

## Assessment of European Foundation for Quality Management of Organizational Excellence Model Function of Yasuj Shahid Beheshti Hospital

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### ABSTRACT

**Background:** Organizations have to apply modern management systems in order to move toward their excellent function. The EFQM (European Foundation for Quality Management) organizational excellence model, established in Europe, is one of the outstanding methods during the last two decades in the field of management. Using the EFQM model creates positive leaders, satisfied customers and good change management. The purpose of this study is to assess Yasuj Shahid Beheshti Hospital function based on EFQM model.

**Methods:** this Cross-sectional-descriptive study conducted in 2020 in a health care center under supervision of the University of Medical Science of Kohkiluyeh Boyer Ahmad. The study population was selected from members of quality improvement committee in the studied hospitals. The statistical population was 200 people and 127 people were selected by Morgan table. The data gathering tools were assessment excellence model questionnaire.

**Results:** results revealed that the maximum score obtained both totally and for the empowering factors was processes (50.52) and the minimum obtained for empowering items was 21.14 for the population results. Other factors values were obtained 35.08, 27.17, 30.69, 40.53, 75.64, 22.48 and 64.45 for leadership, policies and strategies, human resource, partnership and resources, customer's results, staff results and key hospital results, respectively.

**Conclusion :** According to the results of the present study it seems that the organizational excellence model can be utilized as a comprehensive for assessing the healthcare centers.

**Keywords:** EFQM, health care quality assessment, Hospital, Administration, quality improvement

## Introduction

The emerging modern wonderful changes in management knowledge have necessitated the existence of an effective assessment system. So, loss of assessment of different aspects in an organization as well as evaluation of resources and facilities, staff, purposes and strategies is considered as sickness symptoms in an organization (Azizi, 2007).

Therefore, each organization needs a permanent assessment system in order to become aware of desirability and quality of its actions especially in complicated and dynamic environments (Sajadi et al., 2008). To apply an organizational excellence model facilitates such goals as a tool for empowerment of the system evaluation. The model not only enables the organization to measure its success in performing improvement plans in different time sections, but also facilitates the comparison between the organization functions with other organizations, particularly their best functions. A strong systematic perspective paves the way for sufficient attention to the management systems, based on organizational and conclusion-orientated process of EFQM in Iranian organizations faced with serious problems (Shams et al., 2014)

In developed countries, hospitals account for about 40 percent and in developing countries for up to 80 percent of health care costs. Therefore, how to evaluate and implement the results can be of particular importance. Lack of evaluation not only leads to increased treatment costs, but also neglect in providing primary health care seriously endangers the health of the community (Kaplan et al., 2004).

In addition to ensuring health, providing it will lead to the full efficiency of medical institutions at a reasonable cost (Kristiansen et al., 2001).

At present, the performance evaluation of Iranian hospitals is mainly focused on legal requirements and achieving the objectives and standards of hospital evaluation, and other internal evaluations are performed on a case-by-case basis

based on specific needs or sporadically in different parts of hospitals (Nabtiz, 2007).

## Methods

The present study is a descriptive Cross-sectional one aiming to assess Yasuj Shahid Beheshti Hospital function in 2019. The statistical population was 200 people and 126 people were selected by Morgan table. All questionnaires were completed.

The excellence model of EFQM is a non-prescriptive model comprised of nine factors. These factors are the model core and are used as the base for an organization assessment. EFQM factor are categorized into two groups:

1- **Empowering factors:** the first five factors are the empowering factors which empower the organization to reach excellent results.

2- **Results factors:** the results which excellent organization achieve in different areas and suggest the achievements obtained via proper performance of empowering factors. In EFQM the total score of factors is 1000, 500 score for empowering and 500 for the results factors. In the other words, if an organization can perform such model entirely, it can obtain 1000 scores (Kaplan et al., 2004 & Kristiansen et al., 2001).

Data gathering tools were standard questionnaire of self-assessment based on EFQM organizational excellence model for which the reliability and validity has been evaluated with Cronbach's Alpha equal to 98%. In order to determine the validity of the questionnaire in this research, the content validity method has been used. The validity and reliability of the Persian version of the questionnaire was confirmed in a similar study (Sajadi et al., 2008 & Shams et al., 2004 & Kaplan et al., 2004).

The questionnaire included 50 items comprised of 9 scales and 32 sub-scale totally covering 1000 scores, 500 score for empowering and 500 for the results factors.

The questionnaire factors included leadership, policy and strategy, staff, resources and partners,



processes, customers' results, staff results, population results and key results. The studied population was the quality improvement committee members in the studied hospitals including the hospital dean, manager, nursing services head, and in charges of other units and departments of the hospital. First, the research sample was taught about the concepts of EFQM model. Then they were trained for filling out the questionnaire. After 1 month, the committee members scored the items and filled out the questionnaire and the average score was recorded as each item score. All the study variables and their relationship and also the obtained results were analyzed using SPSS version 22, and descriptive statistical methods.

The present paper is a Master's thesis registered with the ethics code of IR.YUMS.REC.1399.122 in the Azad University of Shahrekord.

## Results

EFQM questionnaire was provided to 126 staff of Shahid Beheshti Hospital in Yasouj in 2020.

The mean age of study participants was  $40.03 \pm 3.02$  years. 59.5% of participants were female and 40.5% were male. 42.9% of them had a bachelor's degree and 4.8% had fewer degrees than high school, which had the highest and lowest frequency, respectively. Their average work experience was  $14.58 \pm 1.05$  years (Table 1).

In assessment of Yasuj Shahid Beheshti hospital the obtained scores of questionnaires were as follow:

The mean and standard deviation of the scores of the components of organizational excellence

are: Leadership  $12.74 \pm 2.36$ , Policy and Strategy  $10.10 \pm 1.8$ , Human Resources  $12.6 \pm 2.12$ , Processes  $17.71 \pm 2.61$ , Customer Results  $17.15 \pm 2.49$ , Human Resource Results  $12.11 \pm 2.37$ , Community Results  $7.68 \pm 1.73$ , Key Performance Results  $17.14 \pm 2.79$  and organizational results  $125.06 \pm 15.05$ .

The partnership and human resources component ( $17.71 \pm 2.61$ ) has the highest average score and the community outcomes component has the lowest average score ( $7.68 \pm 1.73$ ).

Scores obtained in the studied hospital for the empowering factors of EFQM model and their difference with the desired level and also the desired percent and its difference percent have been all reported. The study results revealed that human resource (65.9%) and partnership and resources (55%) had the maximum and minimum difference with the desired status among the empowering factors. Results showed that empowering factors obtaining entirely 183.99 score out of 500, and 36.88% of the total desired score which means a difference of 63.12% from the desirable status in comparison of EFQM model. Results factors obtaining entirely 183.71  $\pm 2.51$  score out of 500, and 36.74% of the total desired score which means a difference of 63.12% from the desirable status in comparison of EFQM model. The overall results showed that the total score obtained by Shahid Beheshti Hospital in Yasuj was 367.7. 4.07 out of 1000 standard points. 632.3 is far from the desired score and 36.77% is the desired score and 63.23% is the unfavorable score (Table 2).

**Table 1.** Frequency and percentage of individual information of the studied population

Population variables	Frequency	Percentage
<b>Gender</b>		
Female	75	59.9
Male	51	40.5
<b>Age</b>		
30-35	34	27
36-40	25	19.8
41-45	42	33.3
46-50	19	15.1
51-55	6	4.8
<b>Education level</b>		
Below diploma	6	4.8
Diploma	12	9.5
Bachelor	54	42.9
Master	39	31
Ph.D.	15	11.9
<b>Career experience</b>		
-10 years	38	32.2
11-15 years	31	24.6
16-20 years	24	19
21-25 years	23	18.3
+25 years	10	7.9

**Table 2.** Total scores obtained from YasujShahidBeheshti Hospital for empowering factors of the organizational excellence model

Criterion		Obtained score	Factor score (Benchmark)	Difference with desired score	Desired score percentage	Percentage of undesirable difference
empowering factors	Leadership	35.08±1.01	100	64.92	35.08%	64.92%
	Policy and strategy	27.17±0.8	80	52.83	33.9%	66.1%
	Human resource	30.69±1.2	90	59.31	34.1%	65.9%
	Partnership and resources	40.53±0.78	90	49.47	45%	55%
	Processes	50.52±2.05	140	89.48	36.1%	63.9%
	Total	183.99±1.8	500	316.01	36.88%	63.12%
Results Factors	Customers resources	75.64±2.01	200	124.36	37.8%	62.2%
	Staff results	22.48±1.3	90	67.52	25%	75%
	Population results	21.14±1.9	60	38.86	33.5%	65%
	Key results	64.45±2.01	150	85.55	43%	57%
	Total	183.71±2.51	500	316.29	36.74%	63.26%
Total score		367.7±4.07	1000	632.3	177.68%	322.32%

## Discussion

Self-assessment results, as depicted in tables 2 and 3, suggest that the highest score both in total and empowering factors is attributed to "processes". The minimum score obtained for

the population both in total and empowering factors.

In a study conducted in 2007 by Nebitz, using data from a hospital in Amsterdam it was shown that the maximum strong point was related to the



policy and strategy factor with 65% and the maximum area needed improvement was proven to be the staff results with 33% which was not in accordance with the present study results (Nabtiz, 2007) which did not correspond to the results of the present study.

The study conducted by Rahimi in 2014 was also revealed that the maximum obtained score was for leadership and the minimum was for the population which was in accordance with the present study (Rhimi et al., 2015) which did not correspond to the results of the present study.

Using data from another studies in the field of empowering factors, also revealed that the maximum present of the strong point related to partnership and resources (82.3%) and the highest area needed improvement was for policy and strategy (75.8%) which was not accompanying the present results (Parham et al., 2013 & Dehnavi et al., 2007) which did correspond to the results of the present study.

On strategy and policy, the obtained score in the present strategy was 27.17% which had a 66.1% difference with the desired value. This suggested that the strategy and policy has not been defined and adjusted accurately based on the organizational excellence concepts and there was no specified framework to recognize and define and establish the organizational processes for meeting the strategies and policies. This result was in accordance with this study which was 75.8%, which did not correspond to the results of the present study.

On partnership and resources factor, the obtained score was 43.53% which was less than the study of Malekzade for hospital in Sary (Malekzaeh et al., 2019) Which did correspond to the results of the present study. On processes factor, the achieved factor was 50.52 which was more than a hospital in Germany (Moeller, 2001) which did not correspond to the results of the present study. On customers factor the score was obtained 75.64 which was less than the one obtained in Shahin study for a hospital and the

study of Sajadi in Isfahan (Shahin et al., 2013 & Sajadi et al., 2008). which did correspond to the results of the present study. For the staff factor, the obtained score was 22.48 which was in accordance with the study conducted by Sajadi in Isfahan, but not in compliance with the study of Malekzade and Mollerand Shahin (Malekzadeh et al., 2019 & Moeller, 2001 & Shahin et al., 2013) which did not correspond to the results of the present study. In the present study, participation had a high score, but according to Moeller, customers had a high score.

### Conclusion

There was undesired status of the studied hospital in view of the excellence factors model. Also the performance of the studied centers is under average conditions in terms of excellence model factors. So to pay attention to the management system is in a high necessary for such centers. To execute a strong systematic perspective, to pay attention to a management system based on organizational and conclusion oriented processes, using such a model for healthcare centers faced with serious problems in these fields is executive and experience. Therefore, to prepare effective efficient programs to improve the function and performance is a necessity in this center. Furthermore, it seems that the organizational excellence model can be utilized as a comprehensive for assessing the healthcare centers.

### Conflict of interest

Authors declare no conflict of interest.

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### Authors' Contribution

Conceptualization, M.M.; Methodology, L.GH.; Formal Analysis, M.P.M.; Investigation, L.GH.; Writing -Review & Editing, M.M.; Supervision, M.P.M; Writing -Original Draft, M.M.

All authors read and approved the final manuscript and are responsible about any question related to the article

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