Investigating the Relationship between Organizational Culture and Quality of Work Life from the Perspective of Nurses Working in the Hospitals of Shahrekord University of Medical Sciences in 2015

**Background and objective:** Improving quality of work-life of nurses requires existence of an organizational culture with collaborative and compatible features and with purpose and prospect. Human resources in different organizations such as hospitals with different organizational cultures have different interpretations about quality of work-life; therefore, the aim of this study is to investigate the relationship between organizational culture and quality of work-life of the nurses in the hospitals of Shahrekord University of Medical Sciences.

**Methods:** This study was a descriptive-correlation study, which was conducted in 2015 on 295 nurses at the hospitals of Shahrekord University of Medical Sciences. Sampling was performed by using convenience sampling method. Data collection tools were Walton’s quality of work-life questionnaire and Denison’s organizational culture survey. To analyze data, descriptive and analytic statistics methods were used and Spearman correlation coefficient and regression coefficient were also applied.

**Results:** Results indicated that organizational culture of 76.9% of nurses (227 persons) was mediocre. Also, quality of work life of 72.92 of nurses was mediocre and only 1.4% enjoyed a good work life and 25/8% had a low level of work life. Results also showed that there is a significant positive correlation between quality of work life and all components of organizational culture (p<0/05). Also, results of regression analysis showed a positive linear correlation between organizational culture and quality of work-life.

**Conclusion:** Based on the results of this study, improvement in quality of work life of nurses requires changes in the components of organizational culture and participation of employees in the organization.

**Keywords:** Organizational Culture, Quality of Work-Life, Perspective of Nurses
Introduction
In organizations providing health services, quality of work-life is one of the main factors affecting the performance of employees and finally the quality of provision of health care services (1). One of the policies of healthcare system is improving the quality of health care services. Measures such as total quality management, organizational improvement and organizational excellence must be implemented in order to achieve this policy and implementation of these measures would be impossible without changing in organizational culture (2).

In today's management, the main challenge for success is helping employees to reinforce the spirit of competitiveness among them and to better relate with different issues. Hence, organizations not only need to create a desirable general culture but also they need to improve employee performance. They should pay special attention to issues such as organizational culture, quality of work-life, job satisfaction and improving workplace (3). According to Denison organizational culture refers to core values, beliefs and principles, which serve management system as a solid foundation. According to him, the organizational culture consists of four main components: organizational mission -including goals and objectives- adaptability of organization with internal environment, compatibility with external changes and the component of organizational involvement or participation which shows the level of participation of employees in organizational decisions (4). Hospitals are among the most important institutions providing health services, which play an important role in preservation and promotion of public health, and nurses constitute the majority of staff working in hospitals. Studies have shown that there is a positive correlation between hospital culture and retention of human resources in organization and this correlation can reinforce workforce productivity (5). According to Therme et al(2001), different organizations have different cultures and hospital culture also significantly differs from other organizations and it is distinguished from other institutions due to the diversity of its specialist and non-specialist staff (6). In this regard, Deborah Edwards et al. believe that quality of care services is more desirable in health care institutes with strong culture (7). Also, strong positive culture can increase employees' satisfaction and can provide conditions for better interaction of nurses with coworkers and can lead to satisfaction in performing tasks and finally can result in realization of organizational goals (8). In a study by Ghasemi Pir Balooti et al. (2013) regarding the relationship between organizational culture and job stress in nurses, the results showed that there is a relationship between this variable and job stress in nurses (3). Today, researchers have paid special attention to quality of work-life in hospitals, and improving quality of work-life of hospital staff has been regarded as one of the most important factors to ensure the sustainability of health systems. In fact, high quality of work-life is essential to attract and retain employees in any organization. Quality of work-life differs in different societies and it is affected by geographic and economic resources, development or lack of development of various countries and their industry (9). Although nurses represent the largest group working in hospitals and they are facilitators of hospital care. Despite the importance of quality of work-life, authorities do not prepare their essential and basic resources and requirements and few studies have investigated the nature of nursing and their workplace and quality of their work life; while study about aforementioned point can provide useful feedback for leaders who are eager to manage staff and organizational outcomes (10). Hence, considering the increasing importance of this issue, higher importance of organizational culture and quality of work-life in hospitals compared to other organizations, availability of few studies in the area of nursing and regarding the relationship between these two variables, the researcher decided to conduct this study in order to investigate the relationship between two variables in order to identify the level of organizational culture and quality of work-life and their relationship and to provide useful feedback for hospital authorities and especially nursing managers in order to improve the level of organizational culture and quality of work-life of nurses.
Methods
This descriptive-correlation study was conducted in 2015. To collect data, Denison’s organizational culture survey and Walton’s quality of work life questionnaire were used. During the study, 827 nurses were working in Shahrekord University of Medical Sciences and among them 382 nurses were working in Kashani hospital and 445 nurses in Hajar hospital. The sample size was determined as 300 persons using Morgan table. Considering the statistics of the nursing staff in the mentioned hospitals, we used stratified sampling method based on gender and position of individuals using convenience sampling method. Thus, 80% of the samples were selected among female personnel and 20% were selected among males. Based on the number of personnel working in these hospitals, 138 questionnaires were distributed among nurses in Kashani hospital and 162 in Hajar hospital. The organizational culture questionnaire consisting of 60 questions was used to evaluate the organizational culture of organizations through four main components, including: participation in work (1-15 questions), compatibility (16-30 questions), mission (31-45 questions) and adaptability (46-60 questions). It measures organizational culture at three levels of: low, mediocre and high, which includes low level (score between 60 and 140), mediocre level (score between 141 and 220) and good level (score between 221 and 300). The questionnaire is compiled according to the five-point Likert scale (level one indicates that the respondent fully disagrees with raised statement and the fifth level indicates that the respondent fully agrees with it). The validity and reliability of this questionnaire were confirmed in several studies by Iranian researchers. The validity of the questionnaire has been evaluated in a study by Rahimnia et al. by studying relevant articles and books in the area of organizational culture and through conducting interviews and consulting with experts in the field of management. Cronbach’s alpha was used to evaluate the reliability of the questionnaire, which was 90% indicating a high level of reliability of assessment tool (11). In this study, Cronbach’s alpha coefficient was calculated by researcher and through conducting test-retest on 20 nurses, which was 0.84. Also, Walton’s quality of work-life questionnaire was used to measure quality of work-life of nurses. It contains 27 items and measures eight major components including fair and adequate payment, safe and healthy working environment, providing opportunities for continuous growth and security, rule of law, social dependence of work-life, overall living atmosphere, social integration and cohesion in the organization and development of human capabilities. The questionnaire is based on 5-point Likert scale and it measures quality of work life at three levels: low level (score between 27 and 63), mediocre level (score between 64 and 99) and good level (score between 100 and 135) (12). This questionnaire has also been used by Iranian researchers several times and in numerous studies and its validity and reliability have been confirmed. The face validity of the questionnaire was also confirmed by Khaghanizade et al. in selected hospitals of armed forces of Iran and they used test-retest method to determine the reliability of the questionnaire and in their study, the correlation coefficient was 0.9, which showed good correlation of questions (13). In the present study, Cronbach’s alpha coefficient was calculated through conducting test-retest method which was 0.83 and face and content validity were confirmed by the faculty members of Faculty of Nursing. To comply with ethical considerations, the researcher must first receive permission to conduct the research from the University. Then by visiting clinical wards in selected hospitals, researcher provided the participants with informed consent form regarding the voluntariness of participation in the study and confidentiality of personal information. After collecting the questionnaires, the ones that were not completed were omitted, and to achieve the sample size, the other nurses were selected to complete the questionnaire. Finally, 295 questionnaires were collected and the data was analyzed by SPSS software using Spearman correlation coefficient, linear regression test in order to determine correlations between variables. Also, the significant level was considered 0.05.
Results
Among the four components of organizational culture, missional culture with a mean score of 52.7 had the highest score. In total, the scores of organizational culture questionnaire, from the perspective of nurses were ranged from 121 to 280 with a mean of 205.1±8.2 (Table 1).

| Component       | Min | Max | Mean | SD  |
|-----------------|-----|-----|------|-----|
| Participatory   | 25  | 106 | 50.9 | 8.2 |
| Adaptability    | 31  | 85  | 50.89| 6.61|
| Compatibility   | 26  | 71  | 50.61| 6.87|
| Missional       | 26  | 75  | 52.7 | 8.1 |
| Organizational  | 121 | 280 | 205.1| 8.2 |

Based on the results listed in Table 1, the mean scores of participatory culture, adaptability culture, compatibility culture, missional culture and organizational culture were: 50.9, 50.89, 50.61 and 52.7, respectively. The mean scores of organizational culture questionnaire was 205/1. Regarding the perspective of nurses in the area of organizational culture, the majority of subjects -76.9% (227 individuals) - had mediocre level of organizational culture. Also, the level of quality of work life of the majority of the population under study -215 individuals (72.9%) was mediocre. Also, according to the above table, the majority of nurses -98.6% - have had a low to mediocre level of quality of work life, while in terms of organizational culture, the majority of nurses -98.3% - have had a mediocre to good level of organizational culture (Table 2).

Table 2: Absolute and relative frequency distribution of nurses on the basis of the level of quality of work life and their perspective in the area of organizational culture

| Level     | Organizational culture | Quality of work life |
|-----------|------------------------|----------------------|
|           | Percent | Percent | Percent | Percent |
| Low       | 5       | 1.7      | 76      | 25.7    |
| Mediocre  | 227     | 76.9     | 215     | 72.9    |
| Good      | 63      | 21.4     | 4       | 1.4     |
| Total     | 295     | 100      | 295     | 100     |

The mean scores of organizational culture questionnaire from the perspective of nurses were: 1.7, 76.9 and 21.4 and the mean scores of quality of work-life questionnaire were: 25.7, 72.9 and 1/4, respectively (Table 3).

Table 3: Relationship between quality of work life and the perspective of nurses on organizational culture and its components

| quality of work life | Correlation Coefficient | Organizational culture | Participatory culture | Compatibility culture | Adaptive culture | Missional culture |
|----------------------|-------------------------|------------------------|----------------------|----------------------|------------------|------------------|
|                      |                         | 0.400                  | 0.335                | 0.291                | 0.371            | 0.322            |
| Significance level   |                         | **<0.001**             | **<0.001**           | **<0.001**           | **<0.001**       | **<0.001**       |
| Number               |                         | 295                    | 295                  | 295                  | 295              | 295              |

** Significant at the level of 1%
The correlation coefficient between components of organizational culture, participatory culture, compatibility culture, adaptability culture and missional culture with quality of work life at a significance level of 0.001 were 0.4, 0.335, 0.291, 0.371 and 0.322, respectively. The results of analytical statistics based on the Spearman correlation coefficient test show that there is a significant positive correlation between quality of work life, organizational culture and its main components including participatory culture, compatibility culture, adaptability culture and missional culture (p<0.001). Also, the capacity of components of organizational culture in predicting quality of work-life was studied through using multiple regression (Inter method) . The results of multivariate regression analysis showed that all the predictor variables explain about 165 of the variance of quality of work-life.

Table 4: The results of analysis of variance for predictor variables

|                      | Regression |        |        |        | 13/929<p |
|----------------------|------------|--------|--------|--------|----------|
|                      | 7801.255   | 4      | 1950.314 | 0/0001 | 13/929   |
| Remainder            | 41024.356  | 293    | 140.015 |        |          |
| Total                | 48825.611  | 297    |        |        |          |

F-test showed that the correlation coefficient is 13.929, which is significant at 0.001 level. Thus, it can be said that there is a linear relationship between variables.

Table 5: The results of regression coefficients for predictor variables

| Variables    | Regression coefficient | Standard deviation | Standardized Beta | T     | Significance level |
|--------------|------------------------|--------------------|-------------------|-------|-------------------|
| Constant     | 34.885                 | 5.962              | 0.086             | 5.851 | 0.0001            |
| Participatory| 0.133                  | 0.123              | 0.052             | 1.049 | 0.295             |
| Compatibility| 0.096                 | 0.154              | -0.046            | 0.624 | 0.533             |
| Adaptive     | -0.089                | 0.133              | -0.330            | -0.671| 0.503             |
| Missional    | 0.516                 | 0.118              |                   | 4.378 | 0.0001            |

Results of regression coefficients of components of organizational culture as the predictor variables showed that by changing the standard deviation of each of the components of organizational culture, the standard deviation of quality of work-life will change as well. Meanwhile, this change is reverse in the components of adaptability culture. Reviewing beta coefficients indicates that among all predictors, missional culture better predicts changes in quality of work-life.

Discussion

When we compare this study with other studies conducted in this area, with different questionnaires, our findings show that the changes in quality of work-life have a direct relationship with organizational culture. It means that an increase in each of the two variables of organizational culture and quality of work-life increases or reinforces the other. Hence, according to these findings, we can conclude that improvement of quality of work-life of nurses in the mentioned hospitals requires conducting some changes in the organizational culture and its components. Therefore, the hospital authorities and especially nursing managers can improve quality of work-life of nurses and can achieve their organizational goals through reinforcing hospitals’ organizational culture.

The results of this study were consistent with the results of studies by Hamidi et al. (14), Amini et al. (15), Zanganeh and Aghaie (16), Motafakkeri et al. (17) and study of Jei Yong (18) and Blair Gifford (19). Although, these studies have used different questionnaires to investigate the relationship between organizational culture and quality of work-life.
but their results were similar with the results of the present study. The results of the present study were also consistent with the results of studies with similar questionnaires, including studies by Motafakkeri et al. (2017), Zanganeh and Aghaie (16) and study by Valizadeh and Gahramani (20). The mean score of organizational culture questionnaire of the participants was at a mediocre level. The above findings are consistent with the results of study of Nasiripour et al. (2007) and study of Hariri and Ja’afari (2011) and with the findings of Ahmadian et al. (2010), which classifies organizational culture into three levels of desirable, undesirable and relatively desirable and reports that organizational culture of selected hospitals of Tehran University of Medical Sciences has a relatively desirable condition. Also, the findings are inconsistent with the study of Barati Marnani et al. (2009), a study by Iran Zadeh and Mahmoudieshan (2010), which have reported organizational culture to be above the average. In the study of Barati Marnani in most cultural components, the scores were above the average. According to the researcher, the reason for these high scores and desirability of organizational culture at the studied hospital is that this hospital has implemented organizational excellence and quality improvement programs. Realization of such programs depends on the existence of a desirable organizational culture. Hospital authorities and managers have implemented cultural change program in this hospital before implementation of any other program (Barati Marnani et al., 2009). Also, the results of regression coefficient indicated that the component of misional culture has a higher score and better predicts the changes, compared to other components. This represents the increasing awareness of the nurses regarding hospital’s mission and vision; therefore, this has led to a better understanding of organizational goals and has given the personnel a common vision of organizational values and as a result, they are more coordinated in achieving common objectives (21). The higher mean score of misional culture in this study is inconsistent with Motafakkeri study (2012), in which the component of adaptability had the highest score. Also, the findings are inconsistent with the study of Bokharaian et al. (2013) in which the component of organizational culture had the highest score. Finally, the findings are inconsistent with the results of study of Barati Marnani et al. (2009), the study of Iran Zadeh and Mahmoudieshan (2010) in which the component of participatory culture had the highest score. This score indicates that Nursing Staff in this study are familiar with the mission and vision of their organization and they are aware of the strategy of their organization and they are serving to achieve organizational goals and perspectives. This difference may be due to the establishment of clear strategy and programs in these hospitals and also because of great efforts by managers in implementing clinical governance and accreditation programs which are continuously implemented in these centers in the recent years.

Conclusion

Based on the results of the study it can be concluded that the changes in organizational culture components have been consistent and determinant of the level of quality of work-life of the nurses in the studied hospitals; therefore, boosting the level of organizational culture and its components in hospitals can be strategy to improve the level of organizational culture. Furthermore, by changing the organizational culture to a culture that reinforces participation, adaptability, compatibility and hospital’s mission, we can see an increase in the quality of work-life of nurses, which in turn leads to an improvement in the quality of services.

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