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RESEARCH ARTICLE

Relationship between job burnout and mental health of nurses working in Golestan Hospital of Ahvaz

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ABSTRACT

Background: Burnout is one of the important factors in reduced efficiency, loss of human resources and physical and psychological complications, especially in human service professions. Health is one of basic human needs that plays a vital role in sustainable development. Studies have shown that mental health of nurses are at risk due to several reasons relative to other segments of society which including the stressful nature of the profession, pressure, faced with unexpected situations, shifts, organizational factors and personal factors .So in this study, we examine the relationship between job burnout and mental health of nurses working in Golestan Hospital of Ahvaz.

Materials & Methods: This is a cross sectional and correlational-descriptive study conducted among 197 nurses working in Golestan Hospital of Ahvaz. Moslach Burnout Inventory (MBIQ) and General Health Questionnaire (GHQ) were instruments for data collection. SPSS software was applied for analyzing the data.

Findings: Results showed that 20.3% of practitioners gained score that is below the cut-off point in general health questionnaire and were in a relatively good condition. While 58.9% of them received a score above the cut-off point and were in unhealthy condition. In the case of burnout, 22%of participants suffered from emotional exhaustion, 19%suffered of depersonalization and 2 percent of personnel have high personal accomplishment. A significant relationship was found between burnout and mental health.

Results: Given the risky and sensitive healthcare jobs and increasing level of mental health problems and burnout, especially in the younger and less experienced medical staff and a strong relationship between mental health and burnout, so to prevent or solve the problem, the attention of mental health authorities is essential.

INTRODUCTION

Mental health refers to the feeling of well-being and ensuring of self-effectiveness, self reliant, competitive capacity, intergenerational dependency and self-actualization of intellectual and emotional potential, etc. However, taking into account the differences between cultures, giving comprehensive definition of mental health seems impossible. Nevertheless, there is consensus on this matter that mental health is more than the absence of mental disorders. What is certain is that maintaining mental health as physical health is important (1).According to the Harvard School of Public Health, the World Health Organization and the World Bank research achievements, mental disorders is one of the components of the global burden of disease. Paying attention to mental health in all areas of life including work life is important and open to discussion. Factors in the workplace widely related to health of workers. There is no doubt about the effects of ignoring occupational health on mental health and extensive researches show this matter. Orangi et al in a study to investigate the relationship between job stress and mental health of 397 personnel in Shiraz University of Medical Sciences show that the rate of job stress is effected by mental health and the hospital medical staff have less mental health relative to the administrative staff(2).Burnout is considered as occupational hazards that in recent years is taken into consideration and is used to describe the experienced human response to stress (3).The most common definition of burnout is provided by Jackson: According to him, burnout is a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion is very similar to variable stress and is the feeling of under pressure and the loss of individual emotional resources. Depersonalization is negative and callous response to individuals whom are recipients that usually served by the staff and referred to the negative impression of the nurses. Reduced sense of personal accomplishment defines as loss of competence sense of personal duty and is considered a negative assessment of his work. Burnout can cause a drop in the quality of services, factor to knock out a job, absence or low spirit and related to perturbations such as physical exhaustion, insomnia, turning to alcohol and drug and marital and family problems. Burnout Syndrome is not a mental disorder but slowly spreads over time and may become a psychiatric disability(4).The burnout factors in nurses are numerous among which may be mentioned stressors in nursing. Nowadays, the subject of dementia or staff burnout is a common problem in all health care systems. Since the burnout among health care workers, including nurses, reduce efficiency, increase absenteeism, increased health costs and the movement of personnel, behavioral changes and physical and in some cases drug use, reducing the quality of services provided to patients, followed by dissatisfaction Services physician and most importantly the patients of nurses are affected, therefore, identification and prevention of burnout has an important role in the promotion of mental health and improve the quality of services(5).With regard to the importance of

mental health nurses and the role of burnout on the quality of nursing care, this study aimed to determine the relationship between mental health and burnout of the nurses. In addition, the role of demographic variables was studied in burnout and mental health.

MATERIALS AND METHODLOGY

This study was a cross-sectional which was conducted in 2015.The Statistical population was all personnel working in hospitals of Golestan University of Medical Sciences. Questionnaires distributed among medical staff and after they were completed, they were gathered. A demographic questionnaire (about age, sex, marital status, work experience) and a general health questionnaire (containing 28 items) and Moslach Burnout Inventory were used to collect data. General Health Questionnaire has been self-run and multiple nature and is used for evaluating the mental health and mental disorders in the community. The questionnaire also is applied to identify the inability in the normal functions and disturbing factors in social life. This test has no diagnostic aspects and only used for identifying people with mental disorders in the community. Health questionnaire is composed of seven questions which has four scales. Item assured four categories of Non-psychotic disorders, including scale summarization, anxiety and insomnia, social dysfunction and depression (6).Health questionnaire reliability is studied by a number of studies. Goldberg and Sartorius were reported reliability of the questionnaire0.95 which was completed for 83 patients (7). Cheung, et al were reported the GHQ internal consistency 0.93 who applying Cranach's alpha method and was conducted for the population of 72 students(8).For example, Hodiamont et al (1987) in a study conducted on a sample group in Amsterdam were reported the correlation coefficient of questionnaire 0.6(9).Researches which conducted in Iran show that the validity and reliability of test for the score of 6 between 0.84 and 0.93,and for the cut-off point 23 is variable between 0.68 - 0.94(10, 11, 12).The present study used a cutoff point 6 which the maximum score of participants will be 28 and is used for segregating mental disorders. The scoring is in these way that for Questions 1, 15, 17 to question 21 for first option, in the case of Question 2 and Question 16 to 14 Questionnaire for options 3 and 4for Questions 22 to 28 for options 2, 3 and 4 of the questionnaire were considered point 1 and for the rest of the options will be zero. To determine if there is disorder in an individual from 7 questions of any of the above-mentioned measures, people who had scores of 2 and more are considered abnormal. From a total score of 28 questions in the questionnaire as well as those who have 6 points and more, are considered as a mental disorder (13).The most common measurement tool burnout is Maslach Burnout Inventory which is applied in several studies, such as Saberiet al used Mohammadi(14,15).This questionnaire has measures three dimensions: emotional exhaustion, depersonalization, and adequacy and it consists of 22 separate statements. Emotional exhaustion includes 9 first questions, depersonalization 5 second question and a sense of personal accomplishment included last 8 questions.

The questionnaire consists of a seven-point Linker scale which is scored from 0 to 6.Individuals were categorized on the basis of scores obtained in three categories mild, moderate and severe as follows: In the emotional exhaustion score of 9-0 (mild),36-10 (average) and 54-37 (severe),in the depersonalization scores of 10-0 (mild) 20-11 (average) and30-21 (severe),in the sense of personal accomplishment scores 16-0 (mild) 32-17 (average) and48-33 (severe).And in relation to burnout scores of 44-0 (mild), 88-45 (medium) and 132-89 was calculated (severe). Maslach and Jackson calculated the reliability within each of the sub-tests and have been reported internal reliability of the questionnaire Cranach's alpha coefficient of 0.71 to 0.9 and the retest coefficient of 0.6 to 0.8(16).SPSS software and descriptive statistics such as frequency and percentage and inferential statistics (Pearson chi-square statistic and Cramer's V test) was used for data analysis. To conducting the research after the necessary arrangements with the hospital authorities, questionnaires were provided sufficiently. In the next step197 questionnaires were distributed among employees. Also, the participants were assured that their information is confidential.

Formulation

In this study participate197 individuals whom 90.1 percent of them were women and 9.1 percent of them belong to the male gender. The 51.3% were single and 48.2% were married and 0.5 percent was divorced.4.1% of subjects' technicians, 94% of experts and 1% were graduate. The largest number of personnel work in the emergency department with a frequency of 17% and then u.c.i department with a frequency of 11% had the highest percentage. Percentage of subjects, based on employment status was 23% for the contractual status, 36 percent for employment status and 40 percent for plan status. Period 1-5 has the most frequency among other periods of work experience. The frequency of rotation shift was 164 which involved83% of participants. The constant shifts have frequency of 33 which covers16% of participants.

Table1: The burnout dimensions in terms of percentage

	high	moderate	low
emotional exhaustion	22	35	42
depersonalization	19	26	53
personal accomplishment	2	11	86

The table 1 shows that 22 percent of subjects with high emotional exhaustion,35% of participants with moderate emotional exhaustion and 42 percent have low emotional exhaustion. Also, 19 percent of subjects with high depersonalization, 26 percent of subjects with depersonalization average and 53 percent have low depersonalization.2% of subjects with high personal accomplishment, 11% of subjects with average personal accomplishment and 86 percent have low personal

accomplishment. In relation to mental health and public health the results demonstrate that 20.3% of subjects received a score below the cut-off point in General Health Questionnaire and were in a relatively good condition while 58.9% of them received a score above the cut-off point and were in poor condition. A significant correlation was found between burnout and the level of mental health problems. That's mean an increase in burnout will raise mental health problems.

Table2:Chi-square test for association between burnout dimensions and general health

	Pearson's chi-square	d.f	sig
general health and depersonalization	20.24	6	0.003
general health and personal accomplishment	12.62	6	0.049
general health and emotional exhaustion	35.14	6	0.000

Pearson's chi-square test indicates that the general health has a significant relationship with dimensions of burnout at 5% level.

Table3: Cramer's V test for association between burnout dimensions and general health

	Cramer's V	sig	N
general health and depersonalization	0.227	0.003	197
general health and personal accomplishment	0.179	0.049	197
general health and emotional exhaustion	0.299	0.000	197

The chi-square test cannot detect the intensity of the relationship. So to understand the intensity of the relationship between the two variables we can use Cramer's V test. According to Cramer's V test, all dimensions of burnout have a significant positive correlation with general health and among them the exhaustion has the greatest impact on public health.

Table4:Chi-square test for association between general health dimensions and burnout

	Pearson's chi-square	d.f	sig
Physical fatigue and burnout	24.681	6	0.000
Anxiety and burnout	95.371	6	0.000
social dysfunction and burnout	73.89	6	0.000
Depression and	6.610	6	0.35

burnout			

Chi-square test shows a significant relationship for all aspects of public health with the burnout except depression at 5% level.

Table5:Cramer's V test for association between burnout dimensions and general health

	Cramer's V	sig	N
Physical fatigue and burnout	0.250	0.000	197
Anxiety and burnout	0.492	0.000	197
social dysfunction and burnout	0.433	0.000	197
Depression and burnout	0.130	0.35	197

Cramer's V test showed that the physical, social and anxiety have a positive and significant relationship at 5%burnoutand depression has no significant relationship with the burnout.

RESULTS AND DISUSSION

This study focus on investigating the relationship between burnout and public health nurses in hospital of Ahvaz Golestan. According to research related to general health, 58.9% of the subjects were in unfavorable condition which demonstrate higher figure compared to the study by Kavyaniet al (43%), Behruziyan et al. (28.57) and Norbala who conducting a research on the mental health status in patients 15 years and older in Iran (21%).(17,18,19)

For many reasons, nurses' mental health is at higher risk than other people .The most important of them can be mentioned such as workload and high pressure, stressful nature of the job, dealing with unpredictable situations, factors related to shift work and personal factors .On the other hand most nurses are women whom in addition to job responsibilities, are responsible for household duties and child rearing. This raise their stress levels and puts their mental health in danger. This results are also consistent with Fagin (20), Farrell (21) and Yang (22).Studies demonstrate that we should be consider institutional and individual factors in investigating the mental health because a combination of factors are influential in this field.(23)organizational factors are job security, working conditions and interpersonal communication. Demographic characteristics, balance between life and support from family etc are factors that related to mental health (24, 25).Due to the high prevalence of mental disorders among nurses, we should investigate the role of organizational factors on the disorders. The findings indicate that the burnout and its dimensions are in the low limit. The figures of the burnout were reported variably in domestic and foreign researches. For example, Rasolian et al reported low levels of burnout figures (26).In other findings, it is reported moderate levels of burnout by Silva(27).Significant correlation was found

between burnout and general health. So the higher burnout is, the higher public health is at risk. The findings are consistent with Kavyani et al and Khaghani(17,28).It is an undeniable fact that today everyone in every place and situation feels some degree of stress in their work environment (29).Burnout is a result of various stresses that appears in the form of physical symptoms (headaches, stomach ulcers), psychiatric symptoms (depression, anger) and behavioral symptoms (absenteeism, reduced productivity at work) (30).Burnout and impotence of staff are common problems among the personal. One of every seven individuals experiences impotence at the end of the workday (31).Results of statistical tests (Chi-square and Cramer) showed the age, marital status and educational status did not have a significant relationship with burnout dimensions while gender had a significant positive impact on dimensions of burnout which is in consistent with similar studies conducted by Bozorgi. Significant relationship between Burnout and female gender may be due to women's increased responsibilities at home and at the same time accepting the roles of wife and mother and is also influenced by hormonal changes (32).

The results show that the public health and demographic characteristics (age, marital status, and qualification) except gender haven significant relationship. Gender has a positive and significant effect on public health and the public health in men were higher than women. In this study the prevalence of mental disorders was higher in female students than male students. Our results confirm those of Assadi et al (33), Jafarieta (34) and Jadoon et al (35)and in oppose with the study of Maghsoudiet al (36) and Nabavi (37) that showed between gender and mental health were not significantly different as well, the results of Namdar et al (38) who showed an average score of mental health among male students is higher than female students.

Considering the fact that burnout affects the physical and mental health and causes the costs and consequences such as mental weakness, lowered sense of cooperation and responsibility and ultimately bring down efficiency, it is suggested to reduce or prevent it, managers understand the true sources of stress, reduce the pressure on the individual and by involving staff in decision-making, job support, thank terms of performance, positive attitude and retraining performance to increase productivity in the organization.

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