Performance Measurement Using MBNQA (Malcolm Baldridge National Quality Award) Criteria at Makassar Islamic Hospital

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Abstract

The application of improving the quality of service is very much needed in this era of globalization. Malcolm Baldrige Criteria for Performance Excellence-(MBClPE) better known as the Baldrige Criteria is one method that can provide a solution to this problem. This study aims to analyze the implementation of Total Quality Management using the MBNQA criteria at the Isalam Faisal Hospital in Makassar. This type of research is a quantitative research using an observational study with a cross sectional study design. Collecting data in the form of a questionnaire. The sample in this study were all staff and leaders at the Faisal Islamic Hospital in Makassar, amounting to 258 respondents. The results showed, based on MNQA calculations, Faisal Islamic Hospital Makassar was at the Igood Performance level with a value of 738. The final conclusion of measuring the performance of Faisal Islamic Hospital Makassar with this score illustrates that the performance of Faisal Makassar Islamic Hospital is still not good. Therefore, proactive planning needs to be made and implemented, not only reactive to problems. It is suggested to the hospital management that it is necessary to conduct an evaluation using the PDCA cycle method, so that the strategic plan that has been made can be carried out effectively.

Keywords: MBNQA, Total Quality Management, Hospital

Introduction

Health organizations are undergoing fundamental changes. Rapid changes in the health system, changes in science and technology, new incentive structures and technologies, moral attitudes, environmental conditions and the effects of rising costs pose great challenges to health management. Consumers and payers demand high quality services at a reasonable and affordable cost. Thus, the goal of healthcare organizations is to improve quality and build patient, professional and cost-paying trust in the context of quality, structure, process and outcomes. (Kalaesaran, 2011).

One of the health service organizations is a hospital. The basis of the hospital was built to provide services to patients. However, with the change in the hospital paradigm, where the hospital is an institution that is capital intensive, technology and labor intensive, hospitals are also easy and prone to conflict in the process of providing health services to the community. In the development of time, as with other service industries, one of the main requirements for hospitals to survive is if they are able to provide excellent service to their customers (Kalaesaran, 2011).
Quality management is the right response to this problem. This is a way to reorganize the flow of work in health organizations as much as possible to achieve optimal quality results, namely the quality of health services, patient satisfaction, employee satisfaction and overall performance results. Total Quality Management (TQM) is one of these philosophies, which aims to make an organization successful through customer satisfaction (Ahmad, 2011).

TQM is defined as a holistic management philosophy that requires changing organizational culture (Fu, 2015; Gimenez-Espin, 2013; Baird, 2011). For other researchers (Aladwan & Forrester, 2016; Giaccio, 2013; Vanichchinachai & Igel, 2011; Weckenmann et al., 2015) TQM is a management philosophy that covers all organizational activities to achieve operational excellence. The interesting substance of TQM is the concept of total quality in achieving organizational goals, such as top management commitment, gradual principles in achieving quality, continuous improvement, refracting top management commitment in inculcating culture and work ethic in all lines of the organization (Jarrett, 2016).

Excellent and quality service will have an impact on patient satisfaction and have an impact on increasing customer loyalty to the services offered by the service industry. One measure of the achievement of the quality of a service is the loyalty of consumers. Quality improvement in an integrated system is the right strategy to run, namely Total Quality Management (TQM) (Manurung, 2018).

One measure of the achievement of the quality of a service is the loyalty of consumers. At Faisal Hospital, there was a decrease in the value of service indicators BOR, LOS, BTO, TOI, GDR, NDR, the number of outpatient and inpatient visits, as well as patient loyalty, starting from 2018 to 2021 (Data from Faisal Hospital, 2021).

Various quality management practices have been applied in several health organizations in developed countries including Total Quality Management (Kohli et al., 1995; Moody et al., 1998; Yang, 2003).

Despite the widespread use of TQM in developed countries and the leading role that quality plays in the global competitiveness of products and services, little attention is paid to implementing and assessing quality initiatives by organizations in developing countries and even less so in low-income countries (Aamer et al., 2017; Vretveit, & Al Serouri, 2006).

The phenomenon of not yet optimal implementation of TQM is a serious challenge for hospital leaders and employees at General Hospitals in Indonesia. The management of health facilities such as hospitals is required to be managed with modern and socio-economic management. A hospital must always be responsive to changes that occur fairly quickly and then immediately anticipate them in accordance with the wishes and needs of the community by always referring to customer satisfaction (Ahmad, 2011).

Organizations that manage to keep their customers satisfied are almost unbeatable. Its customers become more loyal so that they buy more often, are willing to pay more and are still willing to be customers even though the organization is experiencing difficulties (Yazid, 1999 in Laksono, 2008). Vice versa, if an organization loses customers who were previously loyal or unable to create loyalty to customers, the organization's marketing costs will increase because it has to attract new customers for the resilience of an organization, and the sustainability of an organization is at stake (Griffin, 2013 in Yunida, 2016).

From the results of the preliminary study, through interviews with hospital management staff, performance measurement was not carried out consistently, so that management could not carry out monitoring and evaluation effectively. Islamic Hospital Faisal Makassar only
compares the value of performance with the targets that have been set, there is no comparison information with other hospitals in the same class. Measuring the performance of service quality comprehensively has not been carried out, only assessing medical service visits and the level of efficiency of hospital services. Performance measurement is not carried out consistently and few performance results are reported, i.e. for a small number of areas that are important to organizational requirements. The results achieved in several performance indicators are also still low. So the author is interested in analyzing the performance of the Faisal Islamic Hospital in Makassar using the MBNQA criteria.

Methods

Location and Research Design

This research was conducted at the Faisal Islamic Hospital Makassar in March – September 2022. The type of research carried out was a quantitative study using an observational study with a Cross Sectional Study approach.

Population and Sample

The population consists of all structural officers, doctors, paramedics, and other health workers. The population consists of 42 structural officers, 67 doctors, 140 paramedics, and 65 other health workers, so that the total population is 314 people. The exclusion criteria in this study were members of the population who were on leave, studying assignments, or attending training during the data collection period. The sample in this study used total sampling, and after eliminating the sample based on the exclusion criteria, the sample was 258 respondents.

Method of Collecting Data

The instrument used in data collection is a questionnaire, with reference to the indicator variables in the MBNQA.

Data Analysis

Univariate analysis was carried out to obtain an overview of the research problem by describing each variable used in the study and the characteristics of the respondents. Univariate analysis consisted of descriptive analysis of respondents' characteristics, and descriptive analysis of research variables. After collecting data, the results of the questionnaire were then calculated using the formula calculation of the MBNQA questionnaire and then determine the level of the organization based on the MBNQA criteria.

Results and Discussion

Table 1 shows that the most respondents' positions/occupations are nurses as many as 126 respondents (48.8%). Respondents with the fewest respondent positions/jobs are Chair of the committee, Admission, and cashier with 1 respondent each (0.4%).

Table 1. Frequency Distribution of Characteristics Based on Respondents' Positions at Faisal Islamic Hospital Makassar in 2022

| Position Respondents | N  | %  |
|----------------------|----|----|
| Analyst              | 11 | 4.3|
| Pharmacist           | 3  | 1.2|
| Ast Pharmacist       | 2  | 0.8|
| Midwife              | 9  | 3.5|
| Doctor               | 7  | 2.7|
| Admission            | 1  | 0.4|
Table 2 shows that the majority of respondents are in the age group of 26-35 years, as many as 168 respondents (65%). At least there are in the age group 46-55 years as many as 22 respondents (8.7%).

Table 2. Frequency Distribution of Characteristics by Age of Respondents at Faisal Islamic Hospital Makassar in 2022

| Respondent's Age (years) | N  | %    |
|-------------------------|----|------|
| 17-25                   | 25 | 9.7  |
| 26-35                   | 168| 65   |
| 36-45                   | 43 | 16.6 |
| 46-55                   | 22 | 8.7  |
| Total                   | 258| 100.0|

Table 3 shows that the most respondents' tenure is 1-5 years, as many as 107 respondents (41.4%). Respondents with working period > 10 years were 74 respondents (28.8%).

Table 3. Frequency Distribution of Characteristics Based on Respondents' Working Period at Faisal Islamic Hospital Makassar in 2022

| Service Life Respondents | N   | %    |
|--------------------------|-----|------|
| 1-5 years                | 107 | 41.4 |
| 6-10 years               | 77  | 29.8 |
| >10 years                | 74  | 28.8 |
| Total                    | 258 | 100.0|

Table 4 shows the total score obtained by the Faisal Islamic Hospital Makassar for all MBNQA categories based on the questionnaire results is 738 or 74.8% of a maximum score of 1000. The category with the largest score is Labor (80%), and the lowest is Results (67%)

Table 4. Scores of All Categories Based on the Results of the Questionnaire of the Islamic Hospital Faisal Makassar in 2022

| No | Category     | Maximum Score | Faisal Islamic Hospital Score | Percent Achievement |
|----|--------------|---------------|-------------------------------|---------------------|
| 1  | Leadership   | 120           | 91                            | 76%                 |
| 2  | Strategy     | 85            | 66                            | 78.1 %              |
| 3  | Customer     | 85            | 63                            | 74.2 %              |
The results of research on the performance of the Faisal Islamic Hospital in Makassar as measured by the leadership variable in the Baldrige criteria show that the fulfillment of these criteria is still poor. It can be seen in table 4 where the leadership variable gets a score of 76%, the third lowest compared to 7 other categorical variables based on the results of the questionnaire. The criteria that really need improvement are the establishment and implementation of the hospital's vision and mission values (VMN), as well as communication between senior leaders and staff.

In line with Jessihana's research (2017) that the leadership variable is a variable that has the lowest average value compared to other variables. In the leadership variable, it is assessed that the role of leadership in transparency, supervision, regeneration in the future, as well as the planning process and also the strategic planning management process is still not optimal.

Leadership is the most important thing in organizational development. At the Faisal Islamic Hospital, Makassar, senior leadership involves a team that is also the hospital's accreditation team. Compared to Duncan's (1988) theory, Vision, Mission and Values (VMN) is shaped by senior leadership, elected staff, and other key people. Once a VMN is established, the most important thing is the leadership's commitment to its implementation. Without a strong commitment, the compiled VMN will only become a document. At the Faisal Islamic Hospital in Makassar, the implementation has not been fully translated into work. Quality improvement can only result from planned management actions. Successful implementation of TQM requires careful strategic planning based on total quality. Including specific goals for quality, as part of the strategic planning process, is associated with TQM success rates (Dayton, 2001; Francois et al., 2003; Taylor & Wright, 2003). Healthcare managers must integrate quality as a strategic priority in their organization's long-term vision, policies and strategies through a strategic quality planning process. As Duncan (1988) argues that it is imperative for senior leadership to develop VMN and make it a "living document".

The results obtained for the measurement of strategy variables in table 4, the average percentage value is 78.1%. Respondents think that the Faisal Makassar Islamic Hospital is still not able to fulfill the elements in the strategy variables, both in strategy development and in strategy implementation. The criteria that really need improvement are the involvement of staff in the preparation of the strategic plan and the proposal of innovative efforts in the hospital's strategy. The results obtained, regarding respondents' perceptions of strategy variables at the Faisal Islamic Hospital Makassar should be a key indicator to improve hospital performance. With the capital of the accreditation status that has been obtained, the Faisal Makassar Islamic Hospital should be able to develop various strategic plans, especially in increasing competitiveness now and in the future. The current situation illustrates that the hospital does not have a strong strategy so that it is unable to respond to the challenges of competition from provision of other health services that are more prepared. This strategy category describes the relationship between organizational quality planning and overall organizational planning (Deming, 1986; Juran, 1989).
In order to achieve excellent performance, quality improvement planning must be fully integrated into the organization’s competitive strategy (Barclay, 1993). Strategic quality planning must be able to contain the implementation and development of work plans, complete with a priority scale, and the required resources (Yusuf, 2017).

The results of research on the performance of the Faisal Islamic Hospital in Makassar as measured by the customer variable in the Baldrige criteria show that the fulfillment of this criterion still requires a lot of improvement. It can be seen in table 4, where the customer variable only gets a score of 74.2% from the questionnaire results. According to respondents, the thing that has not been done well in an effort to focus on customers is that the lack of hospitals opens up opportunities to receive input from patients, both regarding their expectations, as well as the complaints they feel. In addition, a criterion that also needs attention is knowledge of the target customer. Referring to the results of the study that to find out the key customers of the Faisal Islamic Hospital Makassar, an approach was carried out through internal hospital reports, grouping customers based on geography and characteristics. With this segmentation, the hospital’s key customers can be identified. According to Kasali (2000), segmentation is needed in order to serve better, communicate more persuasively, and satisfy the wishes of the intended party.

Purwaningrum (2007) in his research, also concludes that the use of data is less than optimal for segmenting customers in hospitals. Due to the limited customer data contained in the medical record section, supporting data is also needed to determine customer preferences by conducting market surveys. As Kotler (2008) argues, companies need to identify market segments that they can serve very effectively. One of them is by identifying preference segments, and using an approach by classifying consumers demographically where the variables are easier to measure.

The results of research on the performance of the Faisal Islamic Hospital in Makassar as measured by the measurement, analysis and knowledge management variables in the Baldrige criteria show that the fulfillment of these criteria still requires a lot of improvement. It can be seen in table 4, where the PAMP variable only gets a score of 73.4% from the questionnaire results.

Organizational performance measurement must be based on data and information. These performance measurement requirements should be implemented by senior leaders in monitoring unit performance levels and process performance. It is also necessary to have performance measures based on regular surveys of employee satisfaction, company partners, suppliers and the community. In addition, performance measures that are qualitative in nature should be started, such as measuring waiting time, service time and ease of service. Data analysis is important for an organization to make decisions. In order to avoid facts and data that are not related to priority setting and effective decision making (Yusuf, 2017). Measurement of HR performance at the Faisal Islamic Hospital Makassar, the measurements used are the assessment of SKP, activity, education, position, years of service, loyalty, dedication to the hospital. According to Soeroso (2003), staff-oriented performance appraisal is a simple, easy and inexpensive way, but subjective. This method has a weakness because it only focuses on the character of the employee, not on the merits of the employee in carrying out the task.

The results of research on the performance of the Faisal Islamic Hospital in Makassar as measured by operating variables in the Baldrige criteria show that the fulfillment of these criteria still requires a lot of improvement. It can be seen in table 4, where the operating variable only gets a score of 74.1% percent from the results of the questionnaire. Faisal
Makassar Islamic Hospital has great attention to work systems and work processes, but is less sensitive to meeting the needs of employees. In operating variables, the presence of employees is the dominant element in an organizational process in addition to materials, methods and equipment. Employees are internal customers who must receive attention as well as external customers of the organization.

Ayuningtyas (2005) in his research states, to design the process of health care must consider input from patients, market research, and extensive testing, analysis and planned implementation. According to Yusuf (2017) automated data collection to minimize errors and costs associated with measuring performance. Technology is integrated into business and supporting processes for accurate and efficient operations. This is in accordance with Gasperz's opinion (2001) that the measure of quality costs can be used as an indicator of the success of quality improvement programs.

The results of research conducted at the Faisal Islamic Hospital Makassar illustrate that the results of hospital performance according to respondents' views are still not good or not as expected. As shown in table 4, the percent score achieved in the RESULT category is 67.3%, the lowest of the percent average score for all categories. The development of external factors that take place is very dynamic, the influence of which cannot be anticipated by management in advance. For this reason, management is required to always be responsive and adaptive, always follow and adapt to environmental conditions. Management needs to build a strong team so that they can determine the way or approach that will be implemented to maintain and develop the organization in an ever-changing environment.

Referring to the results of the study that to assess the overall performance achievement, the Faisal Islamic Hospital Makassar only compares the value of performance achievement with the targets that have been set. Purwaningrum (2007) in his research, also reported the same thing. Few performance results are reported for a small number of areas that are important to organizational requirements and results achieved are generally low. No trend data and comparative information were reported. Ayuningtyas (2005) in his research states, if it is associated with customer performance indicators such as customer satisfaction, customer retention, customer profitability, and market share in the target segment, operational performance indicators need to be analyzed to identify expectations, customer needs and pay attention to key customer success factors. such as waiting time and service time.

**Conclusion**

The final conclusion of measuring the performance of the Faisal Islamic Hospital in Makassar with this score illustrates that the performance of the Faisal Makassar Islamic Hospital is still not good. Therefore, proactive planning needs to be made and implemented, not only reactive to problems. It is suggested to the hospital management that it is necessary to conduct an evaluation using the PDCA cycle method, so that the strategic plan that has been made can be carried out effectively.

**References**

Aamer, A. M., Al-Awlaqi, M. A., & Alkibsi, S. M. (2017). TQM implementation in a least developed country: an exploratory study of Yemen. *The TQM Journal*.

Ahmad, M. (2011). Analisis Manajemen Mutu Terpadu (TQM) dalam Pelayanan Rumah Sakit. *Accessed on https://www.google.com/url.*
Aladwan, S. A. T. (2017). The impact of TQM and service employee satisfaction on government service quality: an empirical study in the Jordanian public sector (Doctoral dissertation, University of Birmingham).

Ayuningtyas, D., Tambunan, S., Bachtiar, A. 2005. Penilaian Mutu Rumah Sakit Tugu Ibu Dengan The Malcolm Baldridge National Quality Award Tahun 2005. Penilaian Mutu Rumah Sakit, JMPK Vol. 08/No.04/Desember/2005. Jakarta.

Baird, K., Hu, K. J., & Reeve, R. (2011). The relationships between organizational culture, total quality management practices and operational performance. International Journal of Operations & Production Management.

Barclay, C. A. (1993). Quality strategy and TQM policies: empirical evidence. MIR: Management International Review, 87-98.

Dayton, N. A. (2001). Total quality management critical success factors, a comparison: the UK versus the USA. Total Quality Management, 12 (3). 293-8.

Deming, W.E. (1986), Out of the Crisis, Center for Advanced Engineering Study. Massachusetts Institute of Technology, Cambridge, MA.

François, P., Peyrin, J. C., Touboul, M., Labarère, J., Reverdy, T., & Vinck, D. (2003). Evaluating implementation of quality management systems in a teaching hospital’s clinical departments. International Journal for Quality in Health Care, 15(1), 47-055.

Fu, S. L., Chou, S. Y., Chen, C. K., & Wang, C. W. (2015). Assessment and cultivation of total quality management organisational culture—an empirical investigation. Total Quality Management & Business Excellence, 26(1-2), 123-139.

Giaccio, M., Canfora, M., & Del Signore, A. (2013). The first theorisation of quality: Deutscher Werkbund. Total Quality Management & Business Excellence, 24(3-4), 225-242.

Gimenez-Espin, J. A., Jiménez-Jiménez, D., & Martínez-Costa, M. (2013). Organizational culture for total quality management. Total Quality Management & Business Excellence, 24(5-6), 678-692.

Griffin, R., & Van Fleet, D. (2013). Management skills: Assessment and development. Cengage Learning.

Jarrett, J. E. (2015). Total quality management (TQM) movement in public health. International journal of quality & reliability management.

Juran, J. (1989), Juran on Leadership for Quality. New York, NY: Free Press

Kasali, R. (1994). Manajemen Public Relations: konsep dan aplikasinya di Indonesia. Jakarta: Pustaka Utama Grafiti. 1994.

Kotler, P., Shalowitz, J. I., & Stevens, R. J. (2008). Strategic marketing for health care organizations: building a customer-driven health system. John Wiley & Sons.

Laksono, 2008. Analisis Kepuasan dan Hubungannya dengan Loyalitas Pasien di Rawat Inap di Rumah Sakit Dedi Jaya Kabupaten Brebes. Program Studi Magister Ilmu Kesehatan Masyarakat. Thesis. Universitas Diponegoro

Manurung, J. M. (2018). Kajian Implementasi Mutu dengan Pendekatan Integrasi Six Sigma dan TQM Melalui Penilaian Malcolm Baldridge di Rumah Sakit Charitas Palembang. Jurnal Administrasi Rumah Sakit Indonesia, 3(2).
Purwaningrum, S.N., Kuntjoro, T. 2007. Evaluasi Kinerja RSUD Kabupaten Brebes dengan Pendekatan The Malcolm Baldrige National Quality Award Tahun 2006. Program Magister Kebijakan dan Manajemen Pelayanan Kesehatan Universitas Gadjah Mada. Yogyakarta.

Soeroso, S. H. (2003). Analisis Kepuasan Konsumen dalam Mengkonsumsi Produk Rumah Makan Arwana di Yogyakarta. dspace.uii.ac.id

Taylor, W.A., and Wright, G.H. (2003). A Longitudinal Study of Tqm Implementation: Factors Influencing Success and Failure. The International Journal of Management Science (31). 97-111.

Vanichchinchai, A., & Igel, B. (2011). The impact of total quality management on supply chain management and firm's supply performance. International Journal of Production Research, 49(11), 3405-3424.

Weckenmann, A., Akkasoglu, G., & Werner, T. (2015). Quality management–history and trends. The TQM Journal.

Yang, C. C. (2003). The establishment of a TQM system for the health care industry. The TQM Magazine.

Yusuf, M. (2017). Pengukuran Kinerja dengan Menggunakan Baldrige Excellence Framework (BEF) di Rumah Sakit Umum Daerah Kudungga Sangatta Kabupaten Kutai Timur. Universitas Hasanuddin.