Evaluating Burnout among Administrative and Healthcare Staffs

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Background

Nowadays, there is growing awareness towards the importance of employment in several aspects of life since it is not merely a means of subsistence but an issue which is directly associated with individuals’ mental and physical health. Employment can affect the overall pattern of life as well. People experience various types of stressors and psychological pressures in their professional life due to their job requirements and responsibilities. Accordingly, every employee can be a candidate for burnout if does not know how to avoid psychological pressures or manage and control them (1-3).

Burnout is defined as a pathological syndrome which causes emotional depletion and maladaptive detachment in response to occupational stress. This phenomenon underlies physical and emotional diseases which can have many negative consequences (4). Employees who suffer from burnout become mentally apathetic, depressed, fatigue and tetchy. They constantly find faults with all aspects of their work environment and colleagues and show a negative reaction to others’ suggestions (5,6).

Experts believe that burnout is a widespread phenomenon in all organizations. Golembiewski et al. (1988) indicated that 40% of all employees in the...
private and public sectors suffer from burnout in the middle stage of their careers (7). It also has a high prevalence in modern societies. Besides, it affects all aspects of life in a way that, on one hand, increases the rate of mental and physical diseases, addiction, divorce and job leaving and, on the other hand, causes a reduction of productive labor force, a blow to economy and endangers all sections of society (8).

Due to the special importance of healthcare sector and the fact that its efficiency is highly dependent on the performance of its staffs, healthy and highly motivated personnel are much required in this setting. Furthermore, research shows that burnout is more prevalent among those employed in the field of medical sciences or health care. Accordingly, nurses and healthcare staffs are most vulnerable to occupational burnout due to their frequent contact and interaction with recipients of medical services. Therefore, designing and conducting studies in such field can be important as it may help to provide suitable strategies to prevent burnout and burdensome costs incurred by organizations due to consequences of such issue (9-11).

Since identifying and preventing occupational burnout play an important role in promoting mental health and enhancing quality of medical services provided, we aimed to evaluate the prevalence of burnout among the employees of Shiraz University of Medical Sciences. The results of present study can be used as a data source for experts and psychologists to design and implement a comprehensive plan for promoting mental health. It can also be applied as a basis for conducting research on the effectiveness of interventions for reducing occupational burnout, designing plans and teaching appropriate strategies of compatibility and coping with occupational stress.

**Materials & Methods**

This study was approved by the Ethics Committee of Shiraz University of Medical Sciences. In this descriptive-analytical study with a cross-sectional design, we recruited all administrative and medical staffs employed at Shiraz University of Medical Sciences in Shiraz, southwest Iran, in 2010. Inclusion criteria were the age of 20 to 50 years, being an official staff member or employee of the organization for at least one year and ability to read, write, and comprehend Persian.

In coordination with the department of employment statistics and human resources, the researcher prepared a list of all staffs (n=11570) who were employed at both administrative (n=1830) and healthcare (n=9740) sectors. Out of the total population, 10321 employees who met inclusion criteria were selected. Finally, 300 participants were randomly selected using lottery method of them 150 were employed at administrative and 150 were employed at healthcare sector.

Written informed consent was taken from all the participants after explaining the purpose and method of the study and their anonymity and confidentiality were guaranteed. Besides, the demographic questionnaire was designed in such a way that there was no possibility to identify respondents.

Data were collected using a demographic questionnaire and the Maslach Burnout Inventory (MBI) which is known as one of the most valid and reliable instruments for measuring burnout. Several versions of the inventory have been developed since 25 years ago. MBI, which is currently used as the most widely used measure in the burnout field, was initially developed by Christina Maslach (1981). This self-report questionnaire comprises 22 items scored on a 7-point Likert scale. It measures four major factors in burnout including emotional exhaustion (9 items; describing the respondent's expression of emotions and the feelings of being emotionally overextended and exhausted in their interactions with their clients), personal performance (8 items; describing the feelings of competence and achievement in their interactions with their clients) and depersonalization (5 items; describing one’s sense of apathy and indifference toward the recipients of one’s service) (12).

Maslach and Jackson (1981) reported an internal consistency of $\alpha=0.83$ (Cronbach's
alpha) by administering the questionnaire to 420 participants of them 69% were men and 31% were women. The reliability coefficient was also estimated as 0.89, 0.74 and 0.77 for the dimensions of emotional exhaustion, personal performance and depersonalization respectively (13). The reliability and validity of the MBI has also been confirmed by several studies in Iran. Atef et al. (2006) reported Cronbach’s alpha of the inventory as 0.8 in a study conducted on 70 physicians. The Cronbach’s alpha for the three dimensions of emotional exhaustion, personal performance and depersonalization was also reported as 0.81, 0.75 and 0.84 respectively. The concurrent validity of the instrument was confirmed by correlating the MBI scores and job satisfaction questionnaire scores, which were administered simultaneously, on the subscales of emotional exhaustion, personal performance and depersonalization (14,15).

From the total 300 questionnaires distributed to the participants, 276 were returned and collected. The collected data were analyzed using SPSS software, version 21. Statistical descriptive tests and independent t-test were used as appropriated. The significance level was set at <0.05.

Results

The mean (±SD) age of the participants was 34.40 (±7.88) and their mean work experience was 11.00 (±7.88) years. 53.1% of participants were men and 46.6% were women. Moreover, 47.1 % of them were working in rotating shifts.

Of the total respondents, 13.04% had primary or secondary education; while, 27.89%, 33.69%, 17.02% and 8.33% had associate’s, bachelor’s, master’s and doctoral degrees respectively (table 1). The mean (±SD) burnout scores was 2.33 (±0.60); however, it was 2.39 (± 0.92), 2.35 (±1.03) and 2.25 (±0.89) in the dimensions of emotional exhaustion, depersonalization and personal performance.

Comparison of the mean (±SD) burnout scores between men and women employees showed a significant difference between occupational burnout and its three dimensions in terms of sex. The mean (±SD) burnout scores in the administrative and medical staffs were 2.03(± 0.84) and 2.36(±1.00) respectively in the dimension of emotional exhaustion, 2.31(± 0.64) and 2.47(±1.11) in the dimension of depersonalization and 2.24(± 0.87) and 2.26(± 0.85) in the dimension of personal performance (table 2).

Table 1) Frequency distribution of demographic variables in the participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woman</td>
<td>129</td>
<td>46.6</td>
</tr>
<tr>
<td>Man</td>
<td>147</td>
<td>53.1</td>
</tr>
<tr>
<td>Shifts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotating shift</td>
<td>130</td>
<td>47.1</td>
</tr>
<tr>
<td>Fixed Morning Shift</td>
<td>119</td>
<td>43.1</td>
</tr>
<tr>
<td>Fixed Evening Shift</td>
<td>27</td>
<td>9.7</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary or secondary education</td>
<td>36</td>
<td>13.04</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>77</td>
<td>27.89</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>93</td>
<td>33.69</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>47</td>
<td>17.02</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>23</td>
<td>8.33</td>
</tr>
</tbody>
</table>

Table 2) Comparison of occupational burnout and its dimension between men and women

<table>
<thead>
<tr>
<th>Variable</th>
<th>Women</th>
<th>Men</th>
<th>Test Result</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>2.26</td>
<td>0.88</td>
<td>2.42</td>
<td>0.95</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>2.30</td>
<td>1.06</td>
<td>2.47</td>
<td>0.99</td>
</tr>
<tr>
<td>Personal performance</td>
<td>2.21</td>
<td>0.85</td>
<td>2.28</td>
<td>0.88</td>
</tr>
<tr>
<td>Occupational burnout</td>
<td>2.26</td>
<td>0.56</td>
<td>2.39</td>
<td>0.61</td>
</tr>
</tbody>
</table>
Table 3) Comparison of occupational burnout and its dimension between healthcare and administrative staffs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Administrative staff</th>
<th>Healthcare staff</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>2.03</td>
<td>0.84</td>
<td>2.36</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>2.31</td>
<td>0.64</td>
<td>2.47</td>
</tr>
<tr>
<td>Personal performance</td>
<td>2.24</td>
<td>0.87</td>
<td>2.26</td>
</tr>
<tr>
<td>Occupational burnout</td>
<td>2.26</td>
<td>0.57</td>
<td>2.40</td>
</tr>
</tbody>
</table>

Comparison of the mean (±SD) scores of occupational burnout and its dimensions between the administrative and medical staffs showed a significant difference in the dimension of emotional exhaustion (p=0.03). The results also reflected a statistically significant difference between the administrative and medical staffs in terms of depersonalization and personal performance (table 3).

**Discussion**

Burnout is characterized by negative feelings and emotions which make individuals find themselves in a personal-environmental despairing situation where it is impossible to escape from. According to this interpretation, excessive burnout can cause destructive stress and negatively affect mental and physical health as well as professional performance of all occupational groups.

Analyzing the mean scores of burnout and its dimension indicated that both men and women employees and both administrative and healthcare staffs experienced an average level of burnout. Other studies in Iran also have reported similar results. Khajeddin et al. (2006) investigated the correlation between perception of locus of control and burnout syndrome among nurses in a psychiatric hospital. The results showed that the nurses reported a low level of emotional exhaustion but average levels of depersonalization and personal performance (16). However, the results of other studies are in contrast with ours with respect to the different dimensions of burnout such as the study conducted by Abdi masooleh et al. (2007) who investigated the relationship between burnout and mental health among nurses. They observed that majority of their participants had low levels of depersonalization and emotional exhaustion but a high level of personal performance (17). Several studies have also demonstrated that occupational burnout is associated with occupational complications and difficulties. Melamed et al. (1999) stated that the workers with chronic burnout reported higher levels of occupational tension, irritability, higher cortisol levels, more sleep disturbances and complaints of waking up exhausted.

The results of another study by Hayes and Weathington (2007) on 120 restaurant managers proved that there was a negative correlation between optimism, life satisfaction and burnout; however, stress and burnout were significantly correlated (19). Milfont et al. (2008) also found a negative correlation between burnout and wellbeing (20). The results of the studies conducted in the healthcare and medical systems demonstrated that individuals with burnout reported higher scores in the scales of social dysfunction, somatic symptoms, anxiety and depression (21).

Our findings showed no significant difference between men and women employees in terms of occupational burnout and its three dimensions. However, other studies such as those conducted by Anderson (1984) and Abdi et al. (2007) revealed a significant gender difference in burnout and its dimension (17,
22). But our findings were consistent with those of Burke (1989) and Grossi et al. (2003) who emphasized on lack of difference between men and women in terms of burnout and its three dimension (23,24). Similar to our findings, other studies reported no gender difference in the dimensions of depersonalization and personal performance (14) as well as emotional exhaustion (25).

Generally, findings in the field of burnout and sex are twofold: (1) some studies reflected the difference between men and women in terms of burnout dimensions and (2) some others showed no significant difference in this regard. Accordingly, it may be concluded that environmental factors (such as stress, work volume and complexity and the type of work) play more important role in burnout development than individuals’ characteristics. Maslach et al. (2001) believed that sex is not a good predictor of burnout (26). Moreover, we found a significant difference between administrative and medical staffs only in the dimension of emotional exhaustion. No significant difference was found in the dimensions of depersonalization and personal performance. Reviewing the literature, we found no study confirming such finding. Besides, several studies indicated that workload is one of the major predictors of burnout (27). Therefore, it can be deducted that the healthcare staff have more workload than their peers in the administrative sector. Besides, the employees of healthcare services are more likely to experience stress due to dealing with unpleasant and distressing events, numerous risks, death and critically ill patients. Considering the working conditions of healthcare staff, they are expected to feel more physical and mental exhaustion, negative experiences and reduced energy which can lead to emotional exhaustion. Lack of difference in two other dimensions can be justified by the fact that emotional exhaustion is probably more influenced by environment and occupational stress than the other two dimensions. The present study has also some limitations. Firstly, the population of this study was only the official staffs of Shiraz University of Medical Sciences. Therefore, generalizing the results to other communities should be done cautiously. Besides, this study was carried out on only one group of population, regardless of the type of jobs. Further studies with larger sample size of different population groups are recommended.

The increasing amount of burnout among the employees of Shiraz University of Medical Sciences highlights the need to identify the factors influencing such issue. It seems that applying the results of the present study, along with those of other studies related to planning for educational, organizational and psychological services can help to provide better conditions and facilities for promoting mental health and job satisfaction among healthcare, medical and administrative staffs.

**Footnotes**

**Conflict of Interest:**

The authors declared no conflict of interest.

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