOVA were used, if the assumptions of those were not set, Mann-Whitney U test and Kruskal Wallis test were used, respectively. Pearson's correlation was used to assess the relation between the two variables of burnout and professional value that both had normal distribution (Kolmogorov-Smirnov test of those variables was more than 0.05 and the distribution curve of them was almost bell-shaped). The correlation was reported in a scatter plot. Multiple linear regression was applied for predicting burnout score using stepwise procedure and independent variables were kept in the final model in which P values were <0.05 . Some demographic data were more than two classes that were recorded as dichotomous variables. Demographic data and professional value that had $P < 0.20$ in univariate linear regression were included in multiple linear regression models. All statistical tests and final regression model

were set based on the significant level less than 0.05.

Results

Table 1 presents the demographic characteristics of the participants ($N=241$). The participants consisted of mostly females. Equal numbers of participants were in the 20-30 age range and in 31-40 age range. The majority of were married. and the highest percentage of employment status was 39.0% for corporate employees. In terms of overall job experience, the participants had between 1-5 years of experience, and had 1-2 years of experience in the emergency department. The highest percentage of participants reported working 31-70 hours of overtime per month. Almost half of the participants reported working a rotating shift. Additionally, the participants were asked about their income in terms of less than cost, equal to cost, or more than cost. Most participants reported an income less than or equal to the cost (42.3% in each case). The most frequently represented ethnicity was Fars.

The emotional exhaustion was indicated a significant difference in terms of employment status, services history in emergency, overtime working per month and ethnicity (Table 2). The participants with a contract of employment and work expiries of 4-6 years and Arab ethnicity had more score in emotional exhaustion, while overtime working of more than 100 hours had less problems. Depersonalization domain was more present in people with higher income than the cost ($P > 0.05$). Personal accomplishment domain had a significant difference in individuals with different employment status, different services history in emergency, the average of different overtime working per month and different income status ($P < 0.05$). Table 2 shows professional value had no significant relationship with age group, gender, marital status, educational status, employment status, nursing experience and work experience in emergency, income status and ethnicity ($P > 0.05$). There was significantly a higher professional value in the participants who had morning shift only ($P < 0.05$).

Table 1. The frequency and percentage of the study population (n=241) based on demographic characteristics

Variables		N (%)
Sex	Male	109 (45.2)
	Female	132 (54.8)
Age	20-30	108 (44.8)
	31-40	108 (44.8)
	41-50	25 (10.4)
Marital status	Married	150 (62.2)
	Single	91 (37.8)
Education level	Bachelor	165 (68.5)
	Master	76 (31.5)
Employment status	Corporate	94 (39)
	Official	65 (27)
	Contracted	30 (12.4)
	Conditional	39 (16.2)
	Missing	13 (5.4)
Job experience(year)	1-5	112 (46.5)
	6-10	63 (26.1)
	More than 10	66 (27.4)
Job experience in emergency department(year)	1-2	101 (41.9)
	2-4	49 (20.3)
	4-6	32 (13.3)
	6-8	20 (8.3)
	8-10	10 (4.2)
	Over 10	29 (12.0)
Overtime per month(hour)	Less than 30	37 (15.4)
	31-70	76 (31.6)
	71-100	55 (22.8)
	More than 100	73 (30.3)
	Rotational shift	116 (48.1)
Job shift	Morning	30 (12.4)
	Evening	7 (2.9)
	Morning and evening	47 (19.5)
	Night	27 (11.2)
	Night & morning	14 (5.8)
	less than cost	102 (42.3)
	equals cost	102 (42.3)
Income status to cost	Income more than cost	37 (15.4)
	Income less than cost	37 (15.4)
Ethnicity	Fars	132 (54.8)
	Azari	51 (21.2)
	Kurdish	20 (8.3)
	Lori	32 (13.3)
	Arab	6 (2.5)

Table 2. Comparing occupational burnout value, the 3 dimensions of burnout and professional value based on demographic data

Variables		Emotional exhaustion Mean±SD	Depersonalization Mean±SD	Personal accomplishment Mean±SD	Burnout value Mean±SD	Professional value Mean±SD
Sex	Male	28.03±11.87	13.28±5.33	30.12±10.07	70.29±15.29	87.99±22.34
	Female	27.52±11.43	13.30±5.43	29.46±11	71.32±15.28	88.34±21.75
	P	0.46 *	0.77 *	0.64	0.43 *	0.90
Age	20-30	27.73±12.69	13.74±5.35	29.11±11.70	70.45±18.09	90±22.40
	31-40	28.33±10.55	12.90±4.89	30.04±9.24	71.27±12.54	85.53±22.03
	41-50	25.31±12.02	13.54±7.30	31.81±11.27	70.68±14.10	91.36±19.78
	P	0.43*	0.40	0.54	0.75	0.24
Marital status	Single	29.49±11.82	13.85±4.77	29.72±9.98	73.07±13.87	86.23±23.50
	Married	26.64±11.48	12.90±5.72	29.83±11	69.28±16.03	89.67±21.10
	P	0.11*	0.28 *	0.94	0.08 *	0.24
Education	Bachelor	27.84±11.62	13±5053	29.68±10.37	70.43±15.69	89.95±22.64
	Master	28±11.33	14.01±5.05	30.08±10.92	72.10±13.75	84.36±20.03
	P	0.81*	0.18 *	0.79	0.50	0.06
Employment status	Official	25.25±11.14	12.51±5.86	32.80±10.30	70.57±12.64	92.30±20.71
	Contract	32.39±11.73	13.83±5.09	26.72±9.30	72.95±15.46	85.72±21.69
	Corporate	26.49±11.44	12.92±5.20	31.53±10.88	70.95±14.16	91.62±22.02
	Conditional	27.94±9.96	14.51±5.27	28.13±9.97	70.21±16.93	82.30±22.05
	P	0.01 *	0.15 *	0.01	0.31	0.06
Job experience	1-5	29.25±12.69	13.55±5	29.33±10.67	72.15±15.36	89.27±23.05
	6-10	28.13±10.27	13.84±5.07	27.98±9.31	69.72±15.66	84.07±20.42
	More than 10	25.80±10.80	12.38±6.09	32.66±10.80	70.85±13.31	89.54±21.34
	P	0.08 *	0.21 *	0.04	0.51	0.26
Job experience at emergency department	1-2	28.50±12.65	13.21±4.71	29.39±10.64	71.11±16.12	88.01±23.32
	2-4	28.66±11.80	13.72±5.78	28.35±10.77	70.44±17.10	84.04±22.82
	4-6	30.71±9.68	15.5±5.58	28.32±7.60	73.35±13.71	86.31±17.68
	6-8	26.45±8.98	13.05±5.22	31.85±8.38	71.35±11	84.30±22.80
	8-10	20.55±8.12	10.33±5.22	33.11±12.83	64±17.57	84.90±20.30
	More than 10	22.91±11.84	11.43±7.06	35.73±11.39	70.08±14.13	98.72±19.98
	P	0.02 *	0.08 *	0.06	0.51	0.09
Over time working	Less than 30	30.32±7.54	14.87±3.91	27.96±8.44	73.16±10.06	84.57±20.84
	31-70	30.62±11.96	14.11±5.34	27.95±9.61	72.69±15.54	85.22±22.05
	71-100	27.60±11.21	12.67±5.64	29.43±11.05	69.41±17.26	90.39±19.76
	More than 100	24.87±11.43	12.20±5.47	33.38±10.38	70.46±13.65	90.01±23.50
	P	0.05 *	0.11 *	0.02	0.60	0.33
Work shift	Morning	26.20±13.69	13.40±8.56	28.90±13.36	68.50±18.79	93.84±21.36
	Afternoon	28.50±6.41	13.50±4.63	32±9.38	74±4.42	80.71±18.17
	Morning/Afternoon	30.82±9.22	13.92±4.24	28.50±8.10	73.25±13.65	78.73±15.41
	Night	28.28±15.19	12.71±6.31	23±11.60	64±30.41	77.57±15.91
	Night/Morning	24.60±6.65	15.40±7.76	35.60±6.50	75.60±11.21	83.40±24.35
	Rotated shift	27.63±11.90	13.16±5.05	30.07±10.62	70.77±14.58	90.76±23.25
	P	0.53 *	0.90 *	0.50	0.69	0.01
Income status	Less than cost	29.87±11.94	13.35±5.47	27.77±10.82	70.86±15.80	85.89±22.39
	Equals cost	25.63±11.42	12.60±5.21	31.22±10.51	69.47±14.71	91.23±21.93
	More than cost	28.06±9.63	15.06±5.46	31.78±8.93	74.90±13.65	88.88±20.06
	P	0.06 *	0.02 *	0.04	0.1*	0.10
Ethnicity	Fars	28.34±11.02	13±5.48	30.16±10.64	71.39±12.92	86.18±22.47
	Azari	30.95±11.13	14.17±5.10	28.35±8.51	73.48±16.76	89.46±20.07
	Kurdish	25.06±10.85	13.81±5.40	27.37±12.87	66.25±19.86	85.52±22.63
	Lor	24.32±13.24	12.71±5.62	29.21±11.91	66.25±18.31	91.72±19.74
	Arab	33.33±3.21	18.33±2.08	32.33±5.50	84±6.55	72±27.18
	P	0.05 *	0.1*	0.75	0.5*	0.58

All *P* values (except cases with marked) were calculated using independent –t-test and ANOVA. The *P* values marked with * were estimated by nonparametric tests of Mann -whitney test and Kruskal –Wallis test respectively.

The significant level was less than 0.05.

Occupational burnout score and its dimensions in the participants

The mean±SD OB score in the study population was 70.71±15.25. Figure 1 shows the mean of OB dimensions. The

majority of participants had high level of emotional exhaustion and depersonalization. Almost 59.9% had a low level of personal accomplishment (Table 3).

Professional value and its dimensions

The mean \pm SD of professional value was 88.25 \pm 22.0. Approximately, one third of the participants (n=88, 36.5%) were at a high level in terms of professional value, 58.1% (n=140) were at a moderate level, and 5.4% (n=13) were at a low level. Therefore, most of study population were at the moderate level of professional value. The dimensions of professional value included care, trust,

justice, professionalization, and pragmatism. The participants scored the highest in the care dimension, with a mean of 32.30 \pm 7.76. The mean of the trust dimension was 17.07 \pm 4.77, and in the justice dimension was 10.16 \pm 3.08 (lowest score of professional dimensions), in the professionalization the dimension was 13.13 \pm 3.97 and in the pragmatism was 16.19 \pm 4.89.

Table 3. Ranking of dimensions of occupational burnout (emotional exhaustion, depersonalization, personal accomplishment), and professional value.

Variables		N (%)
Emotional exhaustion	High	131 (60.4)
	Moderate	53 (24.4)
	Low	33 (15.2)
	Total	217 (100)
Depersonalization	High	134 (62.0)
	Moderate	54 (25.0)
	Low	28 (13.0)
	Total	216 (100)
Personal accomplishment	High	45 (20.7)
	Moderate	42 (19.4)
	Low	130 (59.9)
	Total	217 (100)
Professional value	High	88 (36.5)
	Moderate	140 (58.1)
	Low	13 (5.4)
	Total	241 (100)

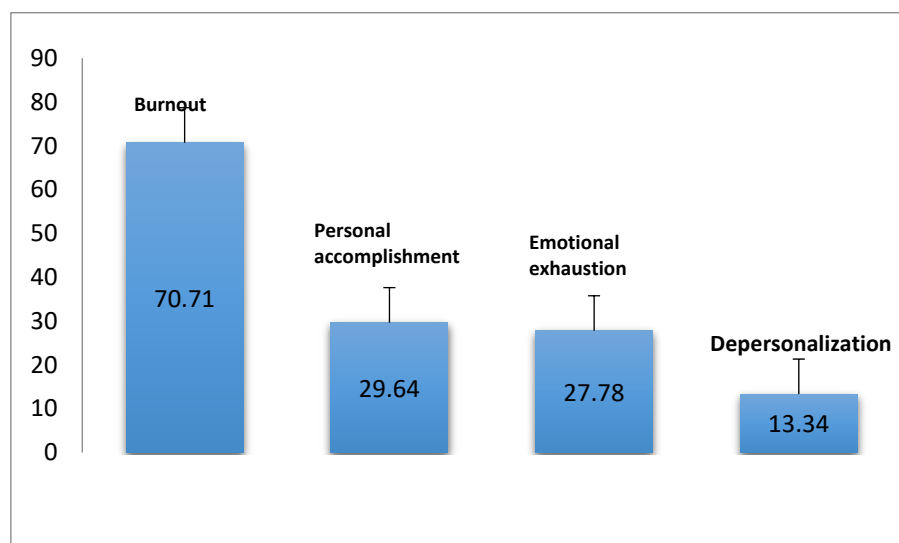


Figure 1. Average score of occupational burnout, personal accomplishment, emotional exhaustion, and depersonalization (The mean \pm SD of these items are as follows respectively: 70.71 \pm 15.2, 29.64 \pm 10.63, 27.78 \pm 11.57, 13.34 \pm 5.37)

The association between occupational burnout score and professional value

There was a significant correlation between professional value and burnout score ($r=-0.19$, $P=0.01$, 95%CI=-0.23,-0.03) (Figure 2). Table 4 presents the results of linear

regression by using OB score as the dependent variable and demographic data and professional value as independent variables. In multiple linear regression, only professional value was found as a significant factor affecting OB score.

Table 4. Univariate and multiple linear regression coefficients of independent variables with occupational burnout score

Independent variables (indicator)	β coefficient (SE)	95% CI	P
Univariate linear regression			
Age (>40 years)	-0.19 (3.44)	-6.98_6.58	0.95
Sex (Male)	1.03 (2.08)	-3.08_5.14	0.62
Marital status (Married)	-3.78(2.15)	-8.03_0.45	0.08
Education level (Master)	1.66(2.21)	-2.70_6.03	0.45
Employment (official)	-0.81(2.34)	-5.43_3.80	0.72
Job experience (≤ 10 years)	0.35(2.31)	-4.21_4.92	0.88
Job experience in emergency (>4 years)	0.05(2.21)	-4.30_4.41	0.98
Overtime (>70 hours)	-2.67(2.03)	-6.69_1.34	0.19
Work shift (Morning)	-2.78(3.60)	-9.88_4.31	0.44
Income (equal or less than cost)	-4.70(2.88)	-10.39_0.97	0.10
Professional value	-0.13(0.04)	-0.22_-0.04	<0.001
Multiple linear regression			
Constant	82.18(4.32)	73.65_90.72	<0.001
Professional value	-0.12(0.04)	-0.21_-0.03	0.01
$R^2:0.033$, Adjusted $R^2:0.028$			

The independent variables were recorded to the dichotomous variables that indicators were mentioned in brackets. The reference group for each variable was others.

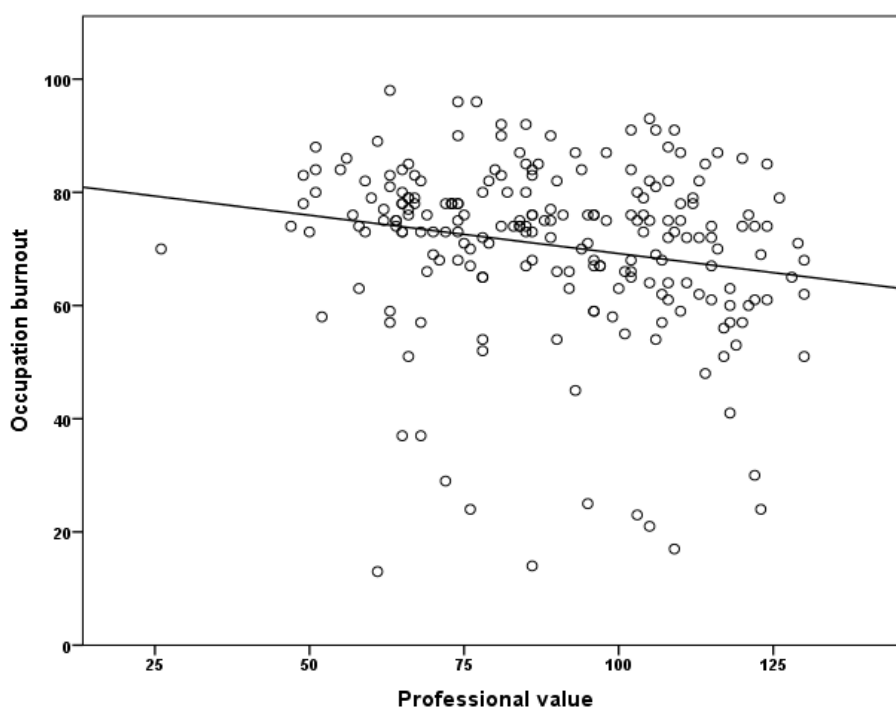


Figure 2. Scatter plot of occupational burnout score and professional value score

Discussion

A significant inverse association was found between professional value and score of burnouts in this study. The professional value can predict OB score without the role of demographic characteristics. The final model based on adjusted R^2 was not powered to predict of burnout score and other possible factors may be involved. Based on our knowledge and the literature review, studies regarding professional value in Iran are limited; generally, research on professional values is rare in Asia (9). Fang Cheng et al. similar to our study reported a significant inverse relation between professional value and burnout score and could not find the role of other variables on burnout score (17). The prevalence of OB in oncology nurses was improved by increasing the perception of professional value; therefore, the professional value education could be a strategy for reducing burnout (18). A study performed by Altun et al. and Liselotte et al, showed that professional value for clinical staff play an important role in burnout. The time that nurses feel that their job is important and valuable, they feel satisfied and the chances of being worn out become quite low. Contrary, when they feel that their job is not important, they face with burned out (19, 20).

According to the results of our study and the importance of professional value on occupational burnout among nurses, it has been recommended that the planners and authorities of the health system consider professional value education in nursing education programs and ongoing professional development to improve nurses' psychological and physical health and to increase the quality of nursing care. In the present study, the entire demographic characteristics had no significant different in burnout score which was consistent with Hosseiniinejad et al. study (21). There were associations between work shift, overtime per month, and education level with professional value. Morning shift personnel

usually have more professional value. The finding was similar with Allahyari et al. study, but there was no significant relation between other demographic variables and professional values of nurses in that study (22).

If a person is at a high level of emotional exhaustion and depersonalization and also at a low level in personal accomplishment, it causes a high level of burnout (23). According to the high percentage of our participant who had high emotional exhaustion and depersonalization, together low personal accomplishment, as resulting they showed a high level of OB, which was in line with Moshtag et al. study carried out in 2014 (24), and a study conducted by You et al. in 2013 (25).

Emotional exhaustion is a form of chronic fatigue, sleep disorder, various physical symptoms as a reduction in energy (21) that more than half of our participants were suffering from it. This dimension of burnout had less score in nurses that were full time and working more than 100 hours in a month. Aghajani et al. found that emergency department nurses had more emotional exhaustion than other nurses (3). Similar results in different centers showed the nature of nursing stress in the emergency department and the physical and psychological complications for individuals and also for their families were present. Our finding was not consistent with Zeighami Mohammadi et al. study (1); they investigated the association between occupational stress and burnout in nursing staff in regular departments of the hospital which a moderate levels of emotional exhaustion was found, while we only focused on the emergency department. The emergency department nurses had stressful condition due to unpredictable situations, a high pressure atmosphere, lack of control, and limited time for assessing the impact of therapeutic interventions and also patients referred to an emergency department are usually in critical condition (26).

Depersonalization is a negative and merciless response to the service recipient from the provider (27). When individuals are not encouraged to do their job properly, do not understand their duties well, rules and guidelines are not described, and no new and diverse approaches are seen, nurses lose their moral and humane views for caring for patients and fall into depersonalization (28). High depersonalization in our study was consistent with the results of Aghajani et al. study (3) and inconsistent with Zeighami Mohammadi et al. study (1).

The majority of our nursing personnel showed a low level of personal accomplishment. It seems that most of the nurses may not be able to exercise their competencies in their work environment. They are dissatisfied with their job and have a negative attitude toward the nursing profession. Since, nurses' satisfaction and efficiency affect the organization's success, increasing nurses' job satisfaction is quite important (1), which was consistent with Khaghani et al. study (29). This finding was not consistent with Aghajani et al. study in the emergency department, where more than half of the emergency nurses showed high personal accomplishment. This may be due to cultural and ethnic differences between the participants in the two studies. The dominant ethnic was Gilak in Aqajani et al. study, and the dominant ethnic was Fars in our study: culture and self-assessment of personal accomplishment in different societies and cultures depends on the factors that an individual has learned in a local culture (30).

Most of our studied population was at the moderate level in terms of professional value. They obtained the highest score in the care and trust dimensions of professional value, the lowest score in the justice and professionalization dimensions, was consistent with Hosseini et al. study (18). The trust and care dimensions were the most important components, and professionalism; in contrary, pragmatism were the least important ones. Razmjoei et

al. studied the components of professional value between nurses, which the highest average score was allocated to justice and the lowest was due to pragmatism. Prioritizing the dimensions of professional value from the viewpoint of those nurses, respectively, from highest to lowest, included justice, care, trust, professionalization, and pragmatism (9). Our study was consistent in care dimension but inconsistent in terms of justice with the aforementioned. The least prioritized dimensions were professionalism and pragmatism, which was similar with our study in terms of professionalism but differs in pragmatism; it could be due to the differences in the sampling environment, emergency department versus other departments indeed.

The limitations of the present study are mainly geographic constraints in the development of the sample. Due to the fact that the research has been conducted in the emergency department of Shahid Beheshti University of Medical Sciences, the results generalization could not be entirely true for all emergency departments. In addition, the probability of different stressful records in people's lives can reduce the amount of generalization. It is recommended that further studies get conducted in other wards with a larger sample as well.

It was ultimately attained that there was a significant reverse association between occupational burnout and professional value score. It appears that by providing training programs for the promotion and internalization of professional value; such as, self-esteem, pragmatism in care and justice among the nurses, the burnout could be reduced between nurses.

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Conflict of interest

Authors declare no conflict of interests.

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