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Self-Assessment With Regard To Efqm Model and The Relationship Between Its Criteria and Organization's Performance

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Abstract: The main purpose of the present study is to assess a hospital's Performance assessment with regard to EFQM model and then determining the relationship between nine criteria and Organizational model of excellence with hospital's Performance. The research method was Survey –Correlation and the selected sample included all managers and 203 employees were selected. To collect data a standard questionnaire of Performance assessment and two questionnaires of relationship assessment one for Enablers criteria and another for results` criteria with Organizational Performance. For self- assessment performance, Radar logic and for hypothesis testing, Pearson correlation coefficient, factor analysis and T-test was employed. Research Findings show that the received points regarding self- assessment of the hospital's performance(from 1000 points) was 562.2(Enablers criteria= 319.2 and results` criteria= 243) respectively, from among them, people criterion received the highest (%69.1) and Society's criterion received the lowest(%36). So the results showed that all research hypotheses were accepted and there was a significant relationship between hospital's Performance and nine criteria EFQM model. The priority of effectiveness of Enablers criteria on hospital's performance are as follows: processes criteria, partners and resources, leadership, People, policies and strategies and results` criteria includes: people results, Key performance results, customers and society results.

Key word: Enablers, excellence, results, leadership, Performance.

INTRODUCTION

The studies represent that it is impossible to have necessary improvement in the organizations actives improvement and growth if there is a lack in performance assessment order and it leads to death of organization. Therefore, the organizational excellence model EFQM can frequently be used as a story tool in organizational pathology and determining the way of achieving the quality. (Neumann, 2009) The organizations are looking for the way and improvement opportunities by increasing its rich points and decreasing its poor points at present. The excellence model EFQM is one of these tools which is helpful and useful in this way. This model is considered as a set of guidelines and requirements which should be completely performed in each level of organization to prove that the excellence is the final goal (Michalska, 2008). Today, performance assessment of medical organizations like hospital has great importance and position for these reasons: the importance of services, great breakthrough in medical science, growth of treatment prices and growth of public knowledge and great expectations of patients from medical services. Hence, European Foundation for quality management (EFQM) can be so much effective as a universal standard in evaluating the hospital performance to improve and maintain the quality of medical organizational services. Therefore, the present research's main question is that what the condition of organizational performance is and what is the relation between these criteria and hospital performance?

The Emergence and Concept EFQM:

EFQM Excellence model literature indicates that using the management tools that are relevant to the organization's needs has become a strategic issue for companies in today's competitive environment. By choosing and applying the best management tools among too many management tools, companies can improve their performances and then increase customer satisfaction and gain market shares. So, identifying and using best management tools according to organization's needs in setting EFQM model and achieving results in organizations are so important (Yousefiea *et al*., 2011). The EFQM framework can be used to develop an integrated management system. The EFQM model is composed of five enablers and four results and may be used as a measurement system that generates information to support learning and consequently improves the enablers and organizational performance. This measurement system should help managers to make decisions the ultimate aim of which is to improve performance in a competitive environment (Tari and Molina-Azorin, 2010).

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The European Foundation for Quality Management (EFQM) was founded by the presidency of 14 major European companies in 1988, to stimulate and assist organizations throughout Europe to participate in improvement activities leading ultimately to excellence in customer and employee satisfaction, influence society and business results and to support the managers of European organizations in accelerating the process of making Total Quality Management (TQM) a decisive factor for achieving global competitive advantage. Until 1995, almost 60% of European organizations used the EFQM model to assess their organization (Zerafat *et al*., 2008). In 2003, new edition of the model was presented which, in comparison with previous edition, had considerable amendments in sub criteria and in the guidance points (Hakes, 2007).

The European Foundation Quality Management is one of the models which deal with the assessment of function of an organization using a self-assessment for measuring the concepts some of which are more and more qualitative (Leonard and Aadam, 2002). Consequently, complete understanding and correct usage of this model in an organization depend on the comprehensive recognition of that model and different strategies of self-assessment. The process of self-assessment on the basis of this model in an organization needs to use the experienced auditors (Vernero *et al*., 2007).

The EFQM model constitutes a non-prescriptive framework that assumes there are different approaches to achieving sustainable excellence (Wongrassamee *et al*., 2003) that derives in the existence of multiple interpretations around its implementation. However, it is made up of certain notions and ideas about the general relationships between its elements that have still not been demonstrated empirically (Bou-Liusar *et al*, 2005). The EFQM Excellence Model is made up of nine elements grouped under five enabler criteria (leadership, policy and strategy, people, partnerships and resources and processes) and four result criteria (people results, customer results, society results and key performance results) (Bou-Liusar *et al*., 2009). The model's nine boxes represent the criteria against which to assess an organization's progress towards excellence. In addition, each of the nine criteria has a set of aspects that should be considered when developing them (Tari and Molina-Azorin, 2010).

The criteria in evaluating the organizational performance based on efqm model have one thousand points (five hundreds in enablers and five hundreds in results) and the higher point in an organization, the better performance. In Figure 1, the points of the criteria are shown one by one. (Eskildsen *et al*., 2001).

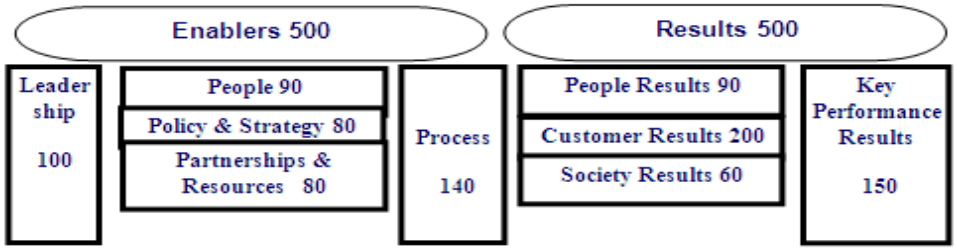

Fig. 1: EFQM nine fold criteria and its points.

Whatever an organization carries out, the enabler criteria covers it and whatever an organization achieve, the result criteria includes it. The results are done by executing the enablers and the enablers improve by getting feedback from the results (Carillo *et al*., 2005). The enablers represent the way the organization operates and the results concentrate on achievements relating to organizational stakeholders (Michalska, 2008). Each criterion is broken down in to several sub-criteria and each sub-criterion is illustrated with various ''guidance points'' exemplifying what the organization has to do in order to develop the criteria (Bou-Liusar *et al*., 2009).

Enablers:

Leadership:

Leaders have an outstanding role as enablers. They should know how to motivate the organization members and other key factor (Leticia and vijande, 2007).

Policy and Strategy:

The excellence organizations perform their mission and prospect by strategy of focusing on beneficiaries and by considering the business and place where they are busy.

People:

The excellence organizations improve and manage all its potential staff in the level of individual, teams and organizational and are benefited from it. These organizations communicate, support, encourage and rested their

staff which lead to their promotion and responsibility the organization, therefore, could use their knowledge and skill.

Partnerships and Resources:

The excellence organizations of non-organizational partnerships plan and manage their own resources and suppliers or support the strategy, policy and performing effective processes. When they are planning and managing the companies and resources, they make balance between the current and future needs of organization, society and environment.

Processes:

The excellence model follow the orbit process management method. The processes should emphasize on internal and external customers satisfaction by considering their expectation and needs, like the strategy, mission and goals, the processes raise the customers and partnerships value. (Leticia & Vijande, 2007)

Results:

***Customers Results*:**

The excellence organizations measure and achieve and outstanding results of their customers widely. These criteria divide into two parts:

Direct Criteria and Results, Customer's Opinions:

These criteria represent the customers opinions from the company (they are received by customers pinions, concentrated groups, clerks assessment, comments and appraises.

Performance Indices:

These indices are internal and they are used as stability, understanding, predictability and organization performance improvement with external customers.

People Results:

The excellence organizations measure and achieve the outstanding results of their human resources widely. These criteria divide into two parts: (Davies, 2008)

Direct Criteria And Results, Staff Opinions:

These criteria represent the staff information about an organization and they are investigating table through survey, specific task group, interviews and regular assessments.

Performance Criteria:

These indices are internal and they are used as stability, understanding, predictability and organization performance improvement.

Society Results:

The excellence organizations measure and achieve the outstanding results of their human resources widely. These criteria divide into two parts: (Martin & Rodriguez, 2008)

Direct Criteria And Results, Social Opinions:

These criteria represent the socials opinions from an organization (they are received by for instance by survey, reports, public conferences, governments and society s authorities.

Performance Criteria:

These indices are used in the organization by considering stability, understanding and predictability and organization performance improvement in interaction with society.

Key Performance Results:

The excellence organizations measure and achieve the outstanding results of strategy s and policy main elements. These criteria divide into two parts: (Martin & Rodriguez, 2008)

Key Performance Results and Consequences:

These indices are the Key Results planned by organization and they should be according to the organizations aims and subjects.

Key Performance Indices:

These indices are related with organization performance and are used in stability, prediction and key performance result improvement in an organization.

Self- Assessment In EFQM Model:

Organizations are interested to assessment "How they are?" for if are knew. There should be a better planning and " How they will be?" Self- assessment in EFQM model is one of the best ways of organization assessment and there is a specific attention to it. (Trujillo, 2009) Self- assessment is a comprehensive and systematic process in organization (enablers) activities and processes and its result is an the basics of a performance excellence model like EFQM. Self- assessment process lets the organization to identify strong points and improvement needs fields clearly. (Moriones *et al*., 2011).

EFQM model suggests various ways to Self- assessment such as: questionnaire, Matrix diagram, Group Work sessions, Pro-Forma and prize simulation method. The organization performance defines in two ways: First having an appropriate assessment and effectiveness of approaches, next having an assessment and wide running approach in comparison with is complete and potential application level. (Tarı, 2008)

Logic Station Radar In Efqm Model:

EFQM (1999) describes the Radar Logic which is known as the heart of the excellence model. EFQM (2000) considers the aspects of Deployment and Assessment and Review within the Radar Logic (Qu and Yang, 2010). So according to the above points, the organization needs:

- It determines the results which are aimed at as a part of process to achieve policy and strategy.
- It plans and collects a set of integrated and constant approaches which lead to result.
- It runs approaches in systematic way to make sure form its establishment.
- It runs, assessment and reviews the approaches.

The Research Purposes and Hypothesis:

The purpose of the present study is to determined and assessment the condition organization performance based an EFQM and to determine the relation between nine fold criteria and hospital performance.

Hypothesis 1:

There is a meaningful relation between hospital performance and leadership criteria.

Hypothesis 2:

There is a meaningful relation among strategy, policy criteria and hospital performance.

Hypothesis 3:

There is a meaningful relation between the individuals and hospital performance.

Hypothesis 4:

There is a meaningful relation among partners, sources and hospital performance.

Hypothesis 5:

There is a meaningful relation between between process and hospital performance.

Hypothesis 6:

There is a meaningful relation between individuals' results and hospital performance.

Hypothesis 7:

There is a meaningful relation between clerks and hospital performance.

Hypothesis 8:

There is a meaningful relation between society's results and hospital performance.

Hypothesis 9:

There is a meaningful relation between performance key results and hospital performance.

MATERIAL AND METHODS

The research method was applied and Survey –Correlation and The statistic population includes the all managers as a group of self- assessment and 430 staff of Iran's Gonbad hospital. The sample volume for

managers is 43, employees 203 which are selected by simple random and clustering sampling. The data collected tools are three questionnaires, one 90 questions in EFQM standard; two 26 researcher-based questions in a survey of relation between enablers criteria and performance; three 19 researcher-based questions in a relation between results criteria and organization performance. Because of getting standard, there is no need of validity and reliability for the first questionnaire. The second and third questionnaires` reliability is determined 86% in contextual method and their validity 91% in cronbach Alpha method. There are radar scoring logic ways in order to calculate performance rate and there are Pearson correlation quotient, factor analysis and T-test in order to evaluate the hypothesis.

RESULTS AND DISCUSSION

At first, the hospital performance rate is determined by standard questionnaire data of EFQM nine fold criteria measurement and Radar scoring logic. The achieved points are shown in Figure 2.

Total	9 Key Results Performance	8 Results Society	7 Results people	6 Results Customer	5 Processes	4 Partnerships & Resource	3 people	2 Policy & Strategy	1 Leadership	Criteria
562.8	83.2	21.6	37.4	103.3	94.1	54.4	62.2	42.5	66	Point
	55.5	36	41.5	50.6	67.2	60.4	69.1	53.5	66	% Point
1000	243 from 500 points				319.2 from 500 points					Total Point

Fig. 2: The achieved points of performance based on EFQM criteria.

As you see in table 1, the points are as follow: 66 from 100 standard points for leader ship criteria, strategy 42.5 from 80, people 62.2 from 90, processes 94.1 from 140, clerk results 101.3 from 200, people results 21.6 from 60 and performance key results 83.2 from 150 points. On the whole the hospital performance points are individually scored in 319.2 points for enablers and 243 points for results criteria. Pearson correlation quotient method has been used to evaluate the research hypothesis and the results shown in Figure3.

	Criteria Enabler	Leadership	Policy & Strategy	people	Partnerships & Resource	Processes	Performance Hospital
Performance	Correlation Pearson	0.872**	0.385**	0.656**	0.546**	0.616**	1000
	Sig	0.000	0.000	0.000	0.000	0.000	
Hospital	N						40

Fig. 3: The quotient rate of Pearson correlation in enablers criteria and performance.

The results in the table show that there is a relation between the whole enablers' criteria and hospital performance. It means that the whole research hypotheses are confirmed.

By factor analysis method the relationship extent of enablers' criteria and hospital performance has been identified and the results are shown in table 3. In order to make sure from the appropriate factor analysis method, Bartllet test and KMO2 indices have been used.

If KMO index quotient, the related data will be appropriate for Factor analysis, It means that it should be above 0.8, also Bartllet test shows that when correlation matrix is recognized and if sig test is less than 0.05, Factor analysis will be appropriate to be identified.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	121.203
	df	10
	Sig.	.000

Fig. 4: KMO and Bartlett's Test

Since KMO indices in Figure 4, are above 0.8 and the significant level is less than 0.05, this method presents to achieve the main factors which effect on running system based on enablers criteria and it identifies

the relation between each criteria and it hospital performance. By considering Figure 5, there are three main factors in this case the first one covers %70.9, the second %13.7 and the third %6.9 respectively.

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.54	70.90	70.9	1.898	37.95	37.95
2	.687	13.74	84.6	1.570	31.40	69.35
3	.344	6.87	91.5	1.108	22.16	91.52
4	.254	5.08	96.6			
5	.170	3.39	100			

Fig. 5: Total Variance Explained.

According to Figure 5 and in order to know how the effective factors presented, the first factor consists of process criteria, partners and sources which determines the most effect and covering for running organization performance are in process criteria's and sources & partner criteria's position. The second factor consists of people and leadership criteria and finally the third factor only consists of policy criteria and it is considered as the last effective covering factor in running organization performance.

	component		
	1	2	3
Process	0.867	0.338	0.159
Partnerships & Resources	0.788	0.403	0.209
Leadership	0.361	0.878	0.215
people	0.592	0.697	0.190
Policies	0.208	0.192	0.958

Fig. 6: Rotated Component Matrix.

T-test has been used to evaluate the related hypothesis (6 to 9) with result criteria and its relation with hospital performance, the results shown in Figure 7.

	Test Value = 65					
	t	df	sig. (2-tailed)	Mean Difference	95% Confidence Interval of the difference	
					Lower	Upper
Customer Results	4.41	201	0.000	7.738	4.28	1.19
People Results	2.53	196	0.012	3.443	0.76	6.12
Society Results	1.73	199	0.045	2.591	0.36	5.54
Performance Results	4.58	200	0.000	6.82	0.88	9.75

Fig. 7: T rate, its relation with hypothesis of results criteria.

As you see in table 6, the numeral value of meaningful level in the whole results criteria is lest than 0.05 level, it means that the hypothesis in relation with excellence model results criteria in hospital have been confirmed.

Conclusions:

The purpose of present study is to determine and evaluate the organization performance condition based on EFQM and to determine the relation between nine fold criteria and Iran's hospital performance. The results show that the leadership criteria are 66 from 100 standard points, policy criteria and strategy 42.5 from 80, process 94.1 from 80, people 62.2 from 90, sources 54.4 from 90, processes 94.1 from 140, customer results 101.3 from 200, people results 37.4 from 90, society results 21.6 from 60 and at the end performance key results 83.2 from 150 points. On the whole the self-assessment points of hospital performance are 562.2 from 1000 standard points and it has been separately determined in enablers 319.2 and result criteria 243 points. By considering the achieved scores, the hospital under study for getting the quality reward, entitled to receive the golden state (the organization which receive the 500-600 points in self-assessment based on excellence model).

The received results of research hypothesis test show that the first hypothesis in its relation of leadership criteria and performance has been confirmed by 0.872 correlations and the leadership has been identified as the second effective factor with hospital performance. The second hypothesis about strategy and policy criteria has been confirmed by 0.385 correlations and it has been identified as the third effective factor. Therefore, the outstanding manager should prepare preemptive and improving meager the on the basis of strategy and policy sub-criteria on other to receive high score in hospital evaluation by considering its relation with hospital performance. The third hypothesis about people criteria has been confirmed by 0.656 correlations and has been identified as the second effective factor at the same time with leadership criteria. It represents the outstanding managers' attention to this case in other to promote the presenting level of hospital quality service. The fourth hypothesis on sources and partners criteria was confirmed by 0.546 correlations and has been identified as the first effective factor which represents the importance of these criteria in hospital performance. The fifth hypotheses on process criteria were confirmed by 0.616 correlations and at the same time with criteria have been identified as the first factor which shows its importance degree. The sixth hypostasis on customers results was confirmed by 68.44 rate based on mean comparison test. The seventh hypothesis on people or staff results was confirmed by 72.73 rate based on mean comparison test. Therefore in order to be an outstanding organization, there should be the most staff cooperation. The eighth hypothesis on society was confirmed by 67.59 rate based on mean comparison test. The ninth hypothesis on performance key results was confirmed by 71.82 rate based on mean comparison test. The most important result of the present paper and also what considers it unique from the other results is that it is based on EFQM model in enablers and by considering the determined points for each criteria in order to assessment performance in every organization, the highest processes criteria are public, partners and the least are sources, policy and strategy simultaneously. Since EFQM is a standard model and it doesn't care to the environmental condition in every society and the nature of activity in every organization, perhaps the order of effectiveness and importance of this criteria will be different in various organization. Therefore the present study show that in the organization under study, the way of resources which all are as the first factor, public and leadership as the second factor and finally policy and strategy as the third factor. So in order to assessment hospital performance correctly, there should be improvements on the criteria points according to the rate of effectiveness hospital performance.

According to the identified and improved positions in enabler's fields, there are applicable suggestions to improve these factors in a different and stepparent presented fields. The only reason of presenting suggestion for enabler's fields is that the organization can improve the result fields on these fields.

A- Suggestions on improvements of leadership field:

One of the most significant and effective factor in applying management systems in organizations is the top managers' responsibility in supporting these systems and cooperation in planning and applying stages. So the top managers can show their responsibility variously in the followings:

1- Innovation and creative background to improve the current processes in an organizations
2- Common sessions among the authorities to inform the strategic programs
3- Determining hospital key processes and quality promotion
4- Supervision and respect organizations morality and value
5- Running various sessions with organs to shoot problems

B- Suggestions on improvements of strategic and policy field:

6- Applying strategic and long-lasting program based on company's staff cooperation
7- Compression of the kind and rate of income which is achieved by service presentation regarding the proper policy assessment
8- An order assessment in other to establish a relation between received information and result and hospital policy and strategy
9- Transparency of hospital purposes among the hospital staff

C- Suggestions on improvements of people or staff field:

10- Employing appropriate members in hospitals next programs
11- Planning on improvement of staff choice according to organizations purposes and value
12- Improvement of a process about how to behave with poor newly- employed personals appropriately
13- Attention to all hospital staff abilities in decision and cooperation
14- Elitism, promotion and giving award for all staff
15- Following the rule of giving award and for all staff

D- Suggestions on improvements of resources and partner field:

16- Common meeting based on common trustworthy and cooperation
17- Preparing distinct web-site to transfer the information for customers and beneficiary people
18- Running a complete and periodic calibration system in the hospital
19- Having full-time medical engineer and installation engineer
20- Establish management quality system OHSAS18001 in hospital

E- Suggestions on improvement of processes field:

21- Over viewing processes should be based on universal standard and up to date information.
22- Using statistic control, sigma on other techniques in management and processes improvement on required periods.
23- Considering customers expectations based on statistic techniques and researches in regional level and having necessary policy to supply.
24- Yearly over viewing the processes to make sure that the customers need is going to be met.
F- Suggestions on improvement of customers' results field:
25- Standard definition of high performance rate and fixed level to attract the customers' satisfaction.
26- Inform the satisfaction level of promotion and customers fidelity in other clinical centers.
27- Overview the interview forms yearly to be standardized and promoted.
28- Running on other and periodic sessions to consider the complaints based in the standard BS8600.
29- Identifying the lost customers and informing them.
30- Investigation of patients' satisfaction in hospital regions.
31- Considering patients educational needs and self-care skill in hospitals.
G- Suggestions on improvement of staff or people field:
32- Constant considering staff complaints
33- Considering and preparing appropriate documents about internal staff indices.
34- Assessment on job satisfaction and its feedback to staff
35- Planning on keep up the hospital human resources and its daily promotion
H- Suggestions on improvement of society result field:
36- Yearly assessment of hospital on society's expectation and needs
37- Orderly assessment on hospital ecological aspects and its present dangers.
38- Transparency and transfer of hospitals growing information to staff and public
39- Periodic survey from society and neighbors
I- Suggestions on improvement of performance key results field:
40- Assessing the expense of wear and tear and expense of managing, preparing and reporting them to hospital president
41- Attention to research and investigation in hospital toward key performances
42- Competition in promotion of financial and non-financial performance key results in hospital
43- Assessing yearly financial indices in promotion and its comparison with other hospitals
44- Transparency of non-financial indices for personnel

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