Relationship of Quality of Working Life in Kashan Teaching and Non-Teaching Hospitals with Knowledge Management According to the Top and Middle Manager’s Point of View

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ABSTRACT

Background and aim: The purpose of the present study was to compare quality of working life in Kashan teaching and non-teaching hospitals and to determine its relationship with knowledge management.

Materials and Methods: the study was descriptive in nature. The statistical population comprised of middle and senior managers at Kashan teaching and non-teaching hospitals. The data were collected using a valid Likert style questionnaire (Very little to very much). Data analysis was carried out using SPSS.

Results: Work space gained the highest score among other parameters (3.64 in teaching hospitals and 3.47 in non-teaching hospitals). Material facilities scored the lowest in teaching hospitals (2.7). Job design also attained the lowest score in non-teaching hospitals (2.81). Democracy showed the strongest correlation with knowledge management in teaching hospitals (r=0.83). There was a strong correlation between education and knowledge management in non-teaching hospitals (r=0.69). There was a strong correlation between quality of working life and knowledge management both in teaching and non-teaching hospitals (r=0.92 and r=0.83), respectively.

Conclusion: Based on the findings of the study, paying special attention to participation in Democracy and education could play a crucial role in improving work life quality.

KEY WORDS: Work Life Quality, Knowledge Management, Teaching hospital, Non-teaching hospital.

INTRODUCTION

Knowledge management (KM) has maintained consistent growth and recognition in business organization since the late 1980s. According to Thomas, Kellogg, and Erickson, 'Knowledge management is well on the way to becoming a distinct field, with its own theories, jargon, practices, tools, skills, and other accouterments of an independent discipline'. Educational institutions are beginning to offer courses, certificates, and even degree programs in KM. Knowledge management is a practice that encourages the application of holistic methods for identifying, gathering, organizing, and making available the knowledge assets to all within an organization. It includes the harnessing and sharing of the expertise and the experience that reside in employees, with the hope of leveraging those resources to organizational advantage. Organizations engage in knowledge management to increase productivity, improve the decision-making process, share the experience and knowledge that individuals possess, generate new knowledge, increase collaboration among employees, and safeguard organizational knowledge.

The existing literature suggests that there is no single common definition for KM. Rather, various definitions are proffered, most of which center around its business applications. These business-focused definitions suggest that the business world has been more involved in KM than academia. As Marshall and Rosselt state, 'Knowledge management involves recognizing, documenting, and distributing the explicit and tacit knowledge resident in an organization's workforce. The mission is to provide the right information to the right people at the right time'. Today, having knowledge and up-to-date information has become a vital and unavoidable necessity to continue the life of organizations, particularly if the procedure of changes and evolutions of the knowledge in society are evaluated carefully, it will be concluded that post–industrial society of today is an information community in which the force increasing technologies replaced with knowledge increasing technologies. In dynamic and complicated environment of today society, organizations should utilize new and modern knowledge & technology continually to produce products & provide services. In fact, knowledge is the only resource that its usage will not decrease its value, but increase it and other theorists pioneer in organization or management also believe that investment on knowledge in an organization is more profitable than materials. Thus, organization management should seek and find capability to make rational decisions in improving functions based on knowledge by emphasis on superior
knowledge. In many organizations, specially health care and medical ones, there is no codified process to find, select and organize the information and its utilize in order to solve problems in training and decision making. This will result in low efficiency, low performance rate, low response capability of the organization toward the environmental changes, decrease in innovation & creativity and loss of hidden assets which are imposed by knowledge-based staff with their exit from the organization or because of lack of educating their talents & skills. Thus, knowledge management is a more important issue than knowledge it self. knowledge management seeks to clarify how to convert individual & organizational knowledge & information into group knowledge & individual skills and abilities in organizations. Organizations should provide an environment to share, transmit and exchange knowledge among members and train the people to understand their interactions.

One of the main steps to improve knowledge is to realize the causes and factors such as job satisfaction, working life quality of staff and training programs.

Improving the working life quality, means the activity to complete the organization through growth & improvement of staff and their human value, which is a process through it the beneficiary parties of the organization, i.e. manager, labor unions and the staff learn how to work together, and it will specify what initiations, changes and advances are desirable and effective and must be done to meet organizational purposes in addition to improve working life for all members.

Finally, it should be noted that meeting an organization purposes depends upon factors such as working life improvement. Thus, managers should recognize and understand the quality of working life and know the effectiveness of that on the organization in order to meet the organization purposes and satisfy the members. Al Dollan did a research to study the relation between work needs, motivation and supportive factors with their working life. The results showed that lack of supportive factors in work place will decrease the working life quality level of the staff.

Kawai & Thomas has done study named studying the quality of working life of staff in eight organizations in Shanghai china. The results showed that to meet economic, health and knowledge needs are the most important factors in working life quality of the staff, respectively. The results of Karami study in Bahman Khodro Co. showed that individual autonomy giving independence to the individuals, management supports, organizational dependency, reward system and decentralization in decision making play important roles to establish knowledge management.

Purpose of this study is to improve the hospital management through determining the effectiveness of working life quality variables related to the subject and then the importance degree of determined variables effecting on knowledge management, according to the view points of demographic population of the study and the results will be provided to the decision making centers of Kashan medical science university hospitals, in framework of modified suggestions.

**STUDY METHOD**

This study is an analytical–descriptive, sectional and practical study which was done in three training and three non training hospitals of Kashan medical science university.

Demographic population of the study was 61 senior and middle manager of the hospitals, from them 31 managers were working in training hospitals and 30 ones were working in non training ones and include boss, manager ,matron ,head nurse ,administrative manager, medical document manager and service manager. In this study, no sampling was done and all the members of the population were analyzed. Data collecting tool was a questionnaire including three parts:

- Demographic information, working life quality and knowledge management.
- In the first part, demographic data such as gender, education and work experience of hospital managers were studied.
- Second part of the questionnaire relating to the working life quality, was prepared based the variables of working life quality (material and life advantages such as salary, welfare advantages ,training facilities like classes and work shops, democracy in the organization including granting franchise to select members of the organization, participation in making decisions such as forming a team to do affairs, designing of jobs such as relation between job properties with the employee, working space including facilities, safety and physical health in work place) in studies of Tatel, Kasio and Morton & management institution of America.
- Third part of the questionnaire was related to the knowledge management. In this questionnaire, the questions were selected & set based on the management knowledge variables which were the most important variables in knowledge management cycle of Nonaka & Takechi and also in Davonport & Proosak models.
- In order to score the questionnaire options, Likert 5-degree scale was used (from 1=very low to 5=very high). In order to evaluate the reliability of the questionnaire, α-Krounbach method was used. α-Krounbach coefficient obtained 0.86 and 0.92 , respectively in a meaningful level of 0.01 which showed a good reliability of the tools.
- Validity of the questionnaire was pre-determined.
- After arrangement of the data and to calculate the integration between working life quality and knowledge management and also between working life quality variables & knowledge management, Pierson integration test, independent and one – way T tests were used, then edited and analyzed by SPSS software. Average of variables of working life quality and management knowledge variables was categorized as:
  - 0-2 weak, 2-3 middle, 3-5 strong. And the working life quality variables were categorized as:
0-16 weak, 16-32 middle and 32-48 strong.

Findings
50.8% (31 healthcare centers) of hospitals were training hospitals & 49.2% (30 healthcare centers) were non-training hospitals.

54.1% (33 people) of participants were male and 45.9% (23 people) were female. In terms of education degree, 90.2% (55 people) had B.A. 8.2% (5 people) had M.A and 1.6% (1 person) had PhD degree. Work experience of 16.4% (10 people) was under 5 years, 21.3% (13 people) was from 6 to 10 years, 36.1% (22 people) was from 11 to 15 years, 19.7% (12 people) was from 16 to 20 years and 6.6% (4 people) was more than 20 years. Average age of 3.3% (2 people) was under 20 years old, 70.5% (43 people) was from 21-40 years old, 24.6% (15 people) was from 41-50 years old and 1.06% (1 person) was 51 years old. Status of working life quality in training and non-training hospitals was evaluated average, with 21.98 and 21.28 scores, respectively, answered by the repliers.

Among the indicators of working life quality in training & non training hospitals, working space in the organization with average score of 3.64 and 3.47 were in highest level and material advantages and job design with average scores of 2.79 and 2.81 were located in the lowest level, respectively. In training hospitals, the average score of working life quality variables belonged to work space, training, participation in decision making, job design, democracy in organization and material advantages, from high to low, respectively. In non-training hospitals, it belonged to work space, training, material advantages, participation in decision making, democracy in organization and job design, respectively (Table 1).

Table 1: Comparison of working life quality between non training and training hospitals of Kashan medical science university.

<table>
<thead>
<tr>
<th>Statistical Test</th>
<th>Non-teaching Average Standard deviation</th>
<th>Teaching Average Standard deviation</th>
<th>Type of hospital Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>T=7.099</td>
<td>2.95</td>
<td>2.728</td>
<td>2.79 Material facilities</td>
</tr>
<tr>
<td>T=7.123</td>
<td>3.45</td>
<td>3.654</td>
<td>3.46 Education</td>
</tr>
<tr>
<td>T=7.077</td>
<td>2.94</td>
<td>3.56</td>
<td>3.01 Democracy</td>
</tr>
<tr>
<td>T=1.03</td>
<td>2.94</td>
<td>3.12</td>
<td>participation in decision-making</td>
</tr>
<tr>
<td>T=1.15</td>
<td>2.94</td>
<td>3.05</td>
<td>3.05 Job design</td>
</tr>
<tr>
<td>T=1.07</td>
<td>2.47</td>
<td>3.64</td>
<td>3.64 Work space</td>
</tr>
</tbody>
</table>

Knowledge management was not significantly different between training and non training hospitals with 2.83 and 1.73 scores, respectively, in view points of repliers, and in both centers gained average scores. Working life quality was not also significantly different in training and non training hospitals with 21.98 and 21.28 scores, respectively, from the view points of repliers, and gained average score in both centers (Table 2).

Table 2: Status of working life quality and knowledge management in training and non training hospitals of Kashan medical science university.

<table>
<thead>
<tr>
<th>Non-teaching</th>
<th>Teaching</th>
<th>Type of hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>Average</td>
<td>Variables</td>
</tr>
<tr>
<td>21.98</td>
<td>21.98</td>
<td>Work life quality</td>
</tr>
<tr>
<td>2.61</td>
<td>2.63</td>
<td>Knowledge management</td>
</tr>
</tbody>
</table>

Assessment of meaningful relations among all variables of working life quality and knowledge management, showed that the highest & lowest levels of relationships belonged to participation in decisions, democracy in organization, job design, material advantages and knowledge management in training hospitals, respectively. Also, the highest and lowest levels of relationships belonged to training, participation in decisions, material advantages, job design, democracy in organization, work space and knowledge management, respectively in non training hospitals (Table 3).

Table 3: Comparison of integration degree between variables of working life quality with knowledge management in training and non-training hospitals of Kashan medical science university.

<table>
<thead>
<tr>
<th>Non-teaching</th>
<th>Teaching</th>
<th>Type of hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-Value</td>
<td>P-Value</td>
<td>Variables</td>
</tr>
<tr>
<td>&lt;.0001</td>
<td>&lt;.001</td>
<td>Material facilities</td>
</tr>
<tr>
<td>&lt;.0001</td>
<td>&lt;.001</td>
<td>Education</td>
</tr>
<tr>
<td>&lt;.01</td>
<td>&lt;.01</td>
<td>Democracy</td>
</tr>
<tr>
<td>&lt;.01</td>
<td>&lt;.01</td>
<td>participation in decision-making</td>
</tr>
<tr>
<td>&lt;.01</td>
<td>&lt;.01</td>
<td>Job design</td>
</tr>
<tr>
<td>&lt;.01</td>
<td>&lt;.01</td>
<td>Work space</td>
</tr>
</tbody>
</table>
Finally, integration coefficients obtained 0.924 and 0.832, respectively for training and non training hospitals between working life quality and knowledge management which shows a positive and meaningful integration between working life quality and knowledge management in the above centers.

Relation between working life quality and knowledge management in training centers, with an integration coefficient of 0.924 was stronger than the relation in non training centers with an integration coefficient of 0.832. In general, in the hospitals, the relation between working life quality and knowledge management with an integration coefficient of 0.901, was evaluated strong (table 4).

Table 4. Integration between working life quality and knowledge management in hospitals of Kashan medical science university.

<table>
<thead>
<tr>
<th>Teaching and Non-teaching hospitals</th>
<th>Teaching hospitals</th>
<th>Teaching</th>
<th>Type of hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>P-Value</td>
<td>The correlation coefficient</td>
<td>Number of persons</td>
</tr>
<tr>
<td>61</td>
<td>.0001</td>
<td>.901</td>
<td>30</td>
</tr>
</tbody>
</table>

Analysis of findings and comparison of them with other findings

Results of the present study suggest that material facilities & advantages allocated to the managers from Kashan medical science university are paid equally with other employed staff in the hospital so the managers do not account this variable a part of material advantages for them.

According to the mentioned results, it can be noted that there is no meaningful difference between material advantages in training and non – training centers. Also, material advantages gained an average score in both of the centers. Karimi and Shahabi evaluated material advantages & scores strong in National Oil Products Distribution Company (Tehran Branch). Mahdian Khalili evaluated material advantages & scores weak among staff of medical universities of Alvaz and both of the studies are contrast with the present study. According to the significant effect of training to improve knowledge management in hospitals, design and execution of training courses inside and out of the country such as work shop in order to up data the management knowledge and to take part in congresses to exchange information and experiences with their counterparts inside and out of country can better affect their knowledge management. The purpose to train knowledge management is to teach proper approaches for doing tasks and making appropriate decision.

There was no meaningful difference between training in training and non-training hospital and also training level was not strong in them. Nabipoor & Jafarabadi stated level of training higher than middle in hospitals of medical science universities which agrees with the present study data.

Managers in training hospitals note that democracy in organization which includes justice in paying, good and correct assessment of self-performance and encourage and persuading against useful activities, is useful and applicable and treat them as important factors to improve knowledge management in an organization. On the other hand, providing an open atmosphere and opportunities to the people in related positions and also their encouragement and promotions can cause emergence of innovation & creativities in the organization which results in improvement of knowledge management.

There was no meaningful relation between democracy in organization and training and non training centers. Also, democracy was evaluated strong in training centers & average in non-training ones.

Kashan medical science university utilizes the consultation and suggestion of managers in a high level, in order to make decisions for hospitals under its coverage. Managers of hospitals value for participation in decisions and have the right to take part in those meetings and following that, have to respect issued rules and guidelines. Thus, this factor can cause motivation and intention in managers toward accepting issued regulations and following it, improvement of knowledge management in the organization.

Participation in decision making was evaluated strong in training centers and middle in non training ones. In a study, managers in training hospitals of Isfahan often acted astronomically and interestingly in field of participation of their staff in decision making process for actions related to organizing and controlling of managers.

In the present study, there was variety and change in working conditions of managers, acceptably and good and proper reflection and response was done by managers. This variable could play important role in field of knowledge management in this study. On the other hand, job variation and enrichment increased motivation to use more knowledge management in the organization. There was no meaningful difference in the relationship of job design and managers’ duties between non training and training centers.

Also, this factor evaluated strong in training centers and average in non training ones. Alizade evaluated it weak in hospitals of social security organization.

It seems that related responsible people are not indifferent to improve team work morale in order to solve problems and provide friendly relationships among managers in the organization, as finally improvement in working life quality in a system depends on the carried out actions in the system.

Effectiveness of this factor has been proved in management system of Japan.

Work space had no meaningful difference in training and non-training centers, but this factor was evaluated strong in both centers which was adapted to the results of Alizade study in social security organization hospitals of Tehran Azad universities.
In General, level of working life quality had no meaningful difference in trainings non-training hospitals. Also, the working life quality in both centers was evaluated average. Monfared Niya evaluated working life quality strong in Azad universities of Tehran. Seifi evaluated it under average level in university hospitals of Sanandaj and the results of both studies don’t agree with the present study.

Knowledge management was better in training hospitals than in non training centers, but no meaningful difference observed between them. Also, knowledge level was evaluated average in organizations. Valimogh & Zanjani stated knowledge management level weak in hospitals dependent to Zanjani medical science universities.

Asgari has noted working structure in ministry of work & social affairs, as the most important factor to improve and advance knowledge management which showed disagreement with our results. Working life quality plays an important and effective role to establish knowledge management and the organization should attend working life quality first to be able to organize knowledge effectively in whole the organization and the higher is the level of working life quality, more successful is the establishment of knowledge management.

Assessment of variations & improvement in working life quality can change interaction and relationship pattern of people in an organization, gradually, and knowledge management can be used as a competitive advantage in them.

Otherwise, they get use to the current procedures in organization and no intend will emerge toward innovation & creation of new ideas and on the other hand, they may withdraw to share their information with others and change them into skills effective to solve organizational problems.

Finally, some suggestions are provided as follow to improve working life quality in order to establish knowledge management successfully:

- Planning improvement programs, enhancement of working life quality in hospitals based upon development and improvement of work space, allowance to participate executive forces in codifying rules & regulation, attention to knowledge quality training (up to date, on time , complete and clear , exact, …) and study methods to provide good response when meeting different problems, change in viewpoints of managers toward position and role of knowledge in an organization, providing opportunities to improve job knowledge, granting independence and freedom in occupation to the managers with good performance, innovations and taking risks, considering a reward system both material and non material to exchange knowledge, recognition and prevention of exit of knowledge based personnel, respecting justice in payments, correct and rational evaluation of managers’ performance.

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