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Evaluation of public health and its relationship with burnout in nurses' public and private hospitals of Khorramabad in 2016

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ABSTRACT

The purpose of this study was to determine the relationship between general health and burnout in nurses of private and public hospitals in Khorramabad in 2015-2016. This correlational study was conducted on 350 nurses selected by stratified random

sampling. Data collection instruments were demographic questionnaire, Goldberg and Hiller General Health Questionnaire (1979) and Maslach Burnout Inventory (1981). General health was significantly associated with marital status (P=0.022), monthly income (P=0.002), economic status (P = 0.043) and work experience (P=0.46). The correlation with burnout (r=0.01) was also significant. Based on the logistic regression model, the general health 0.60 time was higher in women than in men. According to the findings of this research, it seems that general health is significantly associated with demographic characteristics in nurses. Therefore, paying attention to economic status, work experience and marital status of nurses improves general health. In addition, considering the significant association between burnout and demographic characteristics in nurses, employment strategies for reducing stress and burnout can help improve the nursing care quality by promoting mental health of nurses.

Key words: Burnout, Khorramabad, Nurses, General health

1. INTRODUCTION

General health is a multidimensional concept that is affected by physical, environmental, psychosocial and socioeconomic factors (Hartig et al., 2014). General health involves continuous adaptation to changing conditions and efforts to realize the equilibrium between inner demand and the requirements of the changing environment. Therefore, people who are able to adapt well to their environment will have normal general health. This adaptation to the environment and living conditions is based on an appropriate balance between all aspects of general health. One of the most important and effective factors for the health of people is their job, which threatens their health by exposing them to various factors. Both physical and mental health of employees at the workplace is one of the issues that are highly important to organizations (Safi et al., 2016). General health is one of the most important areas for sustainable development in human societies because of its direct relationship with human health. Nurses are important members of the health care service system and human society needs their services. Nurses affect the health system by playing different roles (Shahraki et al., 2013). Nursing staff comprise more than one-third of man power in hospitals (Hojjati et al., 2011). The nursing profession is a stressful profession, but it plays a central role in providing general health for community members (Akbari et al., 2011). Nurses are exposed to different stressors due to their responsibility for providing comfort and peace for patients and treating them, and even the levels of the tensions in the nursing profession are higher than those in other medical professions (Khamisa et al., 2013). However, due to understaffing, high work burden and low salary and benefits, nurses have to work in three shifts, while they are expected to condone pain for patients without fatigue and exhaustion (Van Bogaert et al., 2013), while health workers are more likely to develop mental diseases and are at comparatively higher risk of suicide and burnout (Aradilla-Herrero et al., 2014). Burnout is one of the job-related risks that has been considered in recent years. In addition to undesirable physical effects, this problem can lead to various psychological complications. Burnout is especially high in health care professions due to the stressful nature of these occupations (Bahari Binabag et al.. 2012). Diagnosis and prevention of burnout is important to improve the health of individuals and the quality of services provided (Rössler et al., 2012). Burnout refers to the lack of ability to cope with emotional stress associated with work or excessive consumption of energy and resources that leads to fatigue and helplessness (Dyrbye et al., 2014). This condition can progress over time and turn into a disability (Shanafelt et al., 2012). Burnout is the cause of physical and emotional diseases (Hakanen et al., 2012), which ultimately leads to a reduction in the quantity and quality of work of staff (Chen et al., 2014). This applies to the occupations in which the staff spend most of their time on supporting others, such as nursing, which, in turn, can reduce the quality of services provided to patients and, consequently, dissatisfaction with medical care (Chen et al., 2014). Considering the adverse effects of burnout on individual performance, having information on the factors affecting this phenomenon can have a positive effect on the mental health of individuals and hence recipients of services. Various researches have investigated the relationship between burnout and individual factors (Rashidi et al., 2014). A research on the staff of child welfare services showed that age was a factor associated with burnout (Biani et al., 2013). The results of studies indicate that burnout has a significant association with gender, age, and work experience, and the level of education is also an effective factor on this complication (Gleichgerrcht et al., 2013). In addition, studies have indicated that the conditions of the working environment conditions play an important role in the development of burnout among nurses, including long hours of work, high workload, and certain factors such as the duration of employment, the type of employment, and salary and benefits (Perry et al., 2014). Among the above-mentioned factors, it seems that higher responsibility and work pressure as well as more work experience are important factors effective on reduction in health. As the work experience of nurses increases, the degree of conflict that they experience also increases. These results may suggest that as nurses take on more responsibilities and their job expectations increase, the likelihood of interference

between their professional responsibilities their family responsibilities also increases and and their health is impaired (Hatzenbuehler et al., 2013). This may be due to certain reasons such as high level of responsibility, greater accountability, occupational stress and work pressure, but these factors have been reported to cause different effects on burnout in different studies. Several studies have shown that there is no significant relationship between work experience and burnout, but other studies have reported that job burnout decreases with increasing work experience (Talaei et al., 2006). This finding can be due to the fact that the staff learn how to reduce occupational stress as their work experience increases. In addition, the work of a healthy worker can also be taken into consideration. In burnout, individuals who have physically and personally suitable potentials for their job remain in their job and therefore their work experience increases, while others quit their job because of non-compliance to job (Rashidi et al., 2014). Given inconsistent research findings about the relationship between work experience, burnout and general health, it is highly important to pay attention to this variable in order to find out its specific effects. According to statistics, nursing staff make up approximately 60-80% of hospital staff. Approximately, 170,000 male and female nursing staff have been employed in the public and private sectors in Iran (Hojjati et al., 2014). The study of Hasheminejad et al. on occupational stress and its relationship with mental health among the staff of Kerman Hospital showed that the clinical staff had comparatively lower levels of mental health (Hasheminejad et al., 2012). Gustafsson examined the quality of sleep and health of 160 female nurses. That study showed that 45% of nurses complained of insufficient sleep, 30% of digestive problems and 62% of back and joint pain (Gustafsson et al., 2012). According to the study of Ahadi et al., most nurses have a low level of emotional exhaustion, moderate depersonalization and high level of individual failure (Ahadi et al., 2015). Because stress is usually experienced by nurses who work at lower ranks and are at the early years of their working due to a greater degree of discipline in the group, and the lack of guidance prevents progress in the professional and educational fields, which is a problem for nurses across the world (Bassett et al., 2014), people with low experience, especially those who do not have enough training at the beginning of their career, will face difficulties due to lack of appropriate solutions to occupational stress. After passing through years and acquiring coping skills and expertise in relevant fields and achieving adaptation to the environment and working factors, these people are exposed to lower levels of burnout, but the same stresses and working conditions lead to reduced health over time in more experienced individuals, creating an inverse correlation between work experience and general health as well as quality of life. However, in some studies, no statistically significant relationship between general health and work experience has been observed among employees (Ahadi et al., 2015). Current inconsistencies in the research findings necessitate further research to explain the relationship between work experience, general health and burnout. With regards to the importance of maintaining the general health of nurses due to their central role in the performance of the health system of a community, it is necessary to identify factors such as burnout, which reduce the quantity and quality of nursing services in the long term. The aim of this study was to investigate the association of general health with burnout and work experience in nurses of private and public hospitals in Khorramabad, Iran in 2015-2016.

2. MATERIALS AND METHODS

Participants were 350 private nurses working in public and private hospitals in Khorramabad during 2015-2016. Regarding the subject of the research and its objectives, the method of the study was decided to be applied and data were collected by using a descriptive-correlational method and. In this type of research, which represents one of the descriptive (non-experimental) research methods, the relationship between variables is studied with respect to the purpose of the study. Correlation was used to study the type and level of variables.

2.1. Study population

The study population of this study consisted of all nurses working in private and public hospitals of Khorramabad in the spring of 2016 (n: 1800).

2.2. Sampling method and sample size

This is a cross-sectional study. A total of 350 nurses working in private and public hospitals in Khorramabad were selected by using stratified random sampling. For this purpose, each hospital was considered a stratum. In each hospital, each ward was considered a cluster. Then, having referred to the eight hospitals consisting of Madani Hospital, Social Security Hospital, Shohadaye Ashayer Hospital, Shahid Rahimi Hospital, Asali Hospital, Imam Reza Hospital, Tohid Hospital and Iran Hospital. According to the lists of nurses in morning and evening shifts, their gender, and proportion of the number of employed and eligible nurses in each ward, a sufficient number of nurses were selected from each ward by systematic random sampling. Sample size was determined 315 by using pilot sampling and Cochran's sample size formula, taking into account the variables, but with regard to the likelihood of lack of filling out the questionnaires completely, 350 people were enrolled.

2.3. Demographic characteristics of the participants

According to the findings of this study, 52.3% were nurses and 47.7% were male. 51.7% were single and 48.3% were married. The majority of nurses (48.3%) had monthly income between 1500000 and 3000000 tomans, 31.3% of them had a monthly income of over 3,000,000 tomans, and 20.5% had a monthly income of 1500000 tomans. Also, 91.8% of the nurses were bachelor and 8.2% had undergraduate and postgraduate degrees. 47.4% of nurses had a moderate economic situation, 30.7% and 21.9% had a bad economic situation. 51.7% of nurses were working in public hospitals and 48.3 percent were working in private hospitals. The majority of nurses (55.4%) had a moderate life satisfaction, 25.6% of them did not have life satisfaction, and 19% had life satisfaction. Most of the nurses (35.2%) were employed as provisional employees, 24.7% as formal employees, 20.5% as project-oriented employees, and 19.6% as contractual employees. Of the nurses, 68.2% used sedatives and the rest did not. Most of the nurses (42%) had a work experience of 1-5 years, 36.1% had a work experience of 6-10 years old, 12.2% had a work experience of 11-15 years and 9.7% had a work experience of over 15 years.

Data collection instruments

2.4. Demographic questionnaire

The general and economic status of nurses was determined by a researcher-developed questionnaire. This questionnaire addressed demographic characteristics including age, sex, education level, work experience, working a second job, employment status, job status, and income. The validity and reliability of the researcher-developed questionnaire were approved by three psychology professors. The variables that were quantitatively measured were numerically analyzed by the software and the classification variables were scored and analyzed by using Likert scale.

2.5. General Health Questionnaire

To determine general health, the General Health Questionnaire, developed by Goldberg, was used. This is a multi-disciplinary and self-completion questionnaire that has been developed to investigate discrete non-psychiatric disorders in the last month that is observed in different social settings. In current study, the short (28-item) version of the General Health Questionnaire was used (Table 1).

Table 1 Subscales of the General Health Questionnaire and the number of items of each subscale

Subject	Number of questions
Signs of boodily	1, 2, 3, 4, 5, 6, 7
Anxiety and Insomnia	8, 9, 10, 11, 12, 13, 14
Social output	15, 16, 17, 18, 19, 20, 21
Depression	22, 23, 24, 25, 26, 27, 28

The validity and reliability of the instrument Validity and reliability of this questionnaire have been including in some studies including the studies of Noorbala et al. (Noorbala et al., 1982), Hashemi Nazari et al. (Hashemi Nazari et al., 2013), Halvani et al. (Halvaei et al., 2014), Hassani et al. (Hassani et al., 2015), Latifian and Delavarpour (Latifian et al., 2012), and Moosavi and Ahmadi (Mousavi et al., 2012) has been proven.

Table 2 Cronbach's alpha coefficients calculated for the General Health Questionnaire

Components	Cronbach's alpha	confidence level	Number of questions
Total scale	0.88	0.95	28
Signs of boodily	0.78	0.95	7
Anxiety and Insomnia	0.68	0.95	7
Social output	0.75	0.95	7
Depression	0.66	0.95	7

2.6. Administration, scoring, and interpretation of the scores on the instrument

The questionnaire consists of 28 questions to investigate 4 subscales. The items 1-7 address physical symptoms, the items 8-14 anxiety and insomnia, the items 15-21 social dysfunction, and the items 22-28 depression. The items of these questions are four-choice and there are two methods for scoring it. The first method is the traditional bimodal method, with two choices 0 and 1, and therefore the total score ranges between 0 and 28. In the second method, responses are scored on a Likert (0, 1, 2, 3) scale, and therefore the respondent's score ranges from 0 to 84. The cutoff point for this questionnaire has been determined 21-13 in different studies in Iran (Abbasi, 2001). In this questionnaire, the cutoff is considered 23 so that the scores 0-23 are considered to represent acceptable general health and those > 24 are considered to represent unacceptable general health.

Table 3 Minimum and maximum scores on the General Health Questionnaire

Subject	Maximum score	Middle score	Minimum score	Number of questions
Total scale	84	42	0	28
Signs of bodily	21	10.5	0	7
Anxiety and Insomnia	21	10.5	0	7
Social output	21	10.5	0	7
Depression	21	10.5	0	7

2.7. Maslach Burnout Inventory

The Maslach Burnout Inventory questionnaire is the most common instrument to measure burnout in people with different occupational and professional backgrounds, and the burnout of the respondents is examined by investigating emotional exhaustion, depersonalization and individual sufficiency. This questionnaire contains 22 items.

Table 4 The subscales of Maslach Burnout Inventory and the number of the items of each subscale

Subject	Number of questions
Emotional exhaustion	20-16-14-13-8-6-3-2-1
Drop the character	5-22-15-1-10
Feeling of personal competence	21-19-18-17-12-9-7-4

The validity and reliability of the instrument the reliability coefficient of the questionnaire was 91% in the present study. The reliability of this questionnaire has also been confirmed in other studies such as Toubayi and Sahraeian [31] and Bakhshi Soureshjani [32].

Table 5 The calculated Cronbach's alpha coefficients of the Maslach Burnout Inventory

Subject	Cronbach's alpha	confidence level	Number of questions
Total scale	0.90	0.95	22
Emotional exhaustion	0.78	0.95	9
Mournful of character	0.68	0.95	5
Feeling of personal competence	0.75	0.95	8

2.8. Administration, scoring, and interpretation of the scores on the instrument

Scoring was performed by using a 7-point (0-6) Likert scale ranging from *Never* to *Every day*. To determine the level of emotional exhaustion, the scores on the items 20, 16, 14, 13, 8, 6, 3, 2, 1 are considered so that if the sum of scores is ≤ 17, it represents low emotional exhaustion, if 29-18, it represents moderate emotional exhaustion, and if ≥ 30, it represents high emotional exhaustion

high. In order to determine the level of depersonalization, the scores on the items 5, 22, 15, 1, and 10 are summed, with scores ≤ 5 interpreted as low personal burnout, 6-11 as moderate personal burnout, and ≥ 12 as high personal burnout. The sense of individual sufficiency is represented by the sum of the scores on the items 21, 19, 18, 17, 12, 9, 7, so that the scores ≤ 40 are interpreted as low individual sufficiency, 34-39 as moderate personal sufficiency, and ≥ 33 as high personal sufficiency.

Table 6 Minimum and maximum scores on the Maslach Burnout Inventory

Subject	Maximum score	Middle score	Minimum score	Number of questions
Total scale	132	66	0	22
Emotional exhaustion	54	27	0	9
Mournful of character	30	60	0	5
Feeling of personal competence	48	24	0	8

2.9. Procedure of study

This is a cross-sectional study. A total of 350 nurses working in private and public hospitals in Khorramabad were selected by using stratified random sampling. For this purpose, each hospital was considered a stratum. In each hospital, each ward was considered a cluster. Then, having referred to the eight hospitals consisting of Madani Hospital, Social Security Hospital, Shohadaye Ashayer Hospital, Shahid Rahimi Hospital, Asali Hospital, Imam Reza Hospital, Tohid Hospital and Iran Hospital, According to the lists of nurses in morning and evening shifts, their gender, and and proportion of the number of employed and eligible nurses in each ward, a sufficient number of nurses were selected from each ward by systematic random sampling. After Lorestan University of Medical Sciences provided consent for the researchers to perform the study and necessary arrangements were made with the heads of the above-mentioned hospitals, the participants were assured about the confidentiality of their data and then they provided informed consent to participate in the study, and necessary explanations on how to complete the questionnaires were given to them, the researcher-developed questionnaires the GHQ-28 were provided to them and their responses were recorded without any interference.

2.10. Data analysis

In this study, the SPSS version 21 was used to analyze the data. To describe quantitative data, the mean (standard deviation) and statistical tables were used and to describe qualitative data, absolute and relative frequency was used. In addition, to compare quantitative data between men and women, independent t-test was used. The correlation and multivariate regression were used to examine the relationships between quantitative variables. In this research, sampling (stratification) was used to select participants and the probability of sampling error was used to determine which factors were related to the level of general health. Logistic regression model was used to determine which factors had the strongest correlation with general health. The level of significance in the present study was considered < 0.05 and confidence interval was determined 0.95.

3. RESULTS

According to the data drawn from the questionnaires, analyzed by the SPSS version 21, the normal distribution of the data was analyzed by using inferential statistics. Then, both the descriptive and inferential data for each hypothesis and the significance of the hypotheses were examined.

The collected data were analyzed. First, information about the mean and age group of nurses is presented, and then the mean (standard deviation) scores of general health and burnout of the nurses were determined. The demographic characteristics of nurses were tabulated. In addition, the relationship between general health and demographic variables and burnout were investigated.

Testing normal distribution of data

Testing normal distribution of the data on quantitative variables

To test the normal distribution of the data on quantitative variables, Kolmogorov-Smirnov test is used. In this test, the null hypothesis states There is no significant difference between the distribution of this variable and the normal distribution", or, in other words, the distribution of this variable is normal. If p > 0.05, then the null hypothesis is rejected and the distribution of data is non-normal. If p < 0.05, then the distribution of the data is normal. The data on age, number, total general health score and total burnout score were normally distributed in our study.

Table 7 Normal distribution of data on quantitative variables

Variables	Normality (P-value)
General health	0.521
Burnout	0.396

Testing normal distribution of data on quantitative variables with respect to qualitative variables

Bartlett or Livonese tests can be used to compare the variances in a quantitative variable among several groups. In the SPSS, the Livonese test is used to compare the variances. This test, as with other statistical tests, has a null hypothesis that is always fixed and states. There is no difference between the variance of the small variable in different groups.

The output of the Livonese test is the same as the p value, which, if less than 0.05, means the rejection of the null hypothesis and therefore the inequality of the variance of the quantitative variable in the investigated groups (non-normal distribution), and if greater than 0.05, means the acceptance of the null hypothesis and therefore the equality of the variance of the quantitative variable in the investigated groups (normal distribution). In our study, the normal distribution of data on general health, a quantitative variable, was investigated with respect to different qualitative variables.

Table 8 Normal distribution of data on general health with respect to qualitative variables

Variables	Normality (P-value)
Marital status	0.835
Education	0.248
Income	0.982
The economic situation	0.631
Satisfaction from life	0.491
Work backward	0.074
Employment status	0.065

Variance in general health was equal with respect to the marital status, education, monthly income, economic status, life satisfaction, work experience and employment status, and therefore null hypothesis was accepted and the normal distribution of data was confirmed (Table 8).

In this study, 352 nurses working in private and public hospitals in Khorramabad with an average age of 29.41±6.6 (range: 20-50) years old were studied. The nurses' mean score of general health was 29.99±11.20. In addition, the mean scores of general health subscales consisting of physical health, anxiety, social dysfunction and depression were 6.89±3.33, 6.49±4.33, 9.44±2.62 and 9.09±2.75 respectively; so that 25.3% of nurses had acceptable general health and 74.7% had suspicious impairment of general health. The mean score of burnout in the nurses was 50.74±16.86. The mean scores of emotional exhaustion, depersonalization and personal insufficiency were 21.79±9.46, 10.5±57.5, and 22.85±7.24, respectively. In Table 9, descriptive data such as mean and standard deviation, and minimum and maximum values are shown.

Table 9 Mean (standard deviation) scores of general health with respect to demographic variables in nurses

Variable	Data Domain		Standard deviation	Mean	Abundance	
	Maximum	minimum				
Marital status	66	8	11.42	28.01	182	Single
	69	6	10.99	27.78	170	Married
Education	69	6	11.36	29.83	323	Bachelor
	50	16	9.42	28.69	29	Masters degree and higher
	69	14	11.04	29.53	72	Less than 1500000

Income (Toman)	66	6	11.42	28.40	170	3000000 - 1500000
	61	10	11.02	29.11	110	More than 3,000,000
	69	8	11.64	28.56	77	Good
The economic situation	66	6	11.04	27.09	167	Medium
	61	10	11.14	28.68	108	Bad
	66	6	10.77	29.20	148	1-5
Work backward (Year)	69	8	11.78	29.50	127	6-10
	58	8	12.65	28.26	43	11-15
	53	13	11.70	28.38	34	More than 15
	66	14	11.79	29.29	87	Ceremonious
	62	8	10.81	29.04	124	Employment contract
Employment status	56	11	9.47	28.60	72	Administrative manpower design
	69	6	12.81	29.51	69	Bespoke

Married people (mean score: 78.77±10.99) had higher levels of general health than single nurses. In addition, the nurses with master's degree and Ph.D. had higher levels of general health in comparison with nurses with bachelor's degree (mean score: 69.28 ± 9.29). Nurses with a monthly income of 1,500,000-3,000,000 tomans (mean score: 40.42±11.49) had higher levels of general health than the other two groups. Nurses with an income of more than 3,000,000 and less than 1,500,000 tomans had acceptable general health.

Regarding the economic status, nurses with moderate status had the highest level of general health, followed by those with good and low economic status. Nurses who had 11-15 years of work experience had better general health than other groups. The nurses with more than 15 years of work experience had the highest level of general health followed by those with 1-5 and 6-10 years of work experience, respectively. In addition, nurses working on a project-oriented basis had the highest level of general health, followed by those working on provisional, formal, and contractual basis (Table 10).

Table 10 Association between general health and demographic characteristics in nurses

Variable	P-value	95% confidence interval		Degrees of freedom
		upper line	Bottom limit	
Marital status	* 0.022	2.57	1.31	350
Education	* 0.69	3.41	0.84	350
Income	** 0.002	-	-	2
The economic situation	** 0.043	-	-	2
Work backward	** 0.046	-	-	3
Employment status	** 0.731	-	-	3

*** *T*-test**

**** Analysis of variance**

First, the data on the variables were investigated for distribution normality. For parametric data, Pearson correlation coefficient was used. General health was significantly associated only with marital status (p=-0.022), monthly income (p=0.002), economic status (p=0.043) and work experience (p=0.043) so that marital status improved general health. In addition, the nurses' general health improved with increasing their monthly income, economic status and work experience. Regarding the hypothesis of our study, the researcher's argument about the variables of marital status, economic status, monthly income and work experience was

confirmed (Tables 9 and 10). The mean scores of general health and burnout in the nurses were 29.99±11.20 and 50.74±16.86, respectively (Table 11).

Table 11 Mean (standard deviation) scores of general health and burnout in nurses

Variable	Data Domain		Standard deviation	Mean	Abundance
	Maximum	Minimum			
General health	69	6	11.20	29.90	352
Burnout	102	11	16.86	50.74	352

Table 12 Correlation between burnout and general health in nurses

	Burnout	General health
General health	-	1
Burnout**)** p**(**r	1	*-0.70 (0.004)

First, the data on the variables were investigated for distribution normality. For parametric data, Pearson correlation coefficient was used.

General health was inversely and significantly correlated with burnout (r=-0.07), so that with increasing general health, the levels of the nurses' burnout decreased. Regarding the hypothesis of our study, the researcher's argument about the significant correlation between burnout and general health was confirmed (Table 12).

Table 13 Mean (standard deviation) scores of burnout and general health subscales in nurses

Variable	Data Domain		Standard deviation	Mean	Abundance
	Maximum	Minimum			
Burnout	102	11	16.86	50.74	352
Physical health	21	0	3.83	6.89	352
Anxiety	21	0	4.33	6.49	352
Disruption of social function	18	2	2.62	9.44	352
Depression	16	1	2.75	8.09	352

The mean scores of burnout, physical health, anxiety, social dysfunction and depression in the nurses were 50.74±16.86, 6.89±3.83, 6.49±4.33, 9.44±2.62 and 8.09±2.75, respectively (Table 13).

Table 14 Correlation between burnout and general health subscales in nurses

	Depression	Disruption of social function	Anxiety	Physical health	Burnout
Burnout r(p)					1
Physical health r(p)				1	*-1.21 (0.028)
Anxiety r(p)			1	** -0.61 (0.000)	** 1.43 (0.000)
Disruption of social function r (p)		1	** 0.51 (0.000)	** -0.34(0.000)	*1.32 (0.001)

Depression r(p)	1	**0.74 (0.000)	** 0.76 (0.000)	** -0.044 (0.000)	**1.11 (0.006)

First, the data on the variables were investigated for distribution normality. For parametric data, Pearson correlation coefficient was used. General health was inversely correlated with physical health (r=-1.21) and was directly correlated with anxiety (r=-1.43), social dysfunction (r=1.32) and depression (r=1.11), so that with increasing anxiety, depression and social dysfunction and also with decreasing physical health, the levels of the nurses' burnout increased, with a statistically significant association with all four subscales (Table 14). Regarding the hypothesis of our study, the researcher's argument about the significant correlation between burnout and general health subscales was confirmed (Table 14).

Table 15 Mean (standard deviation) scores of general health and burnout subscales in nurses

Variable	Data Domain		Standard deviation	Mean	Abundance
	Maximum	Minimum			
General health	69	6	11.20	29.90	352
Emotional exhaustion	46	0	9.46	21.79	352
Drop the character	28	0	5.54	10.10	352
Individual performance	47	5	7.24	22.85	352

The mean score of general health, emotional exhaustion, depersonalization and individual functions in the studied nurses were 29.99±11.20, 21.79±9.49, 10.5±54.5 and 85.22±24.7, respectively, and therefore these nurses did not have acceptable levels of general health (Table 15). In addition, in terms of emotional exhaustion and depersonalization, the nurses had moderate burnout, and in terms of individual function, they had severe burnout.

Table 16 Correlation between general health and burnout in nurses

	Individual performance	Drop the character	Emotional exhaustion	General health
General health r(p)				1
Emotional exhaustion r(p)			1	**-1.29(0.003)
Drop the character r(p)		1	**0.60(0.000)	*-1.32(0.019)
Individual performance r(p)	1	** -0/30(0/000)	** -0.16(0.002)	*1.17(0.026)

First, the data on the variables were investigated for distribution normality. For parametric data, Pearson correlation coefficient was used. General health was directly correlated with individual function (r=1.17) and was inversely correlated with emotional exhaustion (r=-1.29) and depersonalization (r=-1.32), so that with increasing emotional exhaustion and depersonalization and also with decreasing individual function, the levels of the nurses' general health decreased, with a statistically significant association with all three subscales (Table 16).

Table 17 Mean (standard deviation) scores of general health in male and female participants and with respect to life satisfaction

Variable	Data Domain		Standard deviation	Mean	Abundance	
	Maximum	Minimum				
Genus	69	6	11.20	29.93	184	Female

	102	11	16.86	28.76	168	Male
	61	15	10.50	27.48	67	Good
Satisfaction from life	69	6	11.15	28.02	195	Average
	65	13	11.74	28.62	90	Bad

The mean score of general health was higher in the women than in the men so that the men had better general health. In addition, the nurses who had life satisfaction had lower levels of general health than those with moderate and low life satisfaction (Table 17).

Table 18 Results of logistic regression on relationship of general health with gender and life satisfaction

	P -value	**OR (CI %95)**	
Sex (women compared to men)	0.042	(0.37-0.98) %60	
	0.000	Ref	Good
Satisfaction from life	0.002	(0.38-0.87) %75	Average
	0.61	(0.49-1.75) %82	Bad

According to the logistic regression model, the desirable general health was 60% higher in the women than in the men, that is, the men had comparatively higher levels of general health. Besides that, the people with moderate (0.75) and low (0.82) life satisfaction had lower levels of general health than those who had life satisfaction. There was also a statistically significant association between general health and these two variables.

Regarding the hypothesis of our study, the researcher's argument about the relationship of general health with gender and life satisfaction was confirmed by the logistic regression model (Table 18). In this cross-sectional study, 350 nurses were selected by multi-stage random sampling. Data collection instruments were demographic questionnaire, a standard general health questionnaire (GHQ) and Maslach Burnout Inventory (MBI-Q).

Data were analyzed by the SPSS version 21 and descriptive and analytical tests. In our study, 352 nurses working in private and public hospitals in Khorramabad with an average age of 29.41±6.6 (range: 20-50) years were enrolled. The mean score of general health in the nurses was 29.99±11.20; and the mean scores of general health subscales consisting of physical health, anxiety, social dysfunction and depression were 6.89±3.33, 6.49±4.33, 9.44±2.62 and 9.09±2.75, respectively, so that 25.3% of the nurses had acceptable levels of general health and 74.7% had suspicious impairment of general health.

The mean level of burnout in the participants was 50.74±16.86. The mean scores of emotional exhaustion, depersonalization and personal insufficiency were 21.79±9.46, 10.5±5.5 and 22.85±7.24, respectively. General health had a significant correlation with marital status variables (p=0.022), monthly income (p=0.002), economic status (p=0.043) and work experience (p=0.46).

There was also a significant correlation with burnout (r=-0.01). According to the logistic regression model, the general health was 60% higher in women than in men, that is, the men had higher levels of general health. In addition, those with moderate (0.75) and low (0.82) levels of life satisfaction had lower general health than those who had life satisfaction. There was also a significant relationship between general health and these two variables components.

4. DISCUSSION

The mean score of general health in the nurses was 29.99±11.20, and the mean scores of general health subscales consisting of physical health, anxiety, social dysfunction and depression were 6.89±3.33, 6.49±4.33, 9.44±2.62 and 9.09±2.75, respectively, so that 25.3% of the nurses had good general health and 74.7% had suspicious impairment of general health. The study of Maghsoudi et al. (Maghsoudi et al., 2014) showed that general health of the nurses was significantly lower during the nursing profession, so that most nurses had some degree of health disorder syndrome, which is consistent with the results of Ghaffari et al. (Ghaffari et al., 2012) who

investigated the general health levels among the nursing staff of the teaching hospitals affiliated with Tehran University of Medical Sciences.

In the studies of Hosseini et al. (Hosseini et al., 2013), Soleimani et al. (Soleimani et al., 2012) and Mardani et al., respectively, 33.8%, 10.2%, 18.9% of the nurses were found to have undesirable general health levels, which is not consistent with the findings of our study. According to the findings of the current study, married individuals, with a mean score of 78.77 ± 10.99, had better general health than single individuals, so that general health were significantly associated with marital status (P = 0.022). In the study of Nourian et al., there was a significant relationship between general health and marital status so that single participants had significantly lower levels of general health than married ones (Nourian et al., 2014).

According to the findings of this study, nurses with a monthly income of 1,500,000-3,000,000 (mean: 40.42±11.49) tomans had better general health than the other two groups. Nurses with an income of over 3,000,000 and less than 1,500,000 tomans were in good general health. According to ANOVA, there was a significant correlation between general health and monthly income (P = 0.002), so that as the nurses' monthly income increased, their general health improved. In the studies of Hashemzadeh et al. (Hashemzadeh et al., 2010), Arasteh et al. (Arasteh et al., 2011) and Zarbashk et al. (Zarbasheshi et al., 2012), consistent with the present study, there was a significant relationship between general health and income, while such relationship was not observed in the study of Badrizadeh et al. (Badri-e Zadeh et al., 2012).

The nurses who had 11-15 years of experience had better general health than the other groups; and general health was favorable among nurses with a work experience of over 15 years, 1-5 years and 6-10 years. According to ANOVA (P = 0.046), there was a significant relationship between general health and work experience (P = 0.046), so that as the nurses' work experience increased, their general health improved. This observation is consistent with the studies of Pour Pourreza et al. (Pourreza et al., 2013). Wang et al. (Wang et al., 2015) have shown that stress, especially among older nurses, is less threatening to general and mental health, and therefore these nurses are at higher risk. According to the findings of our study, the mean scores of general health and burnout were 29.99±11.20 and 50.74±16.86, respectively. Besides that, general health was inversely and significantly correlated with burnout (r=-0.01), such that as the level of the nurses' general health increased, the level of their burnout decreased. In the study of Soleiman Nejad et al. (Suleiman Nejad et al., 2012), an inverse correlation was observed between burnout and general health. In the study of Yavari et al. (Yavari et al., 2014), there was a direct correlation between burnout and general health in ICU nurses. Rahmani (Rahmani et al., 2012) also observed a significant association between these two variables. According to the results, burnout was inversely correlated with physical health and positively correlated with anxiety, social dysfunction and depression, so that burnout increased with increasing the level of anxiety, depression and social dysfunction, and also decreasing physical health, with a significant relationship with all four subscales. In the study of Yavari et al. (Yavari et al., 2014), burnout was directly correlated with anxiety (r=0.378), depression (r=0.262) and social dysfunction (r=0.204) and inversely correlated with physical health (r=-0.411). However, the correlation was statistically significant only with anxiety, depression and physical health. In the study of Ghani et al., burnout was not significantly associated with any of the general health subscales, which is not consistent with the current study (Ghani et al., 2011). According to the findings, general health was directly correlated with individual function and inversely correlated with emotional exhaustion and depersonalization, so that with increasing emotional exhaustion and depersonalization and also with decreasing individual performance, the levels of the nurses' general health decreased, with a statistically significant association with all three subscales. In the study of Abdi et al., general health had a direct correlation with all three aspects of burnout.

Yavari et al. reported a significant and inverse correlation between general health and emotional exhaustion (p=0.001, r=0.501) and depersonalization (p=0.026, r=0.239,), but a non-significant and direct correlation between general health and individual performance, so that with increasing emotional exhaustion and depersonalization, general health decreased. The study of Hamid et al. (2012) showed that all aspects of burnout had a relatively equal correlation with general health and predicted equal proportion of this variable (Hamid et al., 2012).

The study of Arizi et al. showed that the correlation between emotional exhaustion and general health and the correlation of depersonalization and individual performance with general health were lower than average level (Arizi et al., 2013). According to our findings, the mean score of general health was higher in the women than in the men so that the men had higher levels of general health. In the nurses who are satisfied with their lives enjoy better general health than those who are moderately satisfied or are not satisfied. According to the logistic regression model, the desirable general health was 60% higher in the women than in the men, that is, the men had comparatively higher levels of general health. In addition, those with moderate (0.75) and low (0.82) life satisfaction had lower general health than those who were satisfied with their life. There was also a statistically significant relationship between general health and these two variables.

Consistent with our study, the studies of Heydari et al. (Heydari et al., 2012) men had higher levels of health than women, but Bigdeli et al. (Bigdeli et al., 2012) did not see any significant difference between the general health of male and female nurses. Moradian et al. (Moradian et al., 2012) observed that general health was 0.58 times higher in men than in women, without any statistically significant difference, which is not consistent with the current study.

In the study of Mottaghipour et al. (Motaghi Pour et al., 2011), gender was found to have a significant and independent relationship with the rate of developing general health disorders, and the likelihood of suffering from adverse general health disorders was higher in women than in men (CI 95%=5.1-7.2 and OR=1.2).

In the study of Mohammad Beigi et al., there was a significant relationship between general health and life satisfaction, and the increase in life satisfaction by one point caused a 2.58 increase in general health, which is in agreement with the current study (Beigi et al., 2010).

The inconsistency in the findings can be due to the fact that the lack of studying the role of the employed nurses' spouses. According to the above results, it can be argued that if nurses' marital life is free of stress and anxiety and involves psychosocial assistance to help them play completely different and unpredictable roles in their lives, then marital status has a direct correlation with general health and will act as a protective factor. The cooperation of nurses' spouses to help them assume their duties and responsibilities can reduce the problems due to poor health by reducing worry, stress and anxiety in them. Playing several roles causes stress in a person and can put his/her health at risk. However, the use of effective coping skills, such as the cooperation of a spouse, will create a sense of mastery of the conditions, sufficiency and satisfaction.

It seems that low income prevents people from using health services, which can clearly affect their general health. Most nurses, due to low salaries and benefits, have to work in several shifts or work a second job, and are therefore bored and tired while they are also expected to relieve patients' suffering. However, the program for reducing working hours and improving the productivity seems to be a major step to improving the health of nurses. Living in poor economic conditions has negative effects on the health and well-being of individuals. The existence of steady-slope relationship between income and health has been proven worldwide, and with the decline in socioeconomic status, the health of individuals is also affected. Higher levels of income create a sense of security and hope for a better future in the individual, reduce the level of stress and can also lead to the promotion of social status, which is the result of achieving a higher level of general and mental health. Inconsistencies in the results of studies can be due to different sample sizes as well as the widely different income of participants.

Higher work experience, preparedness to cope with stressful situations and raising awareness improve general health. Significant prevalence of general and mental health disorders, especially among young staff and those with lower work experience, necessitating paying special attention to interventions, including organizational interventions such as encouraging teamwork, engaging staff in decision-making, occupational support, reducing occupational conflicts and ambiguities and increasing control over the events of the job, such as psychological interventions to reduce occupational stress and increasing adaptation to work environment. These interventions not only should be implemented in the workplace, but also training them should be incorporated into the in-service training programs for health care staff, and it seems, however, that there is a need for specialized individual interventions in a population at risk of serious mental disorder. The inconsistency in the findings of different studies can be due to difference in occupational stress in different wards of the hospital. Because burnout causes different emotional, physical and psychological complications, it can also influence general health. On the other hand, regarding general health, it can be argued that a complex combination of factors is involved in this area. Certain necessary facilities such as kindergartens, reducing night shifts, especially for nurses who have more work experience, transportation, including household in the salary of married nurses, reducing working hours of nurses and not forcing them to work extra hours, can prevent burnout and improve the level of nurses' health and ultimately the quality of the care provided by nurses. Burnout is highly associated with health. Considering that staff health plays an important role in the productivity of the organization, organizations and managers need to design programs that increase eagerness to work among the staff, and prevent adverse effects of burnout by providing a healthy and joyful organizational environment. The results of studies have shown that there is a relationship between stress and burnout, and burnout can lead to depression and a decrease in the level of health as well as social dysfunction in the individual, which ultimately predisposes him/her to other mental illnesses.

The sense of individual success, mastery and sufficiency is developed when a person can influence the policies of the organization and thereby display his/her abilities and gain a positive attitude toward himself/herself and others (Payami Boysari et al., 2012). It has been also shown that the ability to control occupational events is one of the most important factors affecting sufficiency. It can be therefore argued that the majority of nurses may not be able to prove their competencies in the work environment, which can be due to the lack of optimal conditions in the workplace. To explain our findings, we can argue that the anxiety, depression, social function of nurses is significant predictors of burnout among them. In explaining this finding, it can also

be argued that emotional exhaustion and depersonalization are the main predictors of generally health. Ideally, as a result of increasing emotional exhaustion and psychological energy in nurses, pessimism toward their own efforts and even toward others intensifies among them, exposing their working life to high levels of attrition and burnout.

An increase in the level of emotional exhaustion leads to a reduction in the individual's ability to adapt to stressors and consequently to the development of behavioral and physical symptoms. Emotional exhaustion is the most important subscale of the Maslach Burnout Inventory. Given that our participants had a high mean score of general health and their health was somewhat worrying, health care system authorities should pay more attention to people's mental health so that they will be able to improve their mental health through certain programs such as life skills training, empowerment of individuals for effective adaptation to their living environment and acquisition of the skills to cope with stress.

REFERENCE

1. Ahadi H, Naderi F Farahi N and Zargar Shirazi F. The role of psychosocial safety, organizational commitment and organizational respect in the prediction of occupational burnout dimensions of nurses. Students in Applied Psychology, 2015; 16 (1): 42-53.
2. Akbari M, Ghaffarsamar R, Kiani GHR and Eghtesadi AR. Scientific validity and psychometric properties of Maslach Burnout Inventory (Persian version). J Knowledge and Wellness 2011; 6 (3).
3. Aradilla-Herrero A, Tomás-Sábado J, Gómez-Benito J. Associations between emotional intelligence, depression and suicide risk in nursing students. Nurse Education Today 2014; 34(4), 520-525.
4. Arasteh M, Haditabar B, Sedaghat A, Cho N.Study of mental health status and its related factors among medical and non-therapeutic staff of Sanandaj hospitals. Journal of Kurdistan Uni Med Sci 2011; 13 (3): 44-35.
5. Arizi HR, Nouri A, Zare R and Amiri B. Meta-analysis of research on the relationship between job burnout and mental health. Social Welfare 2013; 13 (48): 110-91.
6. Badri-e Zadeh M, Farhadi A, Tarahi MJ, Saki M, Biranvand GHR. A survey on the mental health status of nurses working in government hospitals in Khorramabad. Magazine 2012; 15 (3): 61-52.
7. Bahari Binabag N, Moghimiyan M, Atarabashi M and Qarcheh, M. Investigating the relationship between job burnout and mental health in midwifery and nursing care. Horizon of Knowledge 2012; 9 (1): 99-104.
8. Bakhshi Sarashjani L. The relationship between emotional intelligence and mental health with burnout among teachers, nurses and employees of Behbahan Water and Power Administration. Quarterly Journal of New Thoughts in Educational Sciences 2014; (1): 37-58.
9. Bassett J, Lloyd C, Bassett H. Work issues for young people with psychosis: barriers to employment. The British Journal of Occupational Therapy 2014; 64(2): 66-72.
10. Beigi M, Mohammad Salehi A, Ghomari N and Salehi Bahman F. Prevalence of Depression Symptoms, General Health Status and Risk Factors in Dormitory Students in Arak University of Medical Sciences. Arak University of Medical Sciences Journal 2010; 12 (3): 123-116.
11. Biani AA, Bagheri H, Biani A. The statement, Aliasghar, Bagheri, Hossein and Bani, Ali. Effect of sex, age and teaching on burnout. Annual Biological Research 2013; 4 (4): 239-243.
12. Bigdeli IA, Karimzadeh S. The effect of stressor factors on mental health of nurses in Semnan. Koomes J 2012; 8 (2): 25-21.
13. Chen MC, Huang YW, Sun CA. Factors influencing the quality of life of nurse anesthetists and the correlations among work stress, job satisfaction, and quality of life: a case study of three medical centers in Southern Taiwan. World Journal Medicine and Medical Sci 2014; 2(2): 1-17.
14. Dyrbye LN, West CP, Satele D, Boone S, Tan L, Sloan J, Shanafelt TD. Burnout among US medical students, residents, and early career physicians relative to the general US population. Academic Med 2014; 89(3): 443-451.
15. Ghaffari F, Azizi F, Mazlum SR. Multiplicity of role and its relationship with mental health of female nurses. Iranian Journal of Obstetrics and Gynecology 2012; 10 (1): 78-69.
16. Ghani, Kamyar; Ahqar, Qudsi; Rahimy Sookar, Afarin and Mobaraki, Hossein. Study of the relationship between mental health and burnout in the staff of the Ministry of Health and Medical Education. Medicine and Cultivation 2011; 19 (3): 36-31.
17. Gleichgerrcht E, Decety J. Empathy in clinical practice: how individual dispositions, gender, and experience moderate empathic concern, burnout, and emotional distress in physicians. PLoS One 2013; 8(4): e61526.
18. Gustafsson, E. Self reported sleep quality in females. J Caring Sci 2012; 16(2): 179-187.
19. Hakanen JJ, Schaufeli WB. Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. J Affective Disor 2012; 141(2): 415-424.
20. Halvaei GHH, Moravotti Sharifabad MA and Baghiani Moghadam MH. Investigating the general health status of the personnel of the lead and zinc mines, 2014.

21. Hamid, Najmeh, Dehghanizadeh, Zahra. Relationship between Spirituality, Organizational Commitment and General Health with Clinical Nursing Career Performance. Quarterly J Nursing Management 2012; 1 (2): 20-28.
22. Hartig T, Mitchell R, De Vries S, Frumkin H. Nature and health. Annual Rev Public Heal 2014; 35, 207-228.
23. Hashemi Nazari SS, Khosravi J, Faqih Zadeh S and Etemadzadeh SH. Mental health of staff of firefighting organization using general health questionnaire 28 questions in 2013, 2013.
24. Hasheminejad N, Rahimi, Moghaddam S, Mohammadian M and Amiri F. A survey on the relationship between mental health and occupational stress among midwives working in Kerman hospitals in 2011. Journal of Midwifery and Infertility of Iran 2012; 16 (64):1-9.
25. Hashemzadeh I, Orangi M, Bahrebardar MJ. Job stress and its relationship with mental health in employees of hospitals in Shiraz. Iranian J Psychiatry and Clinical Psychology 2010; 6 (2): 63-55.
26. Hassani J, Parhoun H, Moemeni KH. The Effect of Short-Term Behavioral Activation Therapy on Depression Symptoms, Mental Health and Quality of Life in Patients with Opioid Abuse. J Kermanshah Uni Med Sci 2015; 16 (2): 74-83.
27. Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. American J Public Heal 2013; 103(5): 813-821.
28. Heydari M, Hosseini P and Shirvani M. General Health and Related Factors in Valiasr Hospital of Borujen in 2012. Health Society 2012; 7 (1).
29. Hojjati H, JalalManesh SHM and Fesharaki M. The effect of insomnia on the general health of night shift nurses in hospitals affiliated to Golestan University of Medical Sciences. Journal of Gorgan Uni Med Sci 2011; 11 (3): 70-75.
30. Hosseini F, Kazemi M and Akbari A. The role of general health in the occurrence of nursing errors among nurses of Rafsanjan University of Medical Sciences in 2012. Journal of Faculty of Nursing, Midwifery and Paramedicine, Rafsanjan 2013; 7 (4): 27
31. Khamisa N, Peltzer K, Oldenburg B. Burnout in relation to specific contributing factors and health outcomes among nurses: A systematic review. Intern J Environm Res and Public Heal 2013; 10(6): 2214-2240.
32. Latifian M, Delavarpour MA. Investigating the relationship between attachment style and mental health mediating emotional creativity. Quarterly Journal of Cognitive Science 2012; 14 (2): 45-62.
33. Maghsoudi SH, Hassabi M, Imami Sigariudi AH, Kazemnejad L, Ehsan Monfared, M General health and its related factors in nurses working in educational centers of Rasht. Journal of Nursing and Midwifery, Jameghar 2014; 25 (1): 63-72.
34. Moradian S, Monor H, Hassan R, Saiipour SH, Shahmirzadi E. Mental Health Status of Students of Tehran University of Medical Sciences in the academic year 2011-2011. Journal of Jurjan 2012; 0 (1), 22-16.
35. Motaghi Pour Y, Amiri P, Payab M, Valaei M, Mehrabee Y and Azizi F. Studying the mental health of adolescents: Tehran Lipid and Glucose Study. Journal of Research in Medicine 2011; 29 (2): 145-141.
36. Mousavi SM and Ahmadi M. Behavioral disorders in children with mild depression. Journal of Gorgan Uni Med Sci 2012; 14 (3): 115-119.
37. Noorbala AA, Bagheri Yazdi SA and Kazem M. Validation of 28 questions of public health as a tool for screening psychiatric disorders in Tehran 1982; 2012.
38. Nourian K, Parvin N and Mehrabi T. Relationship between job stressors and general health of nursing staff working in educational hospitals affiliated to Isfahan University of Medical Sciences in 2013. Journal of Nursing, Midwifery and Paramedicine Faculty, Rafsanjan 2014; 5 (2): 45-52.
39. Payami Boysari M. A survey on job burnout among nurses working in hospitals affiliated to Zanjan University of Medical Sciences. J Nursing 2012; 15 (32): 26-20.
40. Perry L, Rech D, Mavhu W, Frade S, Machaku MD, Onyango M, Njeuhmeli E. Work experience, job-fulfillment and burnout among VMMC providers in Kenya, South Africa, Tanzania and Zimbabwe. PloS one 2014; 9(5): e84215.
41. Pourreza, Abolghasem; Regular, Mohammad Reza Abbasi Nia, Marzieh; Asghari, Mehdi; Safari, Hossein, Sorani, Mohammad. The relationship between job burnout and mental health in nurses working in Qom province. Quarterly J Hospital 2013; 11 (2): 54-45.
42. Rahmani F, Beheshid, M,TimeZadeh V and Rahmani F. The relationship between general health, stress and burnout in nurses working in special departments of educational hospitals affiliated to Tabriz University of Medical Sciences. Iranian J Nursing 2012; 23 (66): 54-63.
43. Rashidi V, Foroughan M and HosseiniMA. Job burnout and related demographic variables in the well-being personnel of Tehran province. Kermanshah Scientific Medical Journal 2014; 16 (1): 28-36.
44. Rössler W. Stress, burnout, and job dissatisfaction in mental health workers. European Arch Psychiatry Clinical Neuroscience 2012; 262(2), 65-69.
45. Safi MH, Mohammadi F, Amouzadeh I, Arshi SH. The Relationship between Leadership Style of Managers with Job Satisfaction and Burnout in Health Center in North Tehran. Social Heal 2016; 2 (2): 88-97.
46. Shahraki VA, Mardani HM, Sancholi J, Hamedi shahraki S. The Relationship between Mental Health and Job Stress in Nurses. J Jahrom Univ Med Scie 2013; 8: 3-40.

47. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, Oreskovich MR. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Archives Inter Med 2012; 172(18): 1377-1385.
48. Soleimani MA, Nasiri F, Fariba; Zonamate Kermani A, Hosseini F. Comparison of general health of working nurses working in constant and working shifts. J Nursing 2012; 20 (50): 28-21.
49. Suleiman Nejad A, Hammadi P, Profit H The study of the relationship between coping styles and burnout with mental health in Orumiyeh physicians. J Nursing Midwifery 2012; 10 (2): 236-226.
50. Talaei A, Mokhber N, Mohammadnezhad M, Samari AA. Occupational burnout and its related factors in staff of university hospitals of Mashhad in 2006, 2012.
51. Tobai SH, Sahraeian A. Comparison of burnout among nurses in internal wards, surgery, psychiatry and burn. Journal of Faculty of Medical Sciences and Health Services of Gonabad 2015; 12 (4).
52. Van Bogaert P, Kowalski C, Weeks SM, Clarke SP. The relationship between nurse practice environment, nurse work characteristics, burnout and job outcome and quality of nursing care: a cross-sectional survey. Intern J Nursing Studies 2013; 50(12): 1667-1677.
53. Wang SM, Lai CY, Chang YY, Huang CY, Zauszniewski JA, Yu CY. The relationships among work stress, resourcefulness, and depression level in psychiatric nurses. Archives of Psychiatric Nursing 2015; 29(1): 64-70.
54. Yavari M, Shamsaee F and Yazdanbakhsh K. Comparison of burnout and mental health of nurses working in psychiatric and specialist departments (ICUs). Quarterly J Nursing Management 2014; 3 (3): 65-55.
55. Zarbasheshi MR, Hosseinian S, Afrouz GHA, Hooman HA. Comparison of some biological characteristics, economic status and general health (mental) of mothers with low birth weight infants with mothers with normal weight in Guilan province. Piawr Hea J 2012; 5 (5): 78-67.