Quality of work life perceived by nurses and their organizational commitment level

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Abstract
Purpose: Quality of work life affects employees' commitment towards the organization. It is a concept that closely interests both the employees and the organization. The present study was conducted in a descriptive form for the purpose of determining nurses' work life quality and their organizational commitment levels.

Materials and methods: The population of the study consists of the nurses working in a university hospital and no further sampling method was implemented. A total of 163 nurses participated in the study. The data were collected between August and December 2012 through the use of the "Organizational Commitment Questionnaire" and the "Quality of Nursing Work Life Survey", a descriptive questionnaire that covers the socio-demographic and work life characteristics of the participants. Student's t-tests, Tukey multiple comparison test, Mann-Whitney U-test, Kruskal-Whitney U-test, Kruskal-Wallis variance analysis, Cronbach’s alpha coefficients and Pearson correlation analysis method were utilized in the evaluation of the collected data.

Results: In the study it was determined that the nurses' work life quality and their organizational commitment are at medium levels. It was also determined that there is a positive and statistically significant relation between work life quality and organizational commitment.

Conclusion: It is suggested to implement applications that would enhance nurses work life quality.

Keywords: Work life quality; organizational commitment; clinical nurses; nursing; turnover

Introduction
Quality of work life examines the relation between the employee and its working environment (Gaurav, 2012: 2). Administrative processes such as wage and reward system, the safety and health environment at work, the capacity of the personnel to improve and develop itself and the healthy, safe growth of the organization are included in this concept (Cao, Duan, Fan, Li, Liu, Sun & Zhao, 2013:781; Walton, 1975:93). Work life quality covers the evaluation of work conditions, the employee’s satisfaction from his or her work, management style and the relation between the work life and the social life out of work, or in short the strengths and weaknesses of the work environment (Martel & Dupuis, 2006: 333).

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Organizational commitment is the situation where individuals develop loyalty or commitment towards the organization they work in (Çekmecelioğlu, 2006:155). In the literature, organizational commitment is addressed as "believing and accepting the goals and values of the organization", "making more effort for the sake of the organization" and "exhibiting continuous willingness to maintain one's membership in the organization" (Raza & Nawaz, 2011:269). A high rate of employee circulation in organizations would bring along many negative consequences for the organization. It is observed that organizational commitment exists in cases where the problems caused by employee circulation is negated (Applebaum, Fowler, Fiedler, Osinubi & Robson, 2010; Raza & Nawaz, 2011).

The desire of the employees to be involved in absenteeism or to leave their jobs would affect individuals' satisfaction of work, success, organizational commitment and work life quality (Applebaum et al., 2010). Each of these results is an undesired consequence outcome (Durukan, Akyürek & Coşkun, 2010; Sençan, Yeşenoglu & Aydıntan, 2013). Due to this reason, there is a linear relation between work life quality and organizational commitment. A person whose work life quality decreases would also have less organizational commitment. The study, conducted by Zhao et al. (2013) supports this conclusion. The effect of quality of work life is positive on job embeddedness and affection commitment and negative on turnover intention. Turnover intention is an important, practical antecedent of turnover that appears to have negative effects on organizational effectiveness (Battistelli, Portoghese, Galletta & Pohl, 2013).

Although many studies on work life quality and organizational commitment were conducted both worldwide (Al-Qutop & Harrim, 2011; Demir, 2011; Raza & Nawaz, 2011; Zhao et al., 2013) and in Turkey no study that addresses work life quality and organizational commitment together could be found. Due to this reason, the present study was planned with the purpose of determining the work life quality perceived by nurses and their level of organizational commitment. The findings to be obtained from the present study will be helpful for executive nurses to enhance nurses' work life quality and organizational commitment.

Materials and methods
Study Sample
The population of the study consists of the nurses working in a university hospital in Ankara. It was decided not to implement sampling and all consentient nurses that have been working in the said hospital for at least one year (n=163) were included in the scope of the study.

Data collection
Questionnaire form
In the collection of data a socio-demographic and work life characteristic questionnaire, the quality of nursing work life scale and the organizational commitment questionnaire were employed. Quality of Nursing Work Life Scale was developed by Brooks in 2001 and its Turkish validity and reliability studies were conducted by Şirin in 2011. The scale is in the 5 point likert form (with the degrees of 1 = “strongly disagree”, 2 = “disagree”, 3 = “undecided”, 4 = “agree” and 5 = “strongly agree”). The scale consists of a total of 35 items that cover the 5 sub factors of work environment, relations with directors, working conditions, work perception and support services. Its Cronbach’s alpha coefficient is 0.86. While the minim score that can be attained from the scale is 42, the maximum is 252. Increases in the scores attained from the scale indicate increases in the work life quality perceived by the nurses.

Organizational Commitment level was measured with the OCQ. The OCQ which is a 7 point likert type questionnaire developed by Porter, Crampdon and Smith in 1976 and that was adapted to Turkish and the validity and reliability studies of which was conducted by Vatansever in 1994. While average scores higher than “4” attained from organizational commitment 1 sub-factor indicate stronger organizational commitment, average scores lower than “4” attained from the sub-factor
organizational commitment 2 indicate higher organizational commitment. The Cronbach’s alpha coefficient of the scale is between 0.82 and 0.93.

**Procedures**

The subjects were briefly informed by the same researcher on the purpose and methods of the research as well as the questionnaire and the scale. The questionnaire and the scale were administered by way of face to face interviews after the written and verbal consent of the subjects had been taken. The questionnaire took approximately 10–12 min to complete.

**Limitations**

The study was conducted on nurses serving in a university hospital and initially it was aimed to achieve the participation of 322 nurses. However, in order to prevent any concerns regarding the ability of those that recently started to work as nurse in terms of getting to know the organization and evaluating their own work life quality, these nurses were excluded from the scope and the study was carried out with the participation of 163 nurses.

**Ethical considerations**

This study was conducted with the approval of the Ethics Committee of the School of Nursing at Gazi University in addition to the written permission received from the organization on which the study was to be conducted. The people to participate in the study were thoroughly informed and the application was made by keeping their identities secret. Participation in the study was based on the principle of voluntariness. The research was conducted in accordance with the approved protocol and there were no complaints received.

**Evaluation of data**

All analyses were performed in SPSS for Windows version 15. For the presentation of categorical variables (for instance demographic characteristics, gender, marital status etc.) frequency and percentage values were used. In the evaluation of quantitative variables in cases where parametric test conditions were met, while Student’s t-test was used to compare two groups, one way variance analysis was used for comparing three or more groups. On the other hand, Tukey multiple comparison test was used in order to determine the groups among which the difference is in results found statistically significant in consequence of the comparison of three or more groups. In cases that parametric test conditions are not met, while Mann-Whitney U-test was used for comparing two groups, Kruskal-Wallis variance analysis was used for the comparison of three or more groups, and in case that the results of the Kruskal-Wallis test were found significant, than Mann-Whitney U-test was used to determine the groups among which the differences were. While Cronbach’s alpha coefficients were used to determine the reliability levels of the scales, Pearson correlation analysis was used to examine the correlations between the scales. The level of significance was accepted as $P<0.05$ for all statistical analyses.

**Results**

In our study, as shown in Table 1, while 90.2% of the participants are females, 76% of them are aged between 18 and 31 years of age and 62% of the nurses are single. It was observed that 71.8% of the married nurses do not have any children, 65.6% of them have bachelor's degree and the income level of 86.5% is higher than 1500 TRY. It was determined that 36.2% of the nurses work in surgical departments, that 59.5% of them are service nurses, 47.9% have been working in the organization for a time between 1 to 3 years, 45.4% have been working in their current unit for a time between 0 to 12 years and 71.7% work both in the day and night shift.

Table 1. Some demographic and work life-related characteristics of nurses (n: 163)

<table>
<thead>
<tr>
<th>Socio-demographic variables</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
<th>Variables Concerning Work Life</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td><strong>Unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>147</td>
<td>90.2</td>
<td>Surgery Unit</td>
<td>59</td>
<td>36.2</td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>9.8</td>
<td>Internal Medicine</td>
<td>19</td>
<td>11.7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td>Polyclinics</td>
<td>22</td>
<td>13.5</td>
</tr>
<tr>
<td>18-24</td>
<td>62</td>
<td>38.0</td>
<td>Operating Room</td>
<td>12</td>
<td>7.4</td>
</tr>
<tr>
<td>25-31</td>
<td>62</td>
<td>38.0</td>
<td>Emergency</td>
<td>11</td>
<td>6.7</td>
</tr>
<tr>
<td>32-38</td>
<td>27</td>
<td>16.6</td>
<td>Other&lt;sup&gt;b&lt;/sup&gt;</td>
<td>40</td>
<td>24.5</td>
</tr>
<tr>
<td>39-45</td>
<td>12</td>
<td>7.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>62</td>
<td>38.0</td>
<td>Executive Nurse</td>
<td>15</td>
<td>9.2</td>
</tr>
<tr>
<td>Single</td>
<td>101</td>
<td>62.0</td>
<td>Service Nurse</td>
<td>97</td>
<td>59.5</td>
</tr>
<tr>
<td><strong>Being a Parent</strong></td>
<td></td>
<td></td>
<td>Other&lt;sup&gt;c&lt;/sup&gt;</td>
<td>51</td>
<td>31.3</td>
</tr>
<tr>
<td>Parent</td>
<td>46</td>
<td>28.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not a parent</td>
<td>117</td>
<td>71.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Educational status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.v. high school&lt;sup&gt;a&lt;/sup&gt;</td>
<td>21</td>
<td>12.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate degree</td>
<td>29</td>
<td>17.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>107</td>
<td>65.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgraduate</td>
<td>6</td>
<td>3.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income Status (TRY)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000-1500</td>
<td>22</td>
<td>13.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500 and higher</td>
<td>141</td>
<td>86.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Medical vocational high school

<sup>b</sup>other: bloodletting, radiology, peripheral angiography, interventional department, coronary angiography

<sup>c</sup>infection control nurse, training nurse, diabetes training nurse, nutrition nurse

Table 2 presents the point averages of the subscales of nursing work life quality and organizational commitment scales. It was determined that the nurses who scored the highest point from the work/job environment subscale (\(\bar{X}=30.6\pm6.4\)) and the lowest point from the support services subscale (\(\bar{X}=15.2\pm2.8\)), scored \(\bar{X}=114.6\pm17.8\) from the total of the subscales concerning work life quality and that the quality of work life they perceive is at medium level. It was also observed that the nurses scored \(\bar{X}=4.4\pm1.1\) point from the organizational commitment 1 dimension and \(\bar{X}=3.8\pm0.9\) from the organizational commitment 2 dimension.
Table 2. Internal consistencies of nursing work life quality and organizational commitment scales and point averages of subscale

<table>
<thead>
<tr>
<th>Scales</th>
<th>Subscales</th>
<th>Min.</th>
<th>Max.</th>
<th>Cronbach’s alpha</th>
<th>( \bar{x} \pm SD )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Life Quality</td>
<td>Work/job environment</td>
<td>10</td>
<td>43</td>
<td>0.734</td>
<td>30.6±6.4</td>
</tr>
<tr>
<td></td>
<td>Relations with directors</td>
<td>5</td>
<td>25</td>
<td>0.715</td>
<td>17.0±4.1</td>
</tr>
<tr>
<td></td>
<td>Work conditions</td>
<td>10</td>
<td>40</td>
<td>0.696</td>
<td>24.7±5.6</td>
</tr>
<tr>
<td></td>
<td>Work perception</td>
<td>7</td>
<td>35</td>
<td>0.706</td>
<td>27.1±4.7</td>
</tr>
<tr>
<td></td>
<td>Support services</td>
<td>4</td>
<td>20</td>
<td>0.618</td>
<td>15.2±2.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>–</td>
<td>–</td>
<td>0.872</td>
<td>114.6±17.8</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>Organizational Commitment 1</td>
<td>1.0</td>
<td>6.9</td>
<td>0.823</td>
<td>4.4±1.1</td>
</tr>
<tr>
<td></td>
<td>Organizational Commitment 2</td>
<td>1.3</td>
<td>6.5</td>
<td>0.681</td>
<td>3.8±0.9</td>
</tr>
</tbody>
</table>

According the table 3, there are strong relations between the nurses "work life quality" and "organizational commitment" scores. All of the obtained relation coefficients were determined to be statistically significant.

Table 3. Coefficients and significance of the relation between nurses' organizational commitment and their work life quality and its sub-dimensions

<table>
<thead>
<tr>
<th>Work Life Quality and Subdimensions</th>
<th>Organizational Commitment 1</th>
<th>Organizational Commitment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work/job environment</td>
<td>0.455 (*)</td>
<td>-0.283 (*)</td>
</tr>
<tr>
<td>Relations with directors</td>
<td>0.370 (*)</td>
<td>-0.197 (*)</td>
</tr>
<tr>
<td>Work conditions</td>
<td>0.616 (*)</td>
<td>-0.408 (*)</td>
</tr>
<tr>
<td>Work perception</td>
<td>0.432 (*)</td>
<td>-0.273 (*)</td>
</tr>
<tr>
<td>Support services</td>
<td>0.367 (*)</td>
<td>-0.153 (*)</td>
</tr>
<tr>
<td>Total score</td>
<td>-</td>
<td>-0.496 (*)</td>
</tr>
</tbody>
</table>

*\( p<0.05 \)
Discussion

The present study was conducted for the purpose of determining the work life quality perceived by the nurses working in a university hospital and their levels of organizational commitment. It was determined that the participating nurses' work life quality and their organizational commitment are at medium levels. It was further determined that there is a positive relation and statistical significance between work life quality and organizational commitment.

Work life quality

Work life quality is one of the most important factors that shape the organizational behaviors of employees. These factors include work/job environment, relations with directors, work conditions, work perception, support services and wage (Şirin, 2011; Zhao et al., 2013). While the quality of work life of the nurses was found out to be at medium level in our study (Table 2), in some other studies nurses' work life quality was determined to be below average (Öztürk, 2010; Yang, Liu, Huang & Zhu, 2013; Vahed, Hamuleh, Bidmeshki, Heidari & Shahraky, 2011) and the other study it was once again reported to be at medium level (Uğur & Abaan, 2008). These differences may be due to the different work environments in other organizations.

In our study it was determined that the quality of work life and organizational commitment of older participants are at higher levels. It was reported also in some other studies that the work life quality and organizational commitment levels increase with the increasing age of nurses (Çelik & Hisar, 2012; Tekingündüz & Tengilimoglu, 2013). This can be explained with the increasing age the nurses establish a better work environment for themselves and feel themselves belonging to the organization (Çelik & Hisar, 2012). The results of the present study showed that the quality of work life of the nurses who work in emergency was found out to be at low level in our study. This result may be due to the fact that more than other parts of the circulation of patients in emergency units. A study conducted by Eslamian, Akbarpoor and Hoseini (2015) reports that about 45.7% of the nurses in emergency departments had a low level of quality of work life. This result is also similar to our study.

Organizational commitment

Within the scope of our study, the nurses’ organizational commitment was determined to be at medium level (Table 2). In Turkey and in the world, nurses in the article stated their commitment to the organization status, level of commitment of the nurses' organization, was reported to be moderate or low. (Durukan et al, 2010, Eren & Demirgöz, 2015, Gregory, Way, Lefor, Barrett & Perfrey, 2007). While in the study conducted by Durukan et al. (2010), it was reported that the organizational commitment of nurses is at low levels, the study conducted by Gregory et al. (2007) reports that the nurses feel little commitment to the organization they work in. The reason for these differences on the other hand may be the differences between different organizations. Results of the present study also showed that the nurses from age group 18-24 attained lower scores from the organizational commitment 1. It is possible to claim that in this group, consisting of new starters to the institution, the probabilities of risk taking and evaluating other organizations are high. Our study shows that as working period in the occupation and in the division increase, organizational commitment increases. Some studies demonstrate that turnover intention is negatively correlated with years of nursing experience (Chan, Luk, Leong, Yeung & Van 2009; Delobelle et al., 2011; Tschannen, Kalisch & Lee, 2010)

However, nurses working in the organization for 4-5 years have reported a decrease in commitment. This decrease can be explained by the increase of expectations in the organization after this period. Also, there is an organization-specific practice that consists of a working mandatory for a period equal to the period of studying in the organization after graduation. This mandatory period is around 4-5 years and explains the decrease.
The results of the present study also showed that nurses who have bachelors and postgraduate degrees were found to be more connected to the organization than the ones with associate degrees. A positive correlation was found between organizational commitment and level of education. This result may be due to fact that the majority of institution’s nurses are graduated from the same university. In contrast to our findings, a study conducted by Mosadeghrad and Ferdosi (2013) reports that education level and organizational commitment have a negative relationship.

Organizational commitment and work life quality

In our study the presence of a positive relation between organizational commitment and work life quality was determined. It is reported in the literature that the quality of work life has positive effects on employees and organizations. These effects manifest themselves in the forms of less absenteeism by employees, increase of organizational commitment and enhancement of performance (Sabarirajan & Geethanjali, 2011). It was observed that as the quality of work life of nurses increases also their organizational commitment increases and that the sub-factors of work life quality affect organizational commitment. The findings of conducted studies support our findings (Applebaum, et al., 2010; Gellatly, Cowden and Cummings, 2014; Gieter, Hofmans & Pepermans, 2011; Raza & Nawaz, 2011; Yüceler, 2009; Vahed et al., 2011).

In our study the organizational commitment and work life quality of nurses that work in day shift were determined to be at high levels. According to the findings of a study conducted on a total of 5323 healthcare personnel in Belgium, the Netherlands and Germany (Steinmetz, Vries & Tijdens, 2014) it is seen that working in shifts may affect the resignation intention of employees. Therefore the findings are in line with the findings of our study. This result is also similar to the results of the other researches (Ishihara, Ishibashi, Takahashi & Nakashima, 2013; Lee, Lim, Jung & Shin, 2012; Tao, Ellenbecker, Wang & Li, 2015). They stated that work environments and organizational factors affect organization commitment and turnover intention of the nurses.

Most other research in this field has been conducted among employees in other job categories, such as teachers, company staff, hotel staff, bank tellers, and social workers. In contrast, this study was restricted to nurses and aimed to identify nurses’ work life quality and their organizational commitment levels. Additionally, this study provides a basic data for use in improving the efficiency of the management of nursing human resources for hospital nursing management. Using these results, nursing administrators can manage nursing staff more effectively and they can improve organizational productivity.

Conclusion

The healthcare professionals are engaged in vital activities due to their occupations and chance of making a mistake is almost zero. It will allow them for being organization committed, happier and more eager and thus making fewer mistakes that occupational life quality of nurses who offer service in such a sensitive and high concern field is high. There are some factors that keep occupational life qualities, organizational commitments and motivation levels of the nurses high as well as other workers. Their work environment, the department and position that they work, working conditions and wage are among these factors. In this paper at which occupational life qualities and organizational commitment levels of the nurses were reviewed; it was determined that the quality of work life and organizational commitment of the nurses are at medium levels. It was also determined that there is a positive and statistically significant relation between work life quality and organizational commitment. It is suggested for organization executives to implement activities that would enhance employees' work life quality and organizational commitment levels. These activities are as follows:

- One of the important factors in terms of increasing the occupational life qualities of the nurses is increase of their work environment quality. In our study, it was correlated with increase of patient density in these departments that occupational life qualities of the nurses who work in the emergency departments were assessed as lower compared to the nurses who work in other
departments. With the aim of increasing occupational life qualities and organizational commitment of the nurses who work in the emergency departments, increasing their motivations by giving rewards,

- As well as that the workers whose working hours are dense may not increase their life qualities, this situation negatively affect their occupational life qualities. As the nurses especially who work in the alternate shift system assess their occupational life qualities as much more negative in our study, making arrangements regarding to their working hours,

- It was seen that organizational commitments of the nurses whose work hours in the institution exceeded 4-5 years were decreased. This result was correlated with that the nurses who were educated in its own university as an application specific to the institution gave compulsory service and this service was between 4 and 5 years. With aim of preventing living the institution following compulsory service of these nurses who were graduated from its university and knew the institution much more than other workers, enhancing their motivation sources,

- Organizational commitments of the nurses whose ages varied 18 to 24 years old were determined as lower compared to other age groups. If we consider that cost of a new hired nurse leaving the institution after completing the orientation process and a bachelor’s degree nurse is between the age of 22 and 24 years old and taking the risk of changing the institution will decrease at these ages, employing highly educated and well trained,

- Education levels of the nurses affect their commitments to the institution. Therefore with the aim of increasing competencies of the persons concerning to their interest fields in their occupations, giving much more support in going or continuing postgraduate education an participating in course, congress and seminars,

- It was seen that sub-dimensions of the occupational life quality is positively correlated with the level of organizational commitment. It was seen that scale sub-dimension of the nurses at which the relations with managers took place were effective in assessing occupational life quality and levels of organizational commitment. Starting from this point, the nurses who work in the manager position take lead in a supporting the nurses who work in other departments, taking the problems and expectations of the nurses by senior management and allowing participation of them in decision making processes,

- It is suggested to make the study on the nurses who work in other institutions and compare the results.

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