

**Research Article**

**Survey on knowledge management and effective factors in  
Firoozgar Hospital, Tehran**

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**ABSTRACT**

**Introduction:** Improvement and development of management indexes in sanitary and health care unit is very important. Improvement of organizational silence and knowledge management can be effective in hospitals operations in a suitable way. This study has been done with purpose of surveying knowledge management and effective factors in Firoozgar Hospital, Tehran.

**Materials and methods:** Current study is descriptive – analytical that has been done in Firoozgar Hospital. In this study, 169 persons had been chosen from nursing, Administrative and financial staff of Tehran Firoozgar Hospital in form of Random – stratified. Data has been used by Joseph Haddad questionnaire for knowledge management. Content validity confirmed by survey on 5 people from intended staff society. Knowledge management questionnaire stability confirmed by Cronbach's alpha coefficients as 0.92. Data were analyzed by SPSS program version 17.

**Findings:** Findings shows that average knowledge record score is 22.11, for knowledge creation is 22.49, for knowledge Establishment is 16.57, for knowledge sharing is 14.55 and for knowledge management average score is 75.72.

**Conclusion:** Refine Knowledge had the highest regression weight on Knowledge Management This means that the use of new knowledge in their proper place should be undertaken.

**Keywords:** knowledge management, knowledge creation, knowledge record

**INTRODUCTION**

One of proposed priority in fourth program of cultural, social and economic development of country is improvement and developing management indexes in sanitary and health care unit. Hospitals are from organizations which are in center of attention and sanitary and health care development priority and have special importance (1). In hospitals there are problems such as dissatisfaction of staff, lack of constant and update education and High costs. Knowledge management is one of major factors of competitive advantages of service and industrial organizations for increasing learning and

operation in them (2). Organizations must be compatible to use obtained opportunities in current dynamic environment and taking competitive advantages, and they must manage the knowledge resources effectively. A successful knowledge management can provide necessary capacity for elevating competitive advantages, focusing on costumer, improvement of staff relationship, Innovation and less lower expenses(3). This is despite the fact in current competitive world success can't be reachable alone just by relying on tools and equipment and investing, innovation ability and knowledge

creation of every single part of organization determines its status.

Knowledge management plays important role as the last tolls and managing methods for a part of human resource management strategies. Interaction with professional colleagues is a kind of social aspects of interactions that plays axial and important role in organizations and people must learn basically cognitive – social skills like corporation, association and solving problems especially interpersonal problems (6). Knowledge management claims that the most important valuable resource of each organization is its personnel knowledge. This confirmation and concentration are taking place by considering increasing acceleration of changes in organization and in entire of society (9). Emphasize groups and committees and group decision making and Formulating incentive regulations for providing effective comments can be useful about organizational structure; because only permitting to claim ideas for quitting silence space isn't enough and based on behavioral theories, Moral and material incentives like Internal and external rewards must be considered (10).

From point of Tulubas & Celep (11), injustice in occupational and financial promotion and Lack of appreciation and ignoring, can prevent distribution of ideas and knowledge and suggestions about organizational matters.

In a research Abdullah and health (12) shows that incitation and rewarding has major role in management utilizing success. Checking inhibitor factors of knowledge sharing are such as lack of Effectiveness that indicating personal factor in sharing knowledge; so lack of informational and communicational technology facilities Reflects technical factors and lack of organizational incitation prevent sharing knowledge (12). Studies show that knowledge management mostly considered by managers and programmers. In studying Azad universities, aspects of knowledge management doesn't have favorable situation, so that these centers couldn't providing their staff and teachers expectations for knowledge management and this cause a significant gap

between expectations and realization of Azad universities' staff and teachers(12). Therefore, by noticing matter importance, current research has been done with purpose of survey on knowledge management and effective factors I Firoozgar Hospital of Tehran.

## MATERIALS AND METHODS

Statistical Society of current research include Firoozgar Hospital of Tehran staff, 169 persons had been chosen and checked from nursing, Administrative and financial staff in form of Random – stratified from 370 people society. Way of gathering data was using questionnaire of Joseph Haddad for knowledge management in quintet spectrum of Likret by scoring 1-5. Knowledge management questionnaire consist of 6 questions for knowledge creation with scoring 6-30, five knowledge establishments with scoring 6-30 and also four questions for sharing knowledge with scoring 4-20. In Knowledge management questionnaire questions, sharing knowledge questions include: 7-16-17-21, creation knowledge question include: 9-10-11-12-18-19, knowledge establishment question include: 4-5-8-13-20 and knowledge record questions include: 1-2-3-6-14-15.

Arabi and *etal* (14) in a research named “relationship between organizational intelligence and knowledge management in Deputy Economy of Central Bank” distributed 160 questionnaire of knowledge management of “Joseph Haddad” questionnaire among Central Bank staff. Results show that mentioned questionnaire had acceptable validity and stability. In current research, content validity is confirmed by distributing questionnaires among 5 persons of staff. Knowledge management questionnaire stability confirmed by Cronbach's alpha coefficients as 0.92. Data were analyzed by SPSS program version 17.

## FINDINGS

Abundance and percentage of working sample group in administrative and hospital units, is shown based on age. As you see, most of

abundance in hospital unit workers is related to the age range of 26-30(49.6%) and least one is related to the age range of 41-45(0%) in administrative unit workers. Most of abundance in hospital unit workers is related to single staff (46.4%), and the least one is related to the single workers of administrative unit with abundance of 34.1%. most of abundance in both sides workers is related to B.S. educated staff with abundance

87.2% and 59.1% in hospital and administrative groups, respectively. Most of abundance in both sides' workers is about workers with work background more than 7 years and with abundance of 24% and 43.2 in hospital and administrative groups, respectively. The least abundance in both sides is related to personnel beneath two years in back ground.

Sample group Age range	Abundance	Percentage	Abundance	Percentage
	Administrative unit workers		Hospital unit workers	
20 - 25	5	11.4	19	15.2
26 - 30	10	22.7	62	49.6
31 - 35	14	31.8	25	20.0
36 - 40	4	9.1	4	3.2
41 - 45	6	13.6	0	0
Above 46	4	9.1	3	2.4
Unknown	1	2.3	12	9.8
Total	44	100	125	100

Sample group Sexuality	Abundance	Percentage	Abundance	Percentage
	Administrative unit workers		Hospital unit workers	
Male	20	45.5	9	7.2
Female	24	54.5	107	85.6
Unknown	0	0	9	7.2
Total	44	100	125	100

Sample group Education level	Abundance	Percentage	Abundance	Percentage
	Administrative unit workers		Hospital unit workers	
Diploma	7	15.9	1	0.8
Associate Degree	6	13.6	1	0.8
B. S.	26	59.1	109	87.2
M. S.	5	11.4	5	4
Unknown	0	0	9	7.2
Total	44	100	125	100

Percentage	Abundance	Percentage	Abundance	Sample group
Hospital unit workers		Administrative unit workers		Background
14.1	18	6.8	3	Beneath 2
23.2	29	18.2	8	2 - 3
23.2	29	20.5	9	4 - 6
24	30	43.2	19	More than 7
15.2	19	11.4	5	Unknown
100	125	100	44	Total

Average knowledge record score is 22.11, for knowledge creation is 22.49, for knowledge Establishment is 16.57, for knowledge sharing is 14.55 and for knowledge management average score is 75.72 and domain achieved (55-98). (Tab1)

Before determining relationship between variables, at first research variables distribution had been assessed through Kolmogorov – Smirnov test. By considering test output it revealed that data distribution was normal (Tab2). So by noticing data, Pearson correlation coefficient was used to express relationship between variables and test results showed a positive and significant correlation between organization silence and four component of knowledge management (Tab3).

**Tab 1:** Statistical indexes of knowledge management components

Statistical indexes	Average	Standard deviation	Average Standard error	Minimum value	Maximum value
Knowledge management	75.72	8.11	0.624	55	98
Sharing knowledge	14.55	1.86	0.14	9	20
Knowledge creation	22.49	2.84	0.22	15	30
Knowledge establishment	16.57	3.08	0.24	10	23
Knowledge record	22.11	2.80	0.22	14	30

In tab 1, Statistical indexes of sample group is been shown. Based on obtained results from Knowledge management, Sharing knowledge, Knowledge record and Knowledge creation, are in the highest and knowledge establishment is in medium situation in Firoozgar Hospital in Tehran.

**Tab 2:** determining position of components data distribution of knowledge management with Kolmogorov – Smirnov Test (n = 169)

Component	Sharing knowledge	Knowledge creation	Knowledge establishment	Knowledge record	Knowledge management
Test criteria	646.1	332.1	138.1	433.1	0.809
Probability	0.099	0.183	0.255	0.152	0.418

## DISCUSSION AND CONCLUSION

Current research is addressing knowledge management and effective factors in Firoozgar Hospital in Tehran. Human knowledge classified in to type. First one is “Explicit knowledge” that can be expressed through formal language such as grammatical sentences, mathematical expressions, signs, guidance and etc. this kind of knowledge has personal aspect and it origins in persons experiences and include intangible factors just like personal attitude, Idiosyncrasies and system based on worthiness. Tacit knowledge is an example of people’s sensitive Collective behavior that has been ignored. Meanwhile, tacit knowledge is considered as an important resource for in case of competition. Explicit and tacit knowledge are proposed as creator basic framework in Supplementary relationships. Interoperability between these two kinds of knowledge is

considered as a key in knowledge creation in organization. Knowledge Creation of an organization is a Spiraling process that in, mentioned function is occurred alternatively. This theory has proved that how a person makes an Interoperate with organization.

Nonaka & Takeuchi (16) is from persons who tried making relationship between knowledge management and management theories. They imply necessity of dynamic interaction of these two kinds of knowledge and creating new one by making Differentiation between explicit and tacit knowledge. Knowledge origins in believes and Commitments in spite of information and is placed in mental tissue of user and works based on it. In Badiieyan research (17) results showed that there is a significant correlation between Intellectual Capital and Different knowledge management activities. In these results the highest

rank has been allocated to sharing knowledge process and the least rank has been allocated to knowledge accumulation. Researchers suggest that knowledge assessing process and accumulation must be supported. These research findings overlap current study.

In Zehir and Erdogan research (19) they are addressing inhibition factors of knowledge Subscription. These factors include lack of Efficacy and lack of informational and communicational technology facilities and lack of organizational incitation. Relationship between these factors has been evaluated through correlation test. Also regression analysis is used to determining the most effective factor from surveying factors. Research findings show that there are negative correlation between these three factors and knowledge sharing behavior with organizational incitation.

In a research, Vashishta and *etal* (20) discussed about obstacles and Facilities of knowledge management. For reason of knowledge gathering, knowledge creation and knowledge distribution has been surveyed from three aspects of personal, social-organizational and technical. Finding Suggests that researchers involve mostly to the personal and social – organizational aspects of knowledge management.

Research restrictions that can be mention:

There are conservatism of some personnel in fulfilling questionnaire and lack of assurance of staff in using results of researches like this for improving occupational conditions and lack of enough motivation in some staff in responding to questions, in addition to lack of similar research in same term for reason of subject is being new, apart from Negative assumptions of consequences of expressing opinion among staff.

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