

The Impact of Organizational Culture on the Successful Implementation of Total Quality Management and Its Assessment Through Internal Audit

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Abstract: *Quality management in healthcare is of critical importance to the healthcare industry and the patient. Everyone in the loop - from physicians to practitioners to support staff - needs to be aware of the importance of quality management in healthcare. Adapting standards and instilling processes into the healthcare system is how healthcare providers can assure quality in healthcare. Total Quality Management originated in the manufacturing sector, but can be applied to almost all organizations. Total quality management ensures that every single employee is working towards the improvement of work culture, processes, services, systems and so on to ensure long term success. Patient is at the center of total quality management in healthcare and Organizational culture is a major variance-causing factor in TQM implementation programs that inhibits or allows the success of such a program.*

Keywords: Total Quality Management (TQM), Organizational Culture, Healthcare, Errors, Internal audit

1. Introduction

Healthcare organizations are undergoing fundamental changes. Consumers and payers demand high quality services at reasonable and affordable costs. Therefore, the aim of healthcare organizations should be to improve quality and to build up the confidence of patients, professionals and cost payers in the quality of the context, the structures, the processes, and the outcomes. Healthcare managers must find new ways to provide services to meet these requirements.

Total Quality Management (TQM) is one such philosophy which aims to provide organizations with a template for success through customer satisfaction. Total Quality Management is a way of managing to improve the effectiveness, efficiency, flexibility, and competitiveness of a business.

Organizational culture consists of the beliefs, values, norms, customs and practices of the organization. An author quotes organizational culture in 1992 as a system of norms, shared values, concerns, and common beliefs that are understood and accepted by the members of the organization. The members of the organization accept these as valid, follow them and teach them to incoming members as a pattern to be followed for problem solving and as required thinking style and behavior. Total Quality Management programs are more likely to succeed if the prevailing organizational culture is compatible with the values and basic assumptions proposed by the Total Quality Management discipline².

Quality management is an essential general practice activity that involves examining structures, systems and clinical care. Patient safety is only one aspect of quality improvement. This can be achieved primarily through the

development and implementation of strategies that reduce the risk of errors³.

Total Quality Management is one such continuous process of error prevention at all levels. This study is to investigate how organizational culture in the healthcare organization related to the implementation of Total Quality Management practices and assesses the current status of errors [medication prescription, transcription, administering, dispensing] in the hospital through internal audit.

2. Review of Literature

2.1 TQM in Healthcare Environment

TQM focuses on: customer (patient) satisfaction, continuous improvement, teamwork, process management, systemization, organization culture and structure, and lastly commitment from management and supportive leadership. TQM in context to health care environment is defined as: "The satisfaction of patients, doctors, nurses, and suppliers (i.e., social shareholders) and other interested groups, achieved by implementing effective planning, programs, policies and strategies (i.e., hard issues), and human and all other assets (i.e., soft issues) efficiently and continually within a hospital context"⁴.

2.2 TQM in India and Indian Quality Awards

As the concept of quality began to be internalized by the Indian industry, spurred by competition, quality awards were instituted on the lines of Malcolm Baldrige award and European Quality award. The Malcolm Baldrige National Quality Award (MBNQA) was introduced in 1987, and the European Quality Award was introduced in 1991.

In comparison, the first Indian quality award - Rajiv Gandhi National Quality Award (RGNQA) - was instituted in 1991. Thereafter a number of quality awards were also announced. This was a measure of the maturing of quality related concepts in India⁵.

2.3 TQM Barriers⁷

<i>Dimensions</i>	<i>Barriers</i>
Cultural and employee barriers	Change of culture, fear/resistance to change, lack of employee commitment, and lack of confidence by employees
Infrastructure barriers	Insufficient quality training and education, lack of customer feedback systems, lack of recognition and reward systems, underdeveloped measurement of quality and lack of expertise in quality management
Managerial barriers	Lack of top management commitment, no proper vision and mission, high turnover/changes in key executives, and lack of leadership
Organizational barriers	Ineffective internal and external communication network, territorialism, and organisational politics

2.4 Role of organizational culture on successful implementation of Total Quality Management

The success of TQM as an organizational change will depend a lot on the organizational culture. TQM is a management approach in which the application of practices such as teamwork, internal customer relationship, and supplier partnership are tools for cultural transformation, and involves a major cultural change in the organization².

The role of organizational culture in improving competitiveness and increasing productivity and profits has urged top managers in many organizations to explore ways of managing and changing organizational culture⁶.

2.5 Quality and Error

The IOM report focused on errors leading to misuse, errors trigger all three types of quality problems. But not all errors lead to quality problems—only those errors that decrease the likelihood of desired health outcomes do so.

Errors that lead to overuse are typically mistakes. Errors that lead to underuse, such as failing to administer influenza vaccine to an elderly patient during an office visit for hypertension, can be either lapses or mistakes. Misuse problems can be associated with all three kinds of errors. Medication errors, for example, may occur when a physician who intends to write a prescription for 0.5 milligrams of a drug instead writes 5 milligrams⁸.

3. Methodology

The study was a research survey undertaken to study the effects of Organizational culture on the implementation and success of Total Quality Management (TQM). Another part of the study included a descriptive research on medication errors through internal audit. Sample size to be taken in this study was 170 randomly selected healthcare employees who were working in Fortis Escorts Hospital, Amritsar. For

internal audit on medication error, 50 patients to be directly observed. The sampling method was Simple random sampling.

3.1 Inclusion Criteria

1. Employees who were working in Fortis Escorts Hospital, Amritsar.
2. Permanent employees with experience > 6months.
3. Age more than 18 years.
4. For audit, patients admitted in IPD's and ICU's.

3.2 Exclusion Criteria

1. Employees who had less than six months working experience.
2. Part-time employees, interns/ trainees were excluded from the study.
3. Age less than 18 years.
4. For audit, OPD patients were excluded from the study.

3.3 Procedure

Research approach to be adopted for the first part of the study included collection of information/opinions from permanent employees who were working in Fortis Escorts Hospital, Amritsar through well-structured questionnaire. Questionnaires were duly filled without prompting and their informed consent was taken on questionnaires provided to them individually. For the second part of the study i.e. Internal audit, a checklist was used to assess the medication errors in different departments of the hospital.

4. Results and Discussions

The study's statistical population consisted of 220 members, out of which 170 respondents were employees' and 50 respondents were patients of Fortis Escorts Hospital, Amritsar. The major areas covered under this research survey are Inpatient Departments (IPDs), Outpatient Departments (OPDs), Intensive Care Units (ICUs) and Emergency Department of Fortis Escorts Hospital, Amritsar. In the first half of discussions, the results obtained from the study of the effects of organizational culture on the successful implementation of TQM were summated. Higher percentage of respondents (43.5%) belonged to the department with 20-100 employees as depicted in Table 1 (like IPDs, OPDs, ICUs) where quality management was a crucial step and involved various processes which directly affect patients if not managed properly.

Table 1: Distribution of sample department wise

<i>Employees</i>	<i>Frequency</i>
<20	49 (28.8%)
20-100	74 (43.5%)
100+	45 (26.5%)
N/A	02 (1.2%)

It was investigated that there were significant differences in the respondents' perception on TQM implementation due to one major demographic variable (i.e. years of experience). Employees' who were working with this hospital from >2years (40.5%) i.e. in category of >2-3yrs, >3-5yrs, >5yrs

seem to be more satisfied than those employees' who had an experience between 6months to 1year (24.7%) as depicted in Table 2.

Table 2: Distribution of sample experience wise

Experience	Frequency
6months to 1year	42 (24.7%)
>1-2 years	59 (34.7%)
>2-3 years	42 (24.7%)
>3-5 years	13 (7.6%)
>5 years	14 (8.2%)

Majority (99.4%) employees agreed that their hospital had been accredited and 98.8% employees acknowledged NABH as their quality system. 99.4% also affirmed that the hospital had a quality manual.

The attitudes of the study sample of employees were positive, in general, toward all the items concerning the Total Quality Management dimensions in the Fortis Escorts Hospital as depicted in Table 4.

Table 4: Perception of Employees about TQM elements

TQM Elements	Frequency
Top management primary driving force behind quality	163 (95.9%)
Communication is open in all directions	143 (84.1%)
Employees are supported when they take necessary steps to improve quality	146 (85.9%)
Effective system for employees to make suggestions on quality	149 (87.6%)
Transparent & effective appraisal system for rewarding employees for their efforts	142 (83.5%)
Customers' complaints are studied to identify problem and preventing recurrence	152 (89.4%)
Sufficient effort is made to get the opinions & ideas of employees	152 (89.4%)
Teamwork has improved patient satisfaction as well as quality	168 (98.8%)

The survey further revealed that the hospital had a strong organizational culture which was essential for the successful implementation of TQM as disclosed by 94.1% respondents while 97.1% employees also believed that Integrity, ethics and trust were essential prerequisite for TQM implementation. 94.7% respondents indicated that all the employees should be committed to change for TQM implementation as depicted in Figure 1 & Figure 2 respectively.

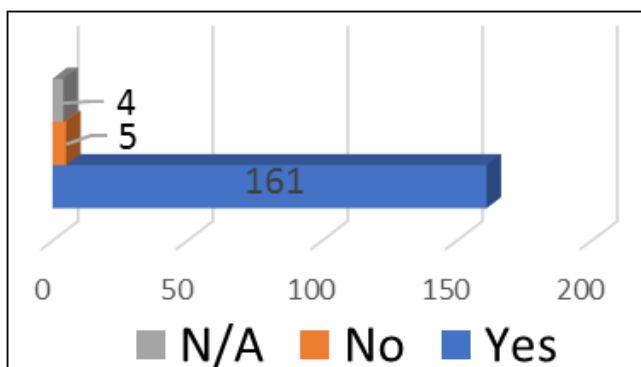


Figure 1: All the employees should be committed to change for TQM implementation.

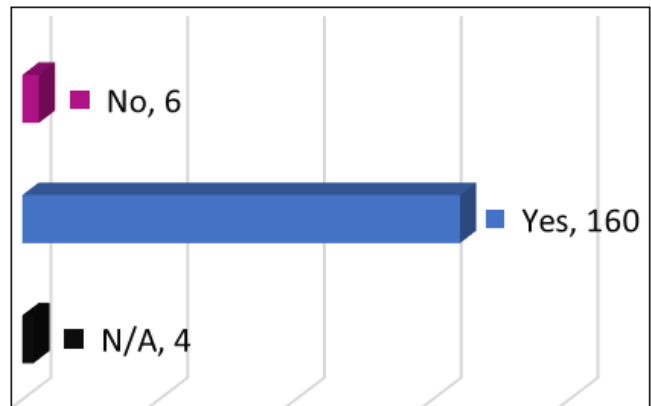


Figure 2: Strong comprehensive culture which strongly implement the TQM elements

In the second half of the discussions, results obtained from the observational study on errors conducted between October 15,2016 till November 30, 2016 were summated. In relation to seriousness, Majority (44%) errors were potential errors (Type A). And another majority 44% medication error reached the patient but did not cause any harm i.e. Type C error. Only 12% medication error did not reach the patient (Type B) as shown in Figure 3 respectively.

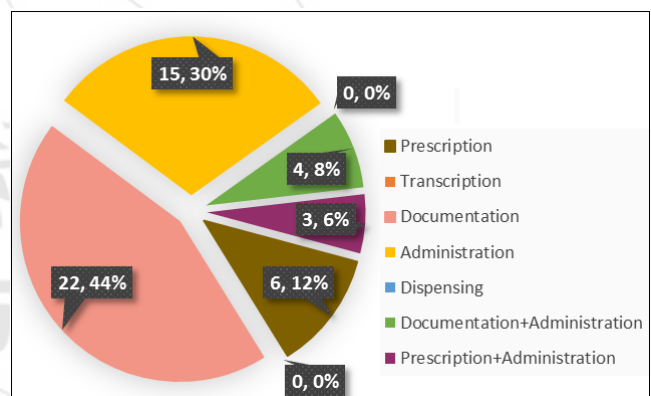


Figure 3: Reported Medication Error in the hospital between Oct. 15th, 2016 to Nov. 30th,2016

Apart from the results of data collection, the following were the inputs given by employees' voluntarily during the research survey. Management had a centralized control over decision-making. Non-managerial employees were not given any authority in setting priorities for quality planning as shown up to some extent in Figure 4.

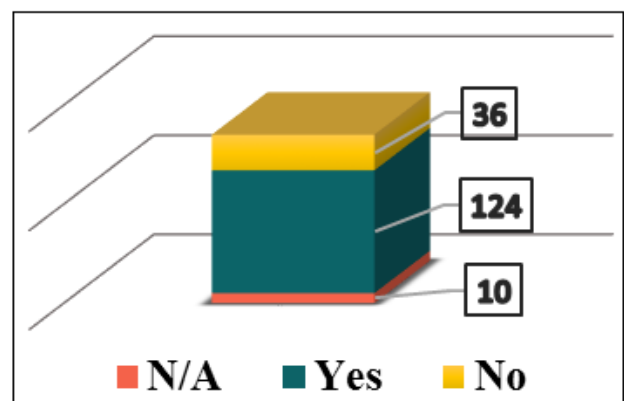


Figure 4: Non-managerial employees themselves play a key role in setting priorities for quality planning.

5. Conclusion

Several critical factors were essential if TQM is to be successfully implemented. There was a statistically significant effect of the organizational culture (meaningful values, support and promotion values, discipline values and free style values) on TQM. This research has revealed a strong indication that achievement, role, power and support type culture do exist in this organization. The results in the survey showed that there is a need for senior management to set good examples for the organization in order to improve the achievement culture which exists. Also, there is a need for management to change the culture of fear based culture where employees cannot express their honest opinions in fear of negative consequences. Management view about change and openness to suggestions were also looked at.

Findings from evaluation have demonstrated that medication errors do occur and these can be minimized by a change in practice and behavior of those involved in medication use process. In conclusion, leading change involves ability to build a shared vision, encourage participation/motivation, share information and enable trust through team working, deal with unexpected issues and goal setting.

5. Future Research

Further studies can hence be conducted as follows:

- As present study covers only one organization, further comparative study can be conducted in multiple organizations with larger sample size.
- Future study can be conducted to examine the relationship between organizational culture and TQM implementation so that more accurate and better structured strategies can be formulated. This can also serve to validate the present study.

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