Original Article

Burnout among nurses working in medical and educational centers in Shahrekord, Iran

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Abstract

Background: Nursing burnout is the main characteristic of job stress that is a delayed reaction to chronic stressful situations in the workplace which could affect nurses who do not have sufficient emotional energy to cope and communicate with different types of patients. There is also sometimes this belief that they do not have the required capabilities for their jobs. The aim of this study was the evaluation of burnout among nurses working in medical and educational centers in Shahrekord.

Materials and Methods: This descriptive study was performed on 340 nurses working in medical and educational centers in Shahrekord in 2009. Samples were selected using proportionate random sampling. Demographic information and the Maslach Burnout Inventory (MBI) were filled in for all nurses.

Results: Burnout was considerable among nurses. The results showed that 34.6, 28.8, and 95.7% of the nurses had emotional exhaustion (EE), high depersonalization (DP), and high reduced personal accomplishment (PA), respectively. The mean scores (± standard deviation) for EE, DP, and PA were 22.77 (12.44), 6.99 (6.23), and 32.20 (9.26), respectively.

Conclusions: Our results showed that burnout was noticeable among nurses working in medical and educational centers in Shahrekord. Disproportionate relationship between the number of nurses, workload, and income was the most important factor affecting nursing burnout. Due to the importance of nursing in the health-care system, policy makers should adopt suitable strategies for increasing the satisfaction of nurses.

Key words: Burnout, medical and educational centers, nursing

Introduction

Nowadays, the intensity of nursing care is increasing in hospitals globally due to the reduction of the length of stay to contain rising costs,[1,2] which in turn, increases work burden on nurses, predisposes them to negative outcomes of health, and are likely to influence their performance and the quality of care.[3] Nurses are generally being considered as a high-risk category regarding work stress; however, health care is a diverse sector and the literature suggests important differences between the work of different categories of nurses such as general and mental health nurses.[4]

Burnout is a nursing workplace problem worldwide due to practice in a complex organizational setting with multiple and, most of the time, conflicting goals.[5-9] Burnout, defined as a work-related stress syndrome comprising symptoms of exhaustion and distant attitudes toward work, has been studied in diverse occupational settings during the past three decades.[10] In fact, burnout has been conceptualized as a psychological syndrome with emotional exhaustion (EE), a tendency to depersonalize client encounters, and a reduced sense of accomplishment.[11,12] Burnout influences the job performance of the professionals working with other people in challenging situations.[13-16] Investigations of burnout among nurses are highly relevant given the international shortage of nurses in roles of clinical care.[17] In addition, burnout has been associated with dissatisfaction of patients and other measures of inadequate quality of care.[18] The Maslach Burnout Inventory (MBI) is the most commonly used instrument to measure burnout.[12,19-21]

Previous researchers have studied burnout and its effects on nurses such as the study of Aiken *et al.*[1,2] on 43,000 American, Canadian, Britain, Scottish, and German nurses in 1998-99 based on MBI. They found that variable percentages of burnout among nurses in these five countries were 43.2, 36, 36.2, 29.1, and 15.2%, respectively.[1,2] There are also some studies on burnout among Iranian nurses

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which found burnout as an important problem in Iran.[22-26] However, the effects of burnout on health care in Iran was not fully understood and in the few available research studies, only some dimensions of burnout have been studied.[22,24] The aim of this study was the evaluation of burnout among nurses working in medical and educational centers in Shahrekord and the preparation of evidence regarding the utility of MBI in cross-sectional research on burnout.

Materials and Methods

This cross-sectional descriptive study was performed on 340 nurses working in medical and educational centers in Shahrekord in 2009. Shahrekord University of Medical Sciences is composed of six educational hospitals, each with a different number of beds. Therefore, using proportionate random sampling, 140 nurses were randomly selected from Hajar, 86 from Kashani, 49 from Lordegan, 41 from Farsan, 14 from Sina, and 10 from Resalat hospitals. After obtaining written permission from the heads of the hospitals, a written consent letter were filled by all participants. In addition, they were explained that all information would be confidential and also that there was no need for writing their names.

The questionnaire had three parts: Demographic information, occupational information, and the MBI. Demographic information, occupational information, and the MBI[20] were filled in for all nurses. The reliability of this questionnaire has been calculated in previous studies (Chronbach's alpha = 0.79).[25] The demographic questionnaire included age, sex, marital status, occupation, and education of spouse and education of self, and occupational information comprised history of work experience, current and previous positions in hospitals, employment status, work shift situation, and residency. The MBI manual (1996) was used.[20] This questionnaire was translated to Farsi and its reliability has been approved by Masoodi *et al*.,[22] Payami,[26] Esfandiari,[27] and Ezzati,[25] with Chonbach's alpha between 0.71 and 0.90. This questionnaire measures burnout using the EE, depersonalization (DP), and personal accomplishment (PA) subscales that are parts of the 22-item MBI.[20] The EE subscale describes feelings of being emotionally exhausted because of the work and contains nine items which vary from 0 to 55 (0-18: Low, 19-26: Moderate, 27-55: High). The PA subscale contains eight items that describe beliefs of competence and successful achievement at work which vary from 0 to 33 (40-50: Low, 34-39: Moderate, 0-33: High). The DP subscale describes detached and impersonal treatment of patients and consists of five items which vary from 0 to 30 (0-5: Low, 6-9: Moderate, 10-30: High). Each of the 22 items asks nurses to describe their feelings on a seven-point scale, ranging from never having those feelings to having those feelings a few times a week. The Likert scale was used including different codes consisting of 0 (never), 1 (several times a year), 2 (once or less a month), 3 (several times a month), 4 (once a week), 5 (several times a week), and 6 (every day).[22-24] The frequencies, percentages, means, and standard deviations were calculated by using the SPSS software (version 17).

Results

The age of the nurses ranged from 20 to 55 years (31.88 ± 7.65 years). Women comprised 71.9% of the participants; married nurses accounted for 72.5% and 27.5% were single. Most of the nurses (86.9%) had received their BSc. in nursing from Iranian universities, 47.7% from Shahrekord University of Medical Sciences and Azad University of Shahrekord. The number of work-years ranged from 3 months to 30 years (9.05 ± 8.11 years). More than one-fourth of the participants (32%) stated that their own choice was the intensive care unit (ICU); however, they had to work somewhere else. Regarding the question about the appropriateness of work load and the number of nurses, 34.8% replied as inappropriate. About the fairness of income and work load, 38.8% replied in the negative.

Table 1 shows the results of three dimensions of burnout among nurses in Shahrekord. With regard to EE, 34.6% of nurses were at a high level of exhaustion and 46.5% were at a low level of EE. For DP, 28.8 and 50.4% of the participants were at high and low levels, respectively. Finally, 95.7% of nurses experienced high levels of reduced PA.

Table 1: The distribution of three dimensions of nursing burnout in medical and educational centers in Shahrekord

Burnout dimensions*	Number (%)	Mean	SD
EE		22.77	12.44
Low	118 (46.5)	10.94	4.24
Moderate	48 (18.9)	22.81	2.27
High	88 (34.6)	36.34	7.30
DP		6.99	6.23
Low	140 (50.4)	2.14	1.89
Moderate	58 (20.9)	7.41	1.08
High	80 (28.8)	15.18	4.38
PA		32.20	9.26
Low	1 (0.4)	42.5	—
Moderate	9 (3.9)	36.25	1.57
High	225 (95.7)	24.61	7.07

*Emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA)
SD: Standard deviation

Discussion

To our knowledge, there are a few comprehensive studies on burnout among Iranian nurses. The results showed that 34.6, 28.8, and 95.7% of the nurses had EE, high DP, and high reduced PA, respectively. Disproportionate relationship between number of nurses, workload, and income was the most important factor impacting nursing burnout. We concluded that burnout was noticeable among nurses working in medical and educational centers in Shahrekord.

Although tools for measurement of burnout have been developed by different researchers such as the Burnout Measure (BM)[28,29] and Copenhagen Burnout Inventory (CBI),[30] the MBI is the most common instrument for measuring burnout.[21] The development of the MBI was based on early research by Maslach and Jackson, who conducted interviews and surveys among various professionals.[8,31]

Our results are consistent with the results of other studies. For example, Masoodi *et al*., in a study on selected nurses of a private sector in Tehran in 2008 reported that about 35, 29, and 96% of the participants had EE, DP, and PA respectively.[22] They showed that the most important determinants of burnout among private section nurses were inequality of workload with income and intensity of patient care. In another study, Esfandiari reported high burnout of 96.4% among nurses of hospitals in Sanandaj.[27] He concluded that work environment situations, work experience, workload, job satisfaction, and intensity of job were the most important determinants of burnout. Payami, in a study on female nurses of Zanjan showed that PA was more important than the other dimensions of burnout.[26] Aziz and Hosseini also reported the importance of burnout and its determinants among nurses.[32]

Research has shown that the effort — reward imbalance between a well-done job and income earned could considerably increase the chances of burnout.[33] This issue has been also confirmed in the study of burnout among nurses of seven European countries, especially in the Netherlands, Germany, Italy, and Slovakia.[13] Bakker *et al*. also reported similar findings in Germany.[34,35]

Lack of social support for nurses and low probability of improvement in the job is another explanation for burnout. Schaufeli *et al*. reported that working in special wards such as the AIDS section could have some adverse effects on their social communication and future jobs.[36,37]

In conclusion, this study showed that nursing burnout is a substantial problem among nurses working in medical and educational centers in Shahrekord. Three dimensions of burnout were found to be important in the study population; however, PA might be more important than the other dimensions, because the weak management of hospitals can impact on this dimension more than others. Due to the importance of nursing in the health-care system, policy-makers should adopt appropriate strategies for increasing the satisfaction of nurses.

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