Relationship between psychological problems and quality of work life of Intensive Care Units Nurses

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Abstract
Aims: Nurses as the major group of health service providers need to have the satisfactory quality of work life in order to give desirably care for the patients. The purpose of this research has been to study the “Relationship between psychological problems and quality of work life of intensive care unit nurses”.

Methods: This cross-sectional study which is descriptive –correlation was accomplished on 143 nurses working in intensive care unit of Tehran hospitals in 2010. Data with using of three questionnaires including demographic characteristics, questionnaire of quality of work life based on Walton’s model and the standard questionnaire of DASS21 was gathered. The information was analyzed using SPSS16 software and Pearson correlation test and chi-square test.

Results: There has been no correlation between quality of work life and stress (p=0.07) and depression (p=0.05), but there has been a weak inverse correlation with anxiety (p=0.002, r=-0.27).

Conclusion: It is essential to consider nurses’ anxiety especially by directors due to anxiety impact on reduction of nurses’ quality of work life.

Keywords: Quality of work life; Psychological problems; Nurse; Intensive Care Unit

Introduction
The nurses play a vital role in the caring system of a country. They are considered as the major working group in hospitals and serve as hospital facilitators. The nurses’ job assignment is one of the most important. As one of the health team members, their duty is to preserve and promote the quality of care to a standard level. Although they are fully trained to consider care quality and the patient’s life, they rarely pay attention to their personal needs.

Quality of life consists of work environment variables and is one of the variables recently emphasized by most hospital directors in order to promote the quality of human sources and is the person’s total assessment of his job. There was not any formal definition of quality of work life and its documents are limited, therefore, we studied a definition in the following parts:

Morhed, Griffin and Kettle have defined quality of work life as: the “personnel’s capability in meeting their important needs by using the experience achieved in organization and in one hand, it means the quality of work life should be considered to be the focus of any organization.” Creating an environment resulting in meeting people’s needs was emphasized in the quality of work life programs.

Quality of work life is a comprehensive and general schema which is essential in improving specialized personnel’s satisfaction, attracting and preserving personnel. It also results in positive theories such as increasing profits and provocation. The quality of nurses’ work life is influenced by four factors including social, executive, managing situations and specific cultural situations where problems and shortages consequently lead to work dissatisfaction, psychological exhaustion and quitting from the job. The results of the research accomplished in Austria showed that the level of the quality of personnel’s work life developed by salary /wage increase. Aging can deteriorate the level of work life of the personnel showed in some various studies’ results that totally two-thirds of nurses were not satisfied with their level of quality of work life and most of aspects of their work lives. The results of this study showed that high payment, interest and satisfaction of work are the most important factors of high quality of work life and most of the nurses’ dissatisfaction studied was related to their primary needs and work life’s basics.

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Dargahi et al. have stated in their study that 74.5 percent of nurses were dissatisfied with the quality of their work life. The nurses’ work environment influences the given care quality, their retention then finally cost of living. However, the complexities of work environment were the least factors being studied. In the meantime, the study of these issues offers useful results to managers who are eager to manage their personnel and organizational events more effectively. Khaghanizadeh et al. have indicated in their study that 81% of nurses have an average level of quality of work life. On the other hand, one of the most important sources that create stress in every body’s life is his/her job. According to Koper’s definition, job stress is due to counteraction between a person and his work environment. Although stress is present in all jobs, it is more crucial in the jobs to involve people’s health. There are evidences that a nurse’s job is stressful. 7.4 percent of nurses are absent due to exhaustion or disability caused by stress in which 80 percent is more than the other occupational groups. Thus, stress monitoring plans need to be adjusted by managers for the nursing personnel. Khaghanizadeh et al. showed in their study that majority of nurses (90 percent) have normal level of occupational stress.

Khaje Nasiri accomplished a descriptive research on “study of depression prevalence and its effective factors in Imam Khomeini Hospital in Tehran” and its findings showed that the amount of depression in 73/1 % of subjects was little and inconsiderable, 21.5 % percent was average and 5.4 % was intensive. Additionally there’s a meaningful relationship between depression prevalence and independent variables such as marital status (p<0.0001), educational level (p<0.005), overtime (p<0.001) and parents’ death before the age of eleven (p<0.001). As mentioned before, few studies have been done on the quality of nurses’ work life and there are some studies on psychological studies, but no study has been found regarding the relationship between the quality of nurses’ work life and their psychological problems. Therefore, due to the importance of this issue, this research was done to study the relationship of the quality of work life and the psychological problems (stress, anxiety and depression) of nurses in the intensive care unit.

**Methods**

This is a descriptive -correlational study with the aim of determining the relationship of the quality of work life and the psychological problems of nurses in the intensive care unit. The criteria in the study consisted of nurses working in the intensive care units (Emergency, CCU, ICU, NICU, Dialysis and Kidney transplant) and having interest in cooperation. Thus, 143 subjects participated in this study through the statistics of nurses in three hospitals namely: Baghiatollah, Jamaran and Najimeh. The information was gathered by three questionnaires including personal information questionnaire (questions such as age, gender, marital status, number of children, military background, weekly schedule, work shifts, education, organizational step, hospital’s name and unit), the questionnaire of quality of work life given was according to Walton’s Model and the standard questionnaire of DASS21 were then analyzed. The questionnaire of quality of work life according to Walton’s model has been adjusted in 1973 and includes 24 questions according to Likret’s 5 ranks spectrum which evaluates 8 factors in quality of work life including adequate payment, health, security occupational environment, creating growth opportunity and stable security, legality in organization, social relationship of work life, total environment of life, social solidarity and cohesion and development of human capability. In this case, the quality levels of work life are specified in 3 levels of low, average and high.
Khaghanizadeh et al. in their research on the relationship between occupational stress and the quality of nurses’ work life in selected hospitals of armed forces, used a nominal method to evaluate the justifiability of the questionnaire of quality of work life and a further method was done to determine its perpetuity and the questionnaire’s correlation coefficient was calculated 0.9 which shows a desirable correlation coefficient of questions. The primary study to determine the justifiability and perpetuity of the questionnaire has been done that result in krunbakh alpha of 0.95.

The standard DASS21 questionnaire was at first presented by Laviband in 1995. This questionnaire was done in England on a large sample of subjects and its justifiability and perpetuity have been confirmed. This questionnaire is a self-evaluation tool and it consists of 21 questions on 3 areas of depression, anxiety and stress based on Likert scale. On this scale, the levels of depression, anxiety and stress are categorized in five levels of normal, low, medium, intensive, high intensive. The information has been analyzed using a Pearson correlation test and Chi-square test.

**Findings**

The subjects were 41.3% men and 58.7% women who were at the age range of 21-52 and average 34.73 years old. 23.1% was single and 76.2% was married and 91.6% had B.A and 7.7 had M.A degree and most of the work shifts were evening and night (60.1 percent), and most of the subjects were in Emergency unit (36.4 percent). According to the DASS21 questionnaire, the degree of each psychological problem (anxiety, depression and stress) has been studied from normal to high intensive that its results are shown in table 1. By studying the quality of nurses’ work life based on the 8 dimensions, 57.3% of nurses were in lower level of adequate and fair payment and in other dimensions, they were in the medium level (table2).

In this study, the relationship of each variable is related to the nurses’ psychological conditions (stress, anxiety, depression). Quality of work life had been studied and according to its results, there was no meaningful correlation found with stress (p=0.07), and depression (p=0.05) however, there was a relationship with anxiety (p=0.002). The results of Pearson correlation coefficient between psychological situations

### Table 1. Absolute and relative abundance distribution of nurses on the basis of psychological problem.

<table>
<thead>
<tr>
<th>Psychological problems</th>
<th>Normal</th>
<th>low</th>
<th>Medium</th>
<th>intensive</th>
<th>High intensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>63.6</td>
<td>11.9</td>
<td>14.7</td>
<td>5.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Anxiety</td>
<td>64.3</td>
<td>13.3</td>
<td>9.8</td>
<td>5.6</td>
<td>3.5</td>
</tr>
<tr>
<td>stress</td>
<td>64.3</td>
<td>14.7</td>
<td>14.7</td>
<td>2.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>

### Table 2. Absolute and relative abundance distribution of nurses on the basis of the dimensions of quality of work life.

<table>
<thead>
<tr>
<th>Quality levels of work life</th>
<th>low</th>
<th>medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair and adequate payment</td>
<td>82 (57.3)</td>
<td>58 (40.6)</td>
<td>2 (1.4)</td>
</tr>
<tr>
<td>Safe and hygienic environment</td>
<td>54 (37.8)</td>
<td>82 (57.3)</td>
<td>6 (4.2)</td>
</tr>
<tr>
<td>Security and growth opportunity</td>
<td>21 (14.7)</td>
<td>108 (75.5)</td>
<td>13 (9.1)</td>
</tr>
<tr>
<td>Legality in organization</td>
<td>32 (22.4)</td>
<td>85 (59.4)</td>
<td>25 (17.5)</td>
</tr>
<tr>
<td>Social relationship</td>
<td>24 (16.8)</td>
<td>80 (55.9)</td>
<td>37 (25.9)</td>
</tr>
</tbody>
</table>

### Table 3. The relationship of different levels of anxiety with quality levels of nurses’ work lives.

<table>
<thead>
<tr>
<th>Anxiety level</th>
<th>normal</th>
<th>low</th>
<th>medium</th>
<th>intensive</th>
<th>High intensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>56.7</td>
<td>13.3</td>
<td>13.3</td>
<td>0</td>
<td>16.7</td>
</tr>
<tr>
<td>Medium</td>
<td>67</td>
<td>16.5</td>
<td>11</td>
<td>5.5</td>
<td>0</td>
</tr>
<tr>
<td>high</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
(stress, anxiety, depression) with quality of work life showed that there had been correlation between quality of work life and anxiety (p=0.002, r=-.27) but there was no relationship with stress (p=0.07) and depression (p=0.05). The degree of anxiety results showed 64.3% normal, 13.3% low, 98.8% medium and 5.6% intensive. Therefore, the relationship between different levels of anxiety from normal to high intensive with levels of quality of work life were studied due to the meaningful relationship between quality of work life and anxiety (table 3).

Discussion
The present study indicated that there was no relationship between stress and depression with quality of nurses’ work life working in the intensive care unit but there was a relationship between qualities of work life with anxiety. According to the results of level of stress shown, 2.8% of nurses had intensive stress, 14.7% medium, and 64.3% with normal stress. These percentages are as follows in Rahimi et al. findings: 41% of nurses had intensive stress, 54% medium and 1.8% with low stress. The results indicated that the percentage of stress in this study is less than the other studies. Farhadi et al. announced the prevalence of nursing psychological problems as 35.5% and according to the results in anxiety, 64.3% have been at normal level, 13.3% low, 9.8% medium and 5.6% at intensive level. The present study's percentage of anxiety is less than the study done by the nursing system organization on 665 nurses entitled “study and comparison of anxiety and depression” where 65% had medium degree of anxiety and 6.5% had intensive one. Ghaffari Nejad et al. also declared the prevalence of anxiety in nursing personnel working in hospitals affiliated to Kerman University of Medical Sciences in medium and intensive levels as 34.4%. In addition, the research findings on stress level and quality of nurses’ work life were similar to the results of Khaghanizadeh et al. research on “the study of relationship between occupational stress and quality of nurses’ work life working in selected hospitals of armed forces”, but there was one difference in the occupational stress that the research had mentioned. The results indicated that the majority of nurses (90 percent) had normal level of occupational stress and 81 percent had medium level of quality of work life. There was a negative correlation found between occupational stress and quality of work life. The results of studying the quality of nurses’ work life based on 8 dimensions is similar to the research done to evaluate the nurses’ satisfaction of the quality of their work life in Canada that according to the its results, it has been indicated that raising is one of the important factors in the quality of nurses’ work life and can affect the quality of nurses’ caring in all levels. These results are equivalent to the findings of the research on nurses in the USA hospitals.

Conclusion
High quality of work life is known as the basic strengthening requirement and preparation of human sources. High quality of work life is essential in every organization to attract and preserve personnel and is affected by social, executive, managerial and specific cultural situations. In this study, a meaningful relationship was found between anxiety and quality of work life. Due to the fact that nursing is considered a stressful job, it is important to consider the psychological problems and their effects on the quality of life and satisfaction of work life and according to the previous studies’ results and the present study, it is essential to pay more attention to nurses’ anxiety. Furthermore, conducting seminars to decrease anxiety and performing training workshops on life skills for nurses can be effective.

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References


