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An investigation of nursing burnout and the underlying factors in Shahid Mohammadi Hospital of Bandar Abbas in 2014

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Abstract:

Background and Purpose of the study: As an essential profession in the health care system, nursing is prone to work-related, physical and mental stress which can in the long run cause burnout. Therefore, the present research aimed to explore the extent of nursing burnout and the factors involved in Shahid Mohammadi Hospital of Bandar Abbas.

Materials and method: In the present descriptive research, the population was comprised of 300 nurses affiliated with Shahid Mohammadi Hospital of Bandar Abbas. The sample size was 158 nurses with at least a bachelor's degree and at least one year of work experience (formally employed). The data collection instrument was a demographic information checklist along with Maslach's burnout inventory. The data entered SPSS for the required statistical analyses. The significance level was set at p≤.05.

Results: 50% of the subjects were found to have a low level of emotional exhaustion; 46.20% showed a low level of depersonalization and 71.51% reported a low level of personal accomplishment. The ward the nurses were working in showed to be significantly correlated with emotional exhaustion (p=.010) and personal accomplishment (p=.024). Work experience showed to be significantly correlated with depersonalization (p=.023) and personal accomplishment (p=.01). Moreover, subjects' weekly workload was significantly correlated with personal accomplishment (p=.038).

Discussion and Conclusion: Work burnout is more prevalent in medical professions and can impose high financial and life-related costs of the personnel, patients and hospital. Therefore, the present findings can be useful in recognizing the underlying factors involved in nursing burnout.

Key terms: nurses, burnout, work.

Introduction:

The term work burnout was, for the first time, coined by Herbert J. Freudenberger who described burnout as a physical/mental ability analytic syndrome in helping professions [1]. According to a body of research in Iran, work burnout was more prevalent among the nursing and care-providing staff than the official workers [2]. Nurses are directly faced with patients' problems including pain, suffering and mortality which makes their job truly stressful. In the long run, stress, mental and physical pressure in undesired conditions can take's one's life away [3]. Burnout reveals itself in three ways: emotional exhaustion, depersonalization and personal accomplishment and Emotional exhaustion can result from routine pressures and tensions which take away all emotional sources and Depersonalization usually

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lead to cruel and negative feedback and lack of personal accomplishment is associated with poor performance and underachievement [4]. A great body of research indicated that in similar conditions, not all people experience burnout to the same extent as burnout results from a combination of personal, interpersonal and personality factors [5]. According to previous studies the correlation between work support and burnout and concluded that authorities' strong support can help to prevent work burnout. Work burnout is more often than not accompanied by tremendous negative physical, mental, social, personal and work-related consequences [3]. Nursing burnout has such manifestations as recurrent absence of leave, quit on work, transfer and even leaving for other jobs [6]. In an investigation in a Japanese hospital, the rate of stressful factors showed to be higher among nurses than other professions, and the quality of healthcare services and patient satisfaction is a function of nursing mental and physical health [2].Quite many investigations have proved that work burnout is curable and the right sorts of contribution can save victims [7]. The ever increasing population growth makes it incumbent to take nursing health as serious as possible as the nursing staff are accountable for other people's health ,so to prevent healthcare lowered quality, it is essential to be aware of burnout and its underlying factors among the nursing staff [8]. Therefore, the present research aimed to look into nursing burnout and its relevant factors in Shahid Mohammadi Hospital of Bandar Abbas in 2014.

Materials and method:

The present descriptive research aimed to explore the extent of burnout and the relevant factors among the nursing staff of Shahid Mohammadi Hospital in Bandar Abbas. It was conducted in 2014-15 with a sample of 158. The data entered SPSS v.19 for the required statistical analyses. Descriptive statistics (percentage for qualitative measures and mean and standard deviation for quantitative measures) were used to analyze the data. The level of significance was set at $p \leq .05$.

The research population was comprised of 300 staff. Through the following formula, the sample size was estimated:

$$n = \left[DEFF^{*} NP(1-p) \right] / \left[\left(d2 / z21-a / 2^{*} (N-1) + p^{*} (1-p) \right) \right.$$

The sample was comprised of nurses with at least a B.S. degree and a year of experience (formally employed). Those who had missed more than 20% of the questionnaire content were excluded from the study. Each and every subject was later met in an agreed-upon work shift for several months to fill out the questionnaire and checklist. All subjects were fully informed that filling out the questionnaires was optional and all the provided data would be kept confidential. Subjects were provided with the head researcher's email address so as to receive the result later on.

The data were collected via Maslach's burnout inventory and a demographic information checklist.

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The former consisted of 22 items (9 on emotional exhaustion, 5 on depersonalization and 8 on personal accomplishment). Work burnout was the dependent variable in this study which was to be rated on a scale ranging from 0 to 6. As for emotional exhaustion, a score above 30 would mean a *high* level of emotional exhaustion; a score between 18 and 29 would be interpreted as *moderate* emotional exhaustion; a score below 18 would be taken as *low*.

Concerning depersonalization, a score above 12 would imply a *high* level of depersonalization; a

score ranging from 6 to 11 would mean a *moderate* level; a score below 6 would be interpreted as *low*.

In terms of personal accomplishment, a score exceeding 40 would be taken as a *high* level of accomplishment; a score between 34 and 39 would be taken as a *moderate* level; a score less than 34 would mean *low*. Higher emotional exhaustion and depersonalization scores plus a lower personal achievement score would imply work burnout. The reliability checked through Cronbach's alpha was reported to be .71-.9 and the test-retest reliability was reported to be .6-.8.

Results:

The present results revealed that in demographic information, the highest relative frequency (75.3%) belonged to the 24-35 year-old age group. From among the 158 subjects, 122 were married and 36 were single. The majority of the nursing staff were female (82.9%). The majority enjoyed a cyclic work shift (88.6%); 8.9% worked only in the mornings; 6% worked merely in evenings and 1.9% merely at night. 119 subjects had 1-10 years of work experience; 26 had 10-20 years of experience and 13 had more than 20 years to their credit. 109 subjects worked 42-84 hours a week; 28 worked less than 42 hours per week and 21 worked over 84 hours. As for the distribution of burnout components, 50% of the subjects showed to have a low level of emotional exhaustion; 46.2% had a low level of depersonalization and 71.51% reported to have a low level of personal accomplishment (table 1). Nursing burnout showed to be significantly correlated with their work experience, in terms of depersonalization (p=.023) and personal accomplishment (p=.01). The highest rate of burnout with respect to depersonalization and personal accomplishment was observed in those with 1-10 years of experience. Statistically significant correlations were found between exhaustion (p=.010), personal accomplishment (p=.024) and the ward the staff were affiliated with. The highest rate of work burnout (emotional exhaustion) was observed in the Otorhinolaryngology ward while the highest rate of burnout (personal accomplishment) was found in the Thoracic, Angiography, Surgery, ICU and eventually Neurology wards. The subjects' personal accomplishment showed to be significantly correlated with their weekly work load (p=.038). The lowest accomplishment rate was observed in those who worked 42-84 hours a week.

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Table 1: The rate of burnout in three dimensions

Burnout component	Level	frequency	percentage
Emotional exhaustion	No response	1	.63
	Low	79	50
	Moderate	50	31.64
	High	28	17.72
Depersonalization	No response	1	.63
	Low	73	46.20
	Moderate	48	30.37
	High	36	22.78
Personal accomplishment	Low	113	71.51
	Moderate	24	15.18
	High	21	13.29

Discussion:

The present research aimed to investigate nursing burnout and its underlying factors in Shahid Mohammadi Hospital of Bandar Abbas. As for the prevalence of the three components of burnout, 50% of the sample showed to suffer from a low level of emotional exhaustion; 46.20% were found with a low level of depersonalization and 71.51% reported to have a low level of personal accomplishment. In some other research by Khazaei et al., 53.3% of subjects showed to suffer from a low level of emotional exhaustion; 54.2% were found with a high level of depersonalization and 37.5% reported a low level of personal accomplishment and Khazaei observed in 2006 a lower level of personal accomplishment and a higher level of depersonalization than the present findings [9]. The rate of emotional exhaustion and depersonalization and personal accomplishment was found to be low in Lopez's investigation, The low level of the three components of burnout in Lopez's research was consistent with the findings of the present research [10].

The present findings revealed no statistically significant correlation between age, sex, marital status, work shift and the three components of burnout. Similarly, in Arsia's investigation, no statistically significant correlation was found between nursing burnout and the staff's age, sex, marital status and education [11]. The findings reported by Esfandiari indicated that women were less prone to work burnout than men which might be due to the higher social pressures men experience as the breadwinner. Work burnout showed to be more prevalent among those working night shifts only than the rest which could be due to a change in rest and

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sleep pattern. Moreover, the lowest level of work burnout in Esfandiari's investigation was observed in the 31-35 year age group [7]. Statistically significant correlations were found between work burnout and one's marital status and sufficient income [6]. The present findings revealed a statistically significant correlation between emotional exhaustion, personal accomplishment and the hospital ward each and every subject was working in. The highest rate of depersonalization was observed in the emergency unit while the highest level of emotional exhaustion was found in the Otorhinolaryngology ward. The lowest rate of personal accomplishment was found in the thorax, Angiography, ICU and Surgery units. Fakhri found a moderate level of work burnout in the ICU, Surgery and Emergency units which were among the most stressful hospital sections. However, no statistically significant divergence was observed between the work burnout level of nurses working in these three sections [12]. On the other hand, Cross and Kelly reported a higher level of nursing burnout in the ICU [13]. The lowest level of personal accomplishment was found among the married in the present research which is not similar to what Abdi and Shahbazi reported [8]. The present findings showed a statistically significant correlation between nursing burnout (personal accomplishment) and their weekly work load. The lowest level of personal accomplishment was found in those who worked 42-84 hours a week. Depersonalization and personal accomplishment showed to be significantly correlated with nurses' work experience. The highest levels of depersonalization and personal accomplishment were observed in the 1-10 year work experience group. In a similar vein, Payami reported a significant correlation between work experience and burnout. It appears that in the long run through gaining more experience, nurses come to cope with their job and know how to manage stress and feelings that could lead to burnout [6]. Work burnout is gradually developed all along one's experiences at work and is more prevalent in professions that require longer work hours such as medicine [13]. As the present results revealed, the majority of subjects (71.51%) reported a low level of personal accomplishment. These can be partly due to a lack of positive work conditions, job dissatisfaction, inability to realize one's full competencies at work and high stress. The highest factor loading in the occurrence of work burnout in the present research showed to be personal accomplishment. However, Hosseininejad et al. observed that the highest factor loading was emotional exhaustion [14].

Nurses are faced with a high level of work stress as they directly encounter much pain and suffering every day. Emotional exhaustion results from all these tensions which produce constant stress and anxiety and affect one's quality of services. They can even take away all positive feelings, empathy and respect for patients [11]. In the present research, 17.72% of subjects showed to have a high level of emotional exhaustion while 31.64% showed a moderate level. Tensions and stress in life takes one away from whatever truly makes one's personality and nature and even overshadow one's actual role in life. Work-related stress can lead to inefficiency at work, lower self-confidence and quit on one's job

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[12]. In the present research, 22.78% of the subjects reported a high level of depersonalization and 30.37% a moderate level of the same burnout component. Personal accomplishment in nursing is not achieved unless one is capable of working to one's full power and develop a positive perception towards oneself as well as patients. Consequently, a nurse feels more self-confident, manages to attract more patient satisfaction and feels competent [9].

Conclusion:

The highest factor loadings involved in the occurrence of work burnout in the present research belonged respectively to personal accomplishment, depersonalization and emotional exhaustion. The three components of work burnout showed to be significantly correlated with the hospital ward, weekly work load and work experience. These findings can help to prevent the prevalence of work burnout especially in terms of personal accomplishment. Work burnout imposes high costs on the hospital, the personnel and patients. Since the nursing staff are in charge of people's health, any damage to their own mental/physical health can lower the quality of services they provide. Therefore, any attempt to promote their healthcare can positively influence the quality of their work.

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