CAN TQM IMPROVE PATIENT EXPERIENCE: A COMPARATIVE STUDY IN LEBANESE HOSPITALS

Bilal Elmasri
DBA student at Beirut Arab University, Email: masri_bilal@yahoo.com

**ARTICLE INFO**

**ABSTRACT**

**Keywords:**
TQM, Patient Experience, Hospitals, Performance Improvement, Satisfaction

**Background:** Patient experience incorporates the variety of relations that patients have within the hospital. These relations include the treatment plans, interactions with physicians, nurses, and other staff in hospitals. Patient experience is a vital constituent of health care quality and Total Quality Management (TQM), it embraces several facets of health care delivery such as getting timely appointments, easy access to ease and access to information, and communication with health care providers. Understanding patient experience is a key step in moving toward patient-centred care. The following intervention looks at the integration and implementation of total quality management (TQM) in order to improve patient experience within the health sector.

**Methodology:** This intervention research uses data and intervention from Lebanese hospitals where one hospital was used as an experimentation site and the other as control. Patient satisfaction score was calculated using a 42 item questionnaire at the beginning of the intervention. Then, TQM was implemented in one hospital while in the second hospital nothing was done. A multidisciplinary team followed up corrective action in the first hospital. The advancement was measured by calculating the patient satisfaction score after 6 months.

**Results:** The results showed an improvement in patient satisfaction in the intervention hospital using TQM while patient satisfaction remained unchanged in the non-intervention hospital. The overall patient satisfaction score increased from 60% to 78% in Hospital 1 whereas the scores were 62% then 63% in Hospital 2. It is worth noting the aspects related to the physical environment, admission and discharge processes showed major improvement.

**Conclusion:** When reflecting on the impact of the implementation of TQM in hospitals, there are various aspects that are of added value to patient experience that increases efficiency internally linking to communication and resulting in improved effectiveness and the quality of services provided to patients. On the other hand, continuous improvement needs perseverance and creating a momentum.

**Article History:**
Received: 11 Aug 2020
Revised: 19 Sep 2020
Accepted: 25 Nov 2020
Available Online: 13 Dec 2020

© 2020 The authors. Published by ZARSMI UAE.
This is an open access article under the Creative Commons Attribution-NonCommercial 4.0

1. **INTRODUCTION**

Patient satisfaction is an imperative indicator for measuring the patient experience in hospitals. Today, patients are becoming informed which makes them demanding and aware of hospital care aspects. Thus, patient satisfaction has become a determinant of patient retention. In Lebanon, the hospitalization sector is dominated by the private sector where 84% of hospital beds are owned by private hospitals. These hospitals compete to attract and retain patients. In addition, the Ministry of Public Health contrats with hospitals on the basis of a classification system that is correlated with reimbursement rate. This system includes a coefficient for patient satisfaction. For these reasons hospitals strive to improve patient experience and satisfaction in order to maintain good relationships with patients, avoid malpractice claims and achieve a higher classification system.

2. **LITERATURE REVIEW**

In the modern world, TQM has become part of health care management on a global scale (Lakle, 1994). The core philosophy of TQM is that each step in a production service encompasses the entire organization from the supplier to the customer, both internal and external to the organization (Heizer, 2004). James (1996) identifies the principal objectives for an organization as customer support, customer service and customer satisfaction. Heizer and Render (2004) suggest that TQM
allows organizations to empower members to make appropriate and reasonable decisions at their level to improve processes. It also builds commitment and a sense of belonging. Hospitals strive to accomplish numerous goals that are focused to serve their customers effectively and efficiently (Minville E., 2008). A joint consensus that a successful implementation of TQM can improve organization performance success (Hansson, 2002) (Kaynak, 2003). The activities of TQM have led to high quality health care services, such as improving patient satisfaction, and increasing productivity and profitability, and improving health care organization performance (Alexander, 2006). Total quality management is established on a set of principles that can increase the satisfaction of stakeholders and ensuring the optimal use of organizational resources. The key management principles are: customer focus, leadership, involvement of people, process approach, continual improvement, factual approach to decision making and relationship management (ASQ, n.d.). Several studies in literature have focused on eight TQM principles and these were top management commitment, employees’ empowerment, teamwork, training, customer satisfaction, continuous quality improvement, organizational culture and service process (Ramseook-Munhuurrun P., 2011).

In hospitals, services are challenging because they are provided by highly divergent skill-mix staff with multiple lines of authority and two distinct lines of authority between administrative and medical staffs (Chakravarty A., 2001). Such challenges force health planners to adopt quality management programs in hospitals (Al-Shdaifat, 2015). Several studies have discussed the implementation of TQM in healthcare sector particularly in hospitals and its impact. The extent of implementation of TQM in hospitals varies among different hospitals in different countries. Al-Shdaifat E. (2015) explored the extent of TQM implementation in Jordanian hospitals by a cross-sectional study using self-developed questionnaire and participants were nurses. Five principles of TQM were pinpointed in this study, depicting 70% of the extent of TQM implementation. The principles were continuous improvement, teamwork, training, top management commitment and customer focus. The most implemented principle was customer focus (Al-Shdaifat, 2015).

Another research was performed in five Libyan hospitals having TQM practices to survey staff about the basic principles of TQM. The study concluded that the implementation of quality is low (33.6%) with a substantial lack of consciousness about quality. TQM principle related to team work was the only implemented principle in Libyan hospitals. (HALIS M., 2017). There is a consensus that a successful implementation of TQM can improve the effectiveness of organizations (Kaynak, 2003). Proper implementation of TQM activities, can impact organizational effectiveness and performance including improved customer satisfaction, enhanced internal communication, better problem solving and fewer errors and enhanced patient safety (El-Tohamy A., 2015).

2.1 Impact of Implementation of Total Quality Management in Hospitals

A study of five Jordanian Hospitals showed that applying the principles of TQM in hospitals can increase the overall hospital effectiveness (El-Tohamy A., 2015). When looking at the implementation of TQM, most researches and findings reflect on the fact that the following are the key eight factors that will positively influence the implementation of TQM, “top-management commitment, teamwork and participation, process management, customer focus and satisfaction, resource management, organization behaviour and culture, continuous improvement, and training and education” (Talib, Rahman & Azam, 2011).

2.2 Patient Satisfaction Measurement

There have been attempts to develop universal measures of patient satisfaction to that can be used in a variety of health service contexts, for example general practice (Baker & Whitfield, 1992) and hospital inpatients (Moores & Thompson 1986, Health Policy Advisory Unit 1989). Patient satisfaction survey is one tool for measuring responsiveness to patient's needs, since the hospital management considers patient as a valuable and a reliable source of data about quality of different services. The main method for measuring satisfaction is the self-completion questionnaire which delivers information in a form which can be used for comparison and monitoring and has proved to be relatively cheap and easy to administer (Jones L., 1987). Another objective is to identify data items in these surveys that can be used to report on an indicator of public hospital quality (Pearse, 2005).

3. METHODOLOGY

The research questions are:
1. Can TQM improve patient experience?
2. How can quality improvement initiative enhance patient experience?

This research aims at measuring aspects of care that affect patient satisfaction, in the project. It uses two international surveys templates of hospital patient satisfaction. These templates are the UK National Health Service (NHS) survey (for admitted patients) and the US based H-CAPHS. Adapting and adopting these templates were tested for their reliability and sensitivity. The nine aspects of care covered in the questionnaire are:
   a. Access and admission process
   b. Information and communication
This is a prospective, descriptive and analytical study for patients that sue a qualitative approach. This design is appropriate to answer the research hypothesis and elicit information about patient experience. The Overall Satisfaction Index (OSI) is a mathematical construct created from 42 individual measures of performance within the questionnaire. Each of the 42 individual measures of performance is converted to a numeric score and then all results are summed and converted to a score out of 100. A sample of one thousands patients was targeted in two hospitals in Lebanon with similar characteristics. Both hospitals are private, not-for-profit, similar patient mix, nearby location, accredited and have the same specialties served. A multidisciplinary team was created in “Hospital 1” to work on improving patient experience using TQM methodology. The team consisted of the Medical Director, Nursing Director, Quality Manager, and the administrative director. Adequate interventions were implemented. The quality improvement cycle was used to streamline enhancement of results. In “Hospital 2”, no interventions were done. Then, patient satisfaction was measured in both hospitals.

4. RESULTS

The results showed an improvement in patient satisfaction in the intervention hospital using TQM while patient satisfaction remained unchanged in the non-intervention hospital. The overall patient satisfaction score increased from 60% to 78% in Hospital 1 whereas the scores were 62% then 63% in Hospital 2. It is worth noting the aspects related to the physical environment, admission and discharge processes showed major improvement.

Table 1: The results are shown in the table below:

<table>
<thead>
<tr>
<th>Patient Experience Items</th>
<th>Hospital 1 (N = 502)</th>
<th>Hospital 1 (N = 488)</th>
<th>Hospital 1 (N = 493)</th>
<th>Hospital 2 (N = 472)</th>
<th>Hospital 2 (N = 493)</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access and admission process</td>
<td>Initial Score</td>
<td>60%</td>
<td>78%</td>
<td>58%</td>
<td>57%</td>
<td>-1%</td>
</tr>
<tr>
<td>Information and communication</td>
<td>Post-intervention</td>
<td>+18%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involvement in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect of privacy and need</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness of staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information provided related to medication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relation with doctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge procedure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access and admission process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information and communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involvement in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect of privacy and need</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall patient satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. CONCLUSION

When reflecting on the impact of the implementation of TQM in hospitals, there are various aspects that are of added value to patient experience that increases efficiency internally linking to communication, and resulting in improved effectiveness and the quality of services provided to patients. Thus, overall the importance of TQM in healthcare cannot be stressed enough, however it is worth noting that it is not a one-fit-for-all approach but rather a tailored approach that needs to reflect the environment that hospitals operate in from legal to infrastructure to available resources.

BIBLIOGRAPHY


El-Tohamy, A. & Al Raoush, A. (n.d) The impact of applying total quality management principles on the overall hospital effectiveness: an empirical study on the HCAC accredited governmental hospital


