TOTAL QUALITY MANAGEMENT ADOPTION IN A PUBLIC HOSPITAL: EVIDENCE FROM MAURITIUS

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ABSTRACT

Total Quality Management (TQM) has emerged as a potential solution to improve the efficiency and effectiveness of health care provision and is becoming increasingly important for the successful operation of public hospitals. The aim of the study is to determine the extent to which TQM can be adopted in public hospitals in Mauritius. The objective of the study is to assess management and employees perceptions on the critical factors influencing effective TQM adoption in public hospitals. A questionnaire comprising of items on a 5-point Likert scale was used to capture the perceptions and the data was analyzed using descriptive statistics and t-tests. The findings showed that the TQM dimensions have a significant impact on the perception of management and employees. Analysis of variance (ANOVA) was further employed to examine if the critical factors were perceived differently by management and employees. The results also revealed that management perceives TQM adoption as being relevant and effective, in the case of public hospitals.

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INTRODUCTION

One of the fastest growing industries in the service sector is the health-care industry (Andaleeb, 1998). The health care industry has restructured its service delivery system in order to survive in an unforgiving environment resulting from maturation of the industry, reduced funding, and increased competition (Williams, 1994; Cho *et al.*, 2004). Total Quality Management (TQM) is a philosophy with the aim of achieving an overall performance. TQM has become a globally strategic force, which may lead to several benefits: improved customer satisfaction, greater employee focus and motivation, reduced waste and improved overall performance (Juran, 1988). TQM has thus emerged as a potential solution to improve the efficiency and effectiveness of health care provision and is becoming increasingly important for the successful operation of public hospitals. Many hospitals are turning towards TQM adoption for cutting costs and overall improvement in the quality of the services provided. It is argued that the measurement of quality is not yet well established in the health care industry although there are some measurement mechanisms in place (Huq, 1996; Yang, 2003; Huq, 2005).

There is also the growing consensus that customer satisfaction is an important indicator of health care quality and many hospitals are searching for ways to change the delivery of patient care through TQM (Schalk and Dijk, 2005). Although TQM has been extensively researched for many years now in the manufacturing sector, there is still significant interest in and need for empirical studies on TQM given the fact that many service organizations are adopting and implementing TQM and its diffusion is on the increase globally (Ehigie and McAndrew, 2005). Therefore, it is imperative that a proper study is carried out to ensure that the adoption of TQM is a worthwhile initiative in public hospitals. Public hospitals have always been criticized for their poor service quality and to implement a quality improvement program management in public hospitals may not be aware of the benefits of adopting and implementing a quality improvement program. Thus this study aims to investigate the extent to which public hospitals in

Mauritius are willing to adopt TQM as their main driver towards quality improvement. The study assesses the perceptions of management and employees on the adoption of TQM in a public hospital.

The present study examines TQM adoption in a public hospital from the management and employees perspectives. The paper is organized as follows: first, the paper reviews the literature on TQM and its application in the health care as well the key factors of TQM. The methodology is then presented, followed by major findings and discussions. The last part of the study concludes the paper and presents the limitations of the study.

LITERATURE REVIEW

TQM has become one of the competitive strategies of choice during the 1990s and has been widely implemented throughout the world (Rad, 2006). However, TQM in the service industry is still in the early stages of theory development (Vouzas and Psychogios, 2007). TQM has been defined and represented in a variety of ways, for example, a search for excellence, creating a "right first time" attitude, zero defects and delighting the customer (Moore and Brown, 2006). TQM is an organization-wide process, where employees are motivated and empowered to do the right things, right first time and every time, to reflect on what they do and to improve what they do (Mohanty and Behera, 1996). As opposed to manufacturing organizations, where TQM is applied widely, service in organizations is more difficult to measure due to the intangibility, inseparability, variability and perishability of the service characteristics. A mere claim of TQM adoption is not sufficient, rather, clear understanding and training of personnel in the TQM philosophy is necessary to prevent it becoming a management fad (Ehigie and McAndrew, 2005).

Quality improvement in health care organizations is considered as a means to better meet the needs and expectations of patients. According to Yang (2003) adopting TQM in the health care industry is not as smooth or successful as in the manufacturing or service industries. As put forward by Huq (1996) today hospitals are being challenged to look at their operations and find more efficient ways to do business. Many hospitals are turning towards TQM for cutting costs and overall improvement in the quality of the services provided. The concept became popular in the health care industry during the late 1980s (Garvin, 1988; Westphal, Gulati and Shortell, 1997). Patient satisfaction is becoming increasingly important for the successful operation of private and public hospitals (Andaleeb, 1998; Yang, 2003; Cho *et al*., 2004). Yang (2003) further argues that the use of TQM has provided a partial cure to service quality problems in healthcare organizations. In US healthcare, TQM is associated with the Baldrige model and has been viewed recently by some as too ambitious for healthcare, while in Japan, healthcare services have not introduced TQM, but some hospitals have set up quality control circles which have been running successfully for some time (Øvretveit, 2001).

Past studies found that there was a growing consensus that patient satisfaction is an important indicator of health care quality. Huq **(**1996, 2005**)** argued that determining the factors associated with patient satisfaction is a significant issue for health care providers. TQM further aims to provide organizations with a model for success through customer satisfaction (Vouzas, and Psychogios, 2007). However, that there are some barriers encountered during the implementation of TQM in public and non-profit organizations due to the bureaucratic culture and the passive behaviors. Consequently TQM initiatives must include an in-built culture of continuous improvement, which can help an organization satisfy the needs of its customers on an ongoing basis (Walsh, Hughes and Maddox, 2002). Even the health care industry is bonded with the cultural background and the traditional professional style of leadership among physicians and other top management. It is good to note that government health sector has less flexibility in its resource allocation and human resources management.

Critical Factors Influencing TQM

TQM adoption and implementation requires changes in structure, system, and process as a necessary precondition to achieve improved business performance and changes in employee behavior (Yang, 2003). It is therefore important to identify the critical factors that influence the success of TQM adoption and implementation in service organizations (Taylor and Wright, 2003). Researchers have derived critical success factors (Ahire *et al*., 1996; Baidoun, 2003) spreading from manufacturing (Ahire, 1996; Ahire *et al*., 1996; Agus and Abdullah, 2000), small and medium scale industries (Yusof and Aspinwall, 1999; Kumar *et al.*, 2009), higher education (Kanji and Tambi, 1999), health care (Kunst and Lemmink, 2000). These success critical factors include practices related to management commitment, education and training, employee involvement, teamwork, customer focus, benchmarking, quality information and analysis, process management, continuous improvement and organizational culture (Dahlgaard *et al*., 1998; Dale, 1999; Bergman and Klefsjö, 2003). Organizations need to adopt the critical success factors if they are to achieve business excellence. Some of these critical factors are briefly discussed.

Factor 1: Top management commitment: Management acts as the driver for TQM implementation, creating values, goals and systems to satisfy customer expectations and to improve an organization's performance (Juran, 1988; Dale and Plunkett, 1990; Ahire, Golhar and Waller, 1996; Huq, 2005; Rad, 2006) and responsible for providing direction and encouragement to the organization (Shores, 1992). Management commitment is crucial for a company's quality development since, with their support and contributions, adequate resources will be allocated to enhance the training activities resulting in better quality measurement, improved customer satisfaction and benchmarking. Berman *et al.* (1996) recommend that top management needs to identify quality improvement areas, for example, improving teamwork or improving hospital quality services in order to achieve sustained TQM implementations. In fact hospital directors are exposed to normative pressures to adopt innovative management practices such as TQM (Taylor and Wright, 2003; Huq, 2005).

Factor 2: Employee involvement: Employee involvement is a critical component of TQM. TQM requires total management commitment to ensure employees indulge in quality work culture and hence create healthy corporate image by rendering quality services to the customers (Huq, 2005; Schalk and Dijk, 2005). Increased employee's participation in the overall quality strategy brings an increased flow of information and knowledge and contributes to the wellness of the organization for resolving problems (Schalk and Dijk, 2005). For employees, a significant aim of TQM is the broadening of work responsibilities.

Factor 3: Customer satisfaction: TQM makes customer satisfaction the number one organization priority, where an emphasis is placed on meeting or exceeding external customer expectations in every transaction (Kangi, 1998). A close relationship with the customers is necessary to fully determine their requirements, thus customer involvement is necessary in the product design and development process (Das, Paul, and Swierczek, 2008; Kumar *et al*., 2009). TQM is one such philosophy which aims to provide organizations with a template for success through customer satisfaction (Arasli and Ahmadeva, 2004). Customer focus is the emphasis placed by hospitals in meeting the unlimited expectations of its customers (Das, Paul, and Swierczek, 2008).

Factor 4: Teamwork: Teamwork is a critical factor in TQM as teamwork is essential in having a fully functioning process management and improvement, especially in medical treatment; it requires cooperation among all related departments (Westphal, Gulati and Shortell, 1997; Huq, 2005; Vouzas, and Psychogios, 2007). According to Yang (2003), teamwork is important to overcome sectionalism and to strengthen cooperation for improving quality (Huq, 2005). The most difficult aspect of TQM is to create an environment of "all one team" (Rad, 2005). The author further adds that everyone throughout the organization must work together to improve processes and to execute them with energy and efficiency.

Factor 5: Processes: TQM is centered for an effective management of processes and continuous customer satisfaction (Kanji, 1998). The process is improved by reducing the source of variation that exists within it and everyone, in the TQM environment, is required to gain additional capabilities to improve the process (Eng Eng and Yusof, 2003; Huq, 2005). Organizations need to have a set of well-defined and well-designed processes for meeting the organization's quality and performance requirements. Schalk and Dijk (2005) are of the opinion that hospitals will have to focus on integrating their various processes in different levels that include quality management, human resource management etc. to meet and exceed customers' expectations and to achieve organizational excellence.

Factor 6: Continuous improvement: Continuous improvement is a powerful concept related to the pursuit of never-ending improvement in meeting external and internal customer needs (Huq, 1996; Taylor and Wright, 2003; Schalk and Dijk, 2005). Kanji points out that continuous improvement require management by facts and commitment of all employees with an emphasis on teamwork to promote a bottom-up thrust for quality improvement (Kanji, 1998). Continuous improvement is the philosophy of improvement initiatives that increases success and reduces failure and must be integrated into the management of all systems and processes (Huq, 1996; Walsh, Hughes and Maddox, 2002; Vouzas and Psychogios, 2007).

Factor 7: Training: Training is a very important tool for promoting and developing skills related to an organization's beliefs and values to change to a culture that places high value on quality. Once management has the skills to lead the TQM process, the rest of the organization should be trained to ensure a systematic, integrated, consistent organization-wide effort (Rad, 2005). The author further asserts that an emphasis on continuous learning and improvement, induces a positive culture where there is sufficient behavioral modification to warrant a sustainable TQM climate. Providing training to employees in problem solving skills is one of the most important activities for organizational climate change (Taylor and Wright, 2003).

Factor 8: Culture change: Instilling quality-oriented culture requires change of attitudes, value systems, and beliefs. TQM is an educational process aiming at changing the behavior and attitudes of organizational members and then developing quality sensitive organizational culture (Huq, 2005; Rad, 2006). Organizational culture has a significant effect on the successful TQM implementation (Rad, 2005). Culture is something collective in an organization and therefore not a characteristic of individuals within it. It is necessary for the management to cultivate concern for employee participation and continuous improvement, and encourage organizational changes.

TQM adoption is believed to lead service organizations to performance improvement. Taylor and Wright (2003) found that senior management commitment is the most essential antecedent of TQM success. Other studies reveal that customer focus, participation and teamwork and continuous improvement are the principles on which TQM is grounded (Yang, 2003; Huq, 2005; Rad, 2005). Huq (2005) found that organizational culture has a significant effect on the successful implementation of TQM. However, many healthcare administrators did not believe that TQM adoption leads to a better organizational performance, in financial terms, and as a strategic advantage (Øvretveit, 2001; Schalk and Dijk, 2005). Vouzas and Psychogios (2007) assessed managers' awareness of TQM and they found three items: continuous improvement and training, total employee empowerment and involvement and quality driven culture, representing the whole concept of TQM approach. Unlike several previous studies, this study did not attempt to assess the implementation of TQM or its actual impact on quality improvement (Westphal, Gulati and Shortell, 1997; Yang, 2003), it rather focuses on TQM adoption as the critical event of interest.

RESEARCH METHODOLOGY

This study was initiated to explore the adoption of TQM in a public hospital in Mauritius. The objective of the research was to measure management and employees' perceptions of quality management practices

in public hospital. Based on the literature review, a questionnaire comprising of 28 attributes was developed, focusing on eight TQM principles: teamwork, customer satisfaction, continuous quality improvement, and an emphasis on empowering employees to identify opportunities to improve quality and top management commitment, training, organizational culture and service process. The questions were measured on a 5-point Likert scale, ranging from '1 = strongly disagree' to '5 = strongly agree'. A pre-test was performed before the final data collection to determine if the questionnaire was well understood. The survey was conducted in one of the five major public hospitals in Mauritius and 40 and 200 questionnaires were respectively distributed to managers and employees across the hospital departments. The managers were top management in-charge of the different departments in the hospital, while employees were the medical staff, other health care professionals and administrative staff. Out of the 200 questionnaires, 155 questionnaires were retained for analysis while all the 40 questionnaires from the managers were used for analysis. Data was collected over a period of two weeks. Data were analyzed by Statistical Package for the Social Sciences, SPSS program, means, standard deviations and t-test were computed and One-Way Analysis of Variance (ANOVA) was used in order to determine if there were any meaningful differences according to management and employees perceptions. These analyses have been made on the eight TQM critical factors.

RESULTS AND DISCUSSIONS

Table 1 revealed management and employees perceptions of TQM adoptions across 8 critical factors. The results of study indicated that all the 28 attributes were statistically significant at $p < 0.05$ and $p < 0.1$ (Table 1). Management has the highest perception for "Employee training is provided in quality principles" (mean = 4.35), followed by "Employees are actively involved in quality-related activities" (mean = 4.30), "Our organization conducts a customer satisfaction survey on a regular basis" (mean = 4.20), and "Employees are very committed to the success of our organization" (mean = 4.20). These results show that management highly wishes to bring quality to every department of the hospital. The results further revealed that management had low perceptions for "Management is in routine contact with customers and employees" and "Feedback received from patients is used continuously to improve the work that we do" both attributes scored a mean of 1.75.

From the employees' perspectives, the attributes that were highly rated are "Employees are actively involved in quality-related activities" (mean = 4.30), followed by "Our organization conducts a customer satisfaction survey on a regular basis" (mean = 4.16) and "We carry out performance assessment to measure excellence in service delivery" (mean = 4.15). Table 1 also revealed that employees had poorly rated "Management is in routine contact with customers and employees" and "Feedback received from patients is used continuously to improve the work that we do" both scoring a mean of 1.75. It is observed that both management and employees have the same perceptions regarding employees' involvement in quality-related activities, conducting customer satisfactions survey on a regular basis, management contact with employee and customers as well as feedbacks from customers being used for continual improvements.

The overall mean for the eight TQM critical factors are statistically significant and the perceptions of both management and employees vary across the eight factors. It seems that management is not fully satisfied with the extent of 'teamwork' (mean = 2.13) as compared to employees' perceptions (mean = 3.12). Previous studies concluded that teamwork is a key factor in the successful implementation of TQM (Huq, 2005; Rad, 2005). Moreover, the most important aspect of teamwork among employees and management in public hospitals seems to be the need for teams to work closely and to coordinate work with a view to quality improvement (Huq, 1996). The results of this study clearly indicate that much need to done by the hospital, in terms of teamwork. It is further observed that the overall perceptions among management and employees seem be quite low as regard to 'continuous improvement'. However, management views continuous improvement as a factor which already exists in the hospital. The perceptions among

management reveal that the hospital should have procedures and processes established to ensure that incremental and ongoing improvements are made to products and services. The results on 'management commitment' dimension are mixed. The overall mean scores for management and employees to the 5 attributes associated with 'management commitment' are 3.75 and 3.39 respectively. Management and employees tend to agree to most of the attributes with the exception of "There are clear quality goals identified by management". It appears that both management and employees are not happy with the level of management commitment in the organization. Management commitment is an essential antecedent of TQM success (Huq, 1996; Zairi, 2000; Taylor and Wright, 2003; Rad, 2006). However, in the present study, this factor still needs to be improved. The results reflect the findings of Rad (2005) who concluded that, for health care organizations in which managers were committed to TQM, its success was greater than in other organizations with a lower management commitment.

Both management and employees agree (mean = 4.18 and 3.96 respectively) that without proper and continuous 'training', TQM cannot be adopted. Based on the above, it is found that the opinion of the respondents is justified. For a service provider 'customer focus' is the most important factor and the results show that 'Customer focus' has been poorly perceived by management and employees as both scored a mean of 2.71. It is observed that, health care managers do have a problem in determining indicators and tools for receiving patients' ideas and suggestions, assessing their satisfaction level about the health care services and trying to improve their satisfaction. Questions on this factor focused on whether the needs and opinions of customers are monitored by the hospital. Customer feedback process is an integral part of the TQM approach. The results concur with the work of Rad (2005) who found that giving no attention to patients and their needs and wants is another reason for TQM failure in health care organizations. The overall mean (3.00) indicates that there is a tendency for management to disagree with the statements pertaining to 'employee involvement' as compared to employees (mean = 3.50), as a factor of TQM adoption. Both management and employees share the view that TQM involves everyone in an organization.

This study revealed that the level of employee involvement is quite low and therefore does not reflect the view of Zairi (2000) who reported that the issue of employee commitment and involvement, as a critical quality factor for successful TQM adoption. Management and employees have poorly perceived the attributes under the dimension 'organizational culture' and the overall mean for this dimension as perceived by management is 2.40 and that of employee is 1.99. Thus, the culture and attitudes within organizations needs to be changed if TQM is to be adopted but it is argued that changing mindsets is the hardest of management jobs. In order to build a quality culture, employee motivation need to be adapted to the cultural setting (Berman *et al.*, 1996). This finding indicates there must be changes in attitudes, communications, employee involvement and commitment if the hospital intends to adopt TQM. The dimension 'processes' was poorly perceived by both management (mean = 3.60) and employees (mean = 3.30). Process management is seen as a major obstacle toward TQM adoption both by management and employees. According to the respondents, benchmarking is almost inexistent and moreover resources are not allocated based on processes. The development of procedure and documentation are vital for control and improvement for TQM adoption.

Hospitals have a unique situation in which variation is almost inherent to the environment. Although in some cases management is justified in putting the blame on the employees, in many cases variations in quality is caused by common causes that management is not ready to acknowledge. The results of this study show that there has not been as much visible involvement and support by management as is probably needed to effect the cultural change that is necessary to move forward at a steady pace. Therefore, determination of causes of quality variation is extremely important for TQM to be successful in a hospital. Significant efforts have not been made at this point in time to reduce these common causes of variation and the common causes observed from this study include inadequate collaboration among employees, failure to put the customer at the centre of the process, and lack of empowerment.

Nevertheless, it should be noted that public hospitals are less flexible in their resource allocations and their human resources management than private hospitals.

Table 1: Descriptive Results for the 8 TQM Critical Factors

Attributes	Management			Employee		
	Mean	S.D	*t*-value	Mean	S.D	*t*-value
Teamwork	**2.13**	**1.01**	**3.749***	**3.12**	**1.19**	**3.366***
Employees work closely together as a team in order to coordinate work and improve quality	2.10	0.79	4.319*	3.12	1.29	3.350*
Management is more in favor of team recognition rather than individual recognition	2.15	1.23	3.179*	3.12	1.09	3.382*
Continuous Improvement	**3.65**	**0.85**	**6.055****	**2.29**	**0.66**	**6.83****
We carry out performance assessment to measure excellence in service delivery	4.07	0.70	-0.425**	4.15	0.67	-0.436*
Change initiatives are driven by patients' needs and expectations	4.13	0.67	12.245*	1.90	0.85	10.768*
Management is in routine contact with customers and employees	3.43	0.96	7.599*	1.75	0.44	10.969*
Feedback received from patients is used continuously to improve the work	3.43	0.96	5.274*	1.75	0.44	6.041*
Management is actively involved in communicating the organization's vision for quality	3.52	0.80	5.490*	2.30	1.08	4.685*
Management routinely removes barriers to performance, innovation, and quality	3.30	0.99	6.144*	1.90	0.45	8.938*
Management Commitment	**3.75**	**0.73**	**1.131****	**3.39**	**1.09**	**1.133****
The hospital has an effective quality improvement plan	3.84	0.66	-1.850**	4.15	0.671	-1.842**
Management views quality as being more important than cost	4.16	0.69	3.047*	3.50	1.28	2.231**
Management promotes a quality culture within the organization	3.84	0.59	2.492**	3.35	1.18	1.773*
There are clear quality goals identified by management	2.85	1.02	2.092**	2.30	1.08	2.026**
Management is committed to quality improvement at all levels	4.07	0.70	1.964**	3.65	1.25	1.478**
Training	**4.18**	**0.53**	**-1.543****	**3.96**	**0.65**	**-1.359****
Employee training is provided in quality principles.	4.35	0.49	-1.842*	4.09	0.73	-1.490**
Resources are available for employee quality training	4.00	0.56	-1.244**	3.82	0.58	-1.228**
Customer Focus	**2.71**	**0.73**	**-0.048****	**2.71**	**0.81**	**-0.059****
A summary of customer complaints is given to the Ward Manager/Charge Nurses	1.95	0.83	1.070*	2.18	0.89	1.030*
The Ward Manager/ Charge Nurses are aware of the level of customer satisfaction	2.05	0.76	0.119*	2.07	0.96	0.105**
The hospital uses customer feedback to improve service quality	2.05	0.76	0.121*	2.07	0.91	0.110**
Quality-related customer complaints are treated with top priority	1.95	0.83	0.025*	1.96	0.82	0.025**
Customers' requirement is used as the basis for measuring quality.	4.05	0.61	-1.396*	3.84	0.59	-1.411**
The hospital conducts a customer satisfaction survey on a regular basis	4.20	0.62	-0.224**	4.16	0.67	-0.215**
Employee Involvement	**3.00**	**0.94**	**-2.228***	**3.50**	**0.56**	**-3.098****
We often work in teams, with members from a variety of departments	2.07	1.04	0.059**	2.00	0.80	0.068**
Employees are very committed to the success of our organization	2.85	1.08	-5.468*	4.20	0.41	-8.413*
Employees are actively involved in quality-related activities	4.09	0.69	-1.275*	4.30	0.47	-1.561**
Organizational Culture	**2.40**	**0.81**	**1.999****	**1.99**	**0.93**	**1.790****
There are few 'status' distinctions between managers and employees	1.95	0.83	0.094**	1.97	0.89	0.091**
Employees are empowered to take direct action whenever it is likely to affect quality	2.84	0.98	3.488*	2.00	0.80	3.903*
Processes	**3.60**	**0.56**	**-0.911****	**3.30**	**0.68**	**-0.738***
We have a program to find wasted time and costs in all internal processes	3.90	0.64	-0.064**	3.40	0.65	-0.064**
All our processes have been designed to meet quality standards.	3.30	0.47	-1.758**	3.20	0.72	-1.411**

*Table 1 shows management and employees perceptions across eight TQM critical factors. * and ** indicate significance at 1 and 5 percent levels respectively.*

ANOVA ON TQM CRITICAL FACTORS

In order to determine whether any significant differences exist between management and employees perceptions regarding TQM adoption on the eight critical factors, One-Way ANOVA test was performed for each of the eight TQM critical factors. This analysis can help illuminate the direction and magnitude

of change that both respondents experience with regard to their position in relation to each TQM critical factor. Therefore, it is important for hospital administrators to understand the effect of key critical factors on management and employees perceptions on TQM adoption. From the ANOVA results of Table 2, it is seen that six of the eight constructs namely, teamwork, management commitment, training and employee involvement results show statistically significant different means between management and employees perceptions at $p = 0.01$ level while continuous improvement and customer focus show significant differences at $p = 0.05$ level. The two critical factors that were not significantly different across all critical factors were: organizational culture and processes. For the hospital to adopt TQM, it must explore its goals, constraints, realities, customers' needs, employees' involvement as well as organizational culture. Therefore, for TQM to be successful and sustainable, the benefits of TQM must be visible to management and employees as well as to customers.

Table 2: Results of ANOVA

TQM critical factor		Mean	F-value
Teamwork	Management	3.23	
	Employees	3.78	22.24**
Continuous improvement	Management	3.89	
	Employees	2.45	14.52*
Management commitment	Management	3.71	
	Employees	2.21	17.56**
Training	Management	3.40	
	Employees	2.90	9.27**
Customer focus	Management	3.73	
	Employees	3.57	22.16*
Employee involvement	Management	2.58	
	Employees	3.21	4.20**
Organizational culture	Management	2.78	
	Employees	2.90	11.12
Processes	Management	3.01	
	Employees	2.89	1.25

Significance: *p < 0.05; **p < 0.01; *Table 2 shows management and employees perceptions mean differences on TQM critical factors. The results revealed six significant differences for the TQM critical factors.*

CONCLUSION

This paper examines TQM adoption in a public hospital using management and employees perceptions using eight TQM critical factors. The study shows that both management and employees have displayed some positive attitudes towards the adoption of TQM. Sustained improvements can come only through the commitment and participation of everyone involved. The student reveals that commitment for continual improvement from management is high, however, involvement of employees in the initiation of a corporate culture consistent with the TQM goals is lacking in the hospital. Developing a TQM culture has been found to be another key aspect of successful TQM adoption in the study. In this context it is worth mentioning that the organizational culture in the hospital has not undergone sufficient change at the current time. The adoption of TQM requires employees to reconceptualize the boundaries of their jobs, reshape their attitudes toward quality, and engage in new behaviors. Another key finding to the successful TQM adoption is the determination of customer's needs. Increase in TQM participation by management and employees will help in identifying their customers' needs and expectations. Management and employees' awareness of the customers' needs will help to move the hospital towards a customer-focused orientation. Even though process and organizational culture were not statistically significant, it does not mean that they are not important for TQM adoption. The hospital needs to invest its time and effort to

develop foolproof methods and procedures. It is important that management demonstrate its commitment to the hospital processes and to provide the necessary resources to permit employees to participate in quality improvement activities. Therefore to make the public hospital more responsive to customers' needs while also improving its efficiency and effectiveness, the hospital has to adopt a TQM culture.

Limitations of the Study and Future Research

Since this study is considered as the first attempt to investigate TQM adoption in a public hospital in Mauritius, directions for further research are suggested. A detailed study of the critical success factors influencing the operational performance in the hospital is necessary. Another useful avenue for future research is to carry out a comparative study with other public hospitals to provide good insights on the effectiveness of TQM adoption and successful implementation. One important limitation of this study is that the results of this study are only valid for TQM adopters and give an indication of what performance can be achieved by service organizations that embark on a successful TQM program.

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