CHAPTER TWO

LITERATURE REVIEW

The previous introductory chapter addressed the research problem and presented an outline of the study. The aim of this chapter is to review the literature relevant to the research problem. It reviews the literature on total quality management practices in healthcare, its relationship with hospital performance, ISO 9000 certification and service quality in healthcare services. The literature on the obstacles to the implementation of TQM in healthcare is also reviewed.

Review of Literature on Total Quality Management in Health Care Services

This section will first review the literature relevant to Total Quality Management in healthcare, the influential factors and the critical success factors of TQM conducted in different parts of the world.

TQM in hospitals is a totally integrated programme designed to change hospital culture by Continuous Quality Improvement (CQI) in order to meet patients' satisfaction and staff requirements. The ultimate objective of TQM is to enable hospitals to become better
at service quality along with becoming more competitive and productive.

Lisbeth M. Claus (1991) discussed the essential elements of TQM in light of the healthcare environment. A number of TQM in healthcare models were reviewed and an eclectic implementation model was developed. The model emphasized change steps which an organization needs to undertake as well as a detailed implementation roadmap for healthcare institutions. Success factors and obstacles for TQM implementation in healthcare were also presented.

Monty L Lynn (1991) explained about the 165-bedded Brazoport Memorial Hospital in Lake Jackson, Texas which had adopted Deming's ideas to work in healthcare. The involvement of medical and clinical areas and the effective management of the team concept have been explored in detail.

John Kalafat (1991) described a systematic quality service program implemented in a community hospital as an initial component of a total quality approach. His study summarized that the commitment of top administration was essential to the success of any quality effort, but that commitment must be operationalised through procedures that involve staff at all levels if such efforts were to have measurable effects.
Robert F Casalou (1991) explored the concept of TQM and its application in healthcare organizations, specifically hospitals. The analysis presented the fundamental concepts of TQM and their relevance to hospitals. The role of top management and the governing board in implementing and leading a system based on TQM and factors that are important for successful implementation of TQM were also discussed.

McCarthy, Gerald J. (1991) argued that TQM offers enormous potential for improvements in employee performance, patient and physician satisfaction, and hospital market share. Hospitals that are likely to benefit from TQM are those that face moderate competition stimulating both a sense of urgency and a willingness to try new strategies. Hospitals that should avoid TQM are those that: 1. are downsizing management or staff, 2. have turnover in the executive staff or are headed by chief executives with a control-oriented management style, or 3. need short-term, dramatic changes in order to survive in the market.

The growing shift to total quality management (TQM) and continuous quality improvement (CQI) is confirmed by a new hospitals survey conducted by Eubanks, Paula (1992). Of the 781 respondents, 58.5% say that they are now implementing a CQI or TQM program. Of the
respondents who have not implemented such a program, 84.6% plan to implement it in the next fiscal year. CEOs have found that they cannot lead a TQM initiative without changing their own behavior. Common personal shifts reported by CEOs include letting go of power, setting measurable goals, and using facts to make decisions.

Counte, Michael A et al. (1992) assessed the employee outcomes of a large scale TQM programme with respect to job satisfaction, perceptions of organizational climate, and additional employee opinions about the organization and their immediate work environment. The results support the general contention of TQM proponents, that introduction of TQM programme elicits favorable outcomes among an organization's employees.

According to Brooks, Tessa (1992), the need to improve the quality of care and evidence from individuals who have successfully pursued the total quality management (TQM) route leads to the conclusion that a quality-managed approach is needed in the UK’s National Health Service (NHS). Such an approach would act as a vehicle for bringing together the many current NHS initiatives. It would focus the NHS on the customer and engage all staff in the quality of care, empower staff, give a sense of purpose and identity to the NHS, and increase the NHS effectiveness and efficiency. An NHS-style TQM
approach should be built on such principles as: 1. clear purpose and shared values, 2. leadership from the top, 3. a focus on patients and clients, 4. investment in staff, 5. fact-driven action, and 6. an organization-wide commitment.

An article by Matherly, Laura L., Lasater, H Alan (1992) revealed that at Blount Memorial Hospital (BMH), (Maryville, Tennessee), TQM was defined as a systematic approach to implement lasting change in an organization through the use of: 1. teamwork and participation, 2. statistical methods and analyses, 3. management leadership, and 4. problem solving and process management. BMH is 5 years into a 10-year change. The benefits and improvements generated by the TQM program were numerous. For example, inpatient load has decreased, reflecting the tendency for hospital stays to be shorter, while outpatient load has increased. The value of TQM has been tracked by documenting team successes, and BMH believed that TQM would continue to contribute towards more efficient and effective operations.

Casey, John (1993) studied the process used to identify the benefits of practicing TQM within the Battle Hospital, Reading, Berkshire, UK. The study results found that using the tools of patient information, improving the environment, communication,
training, standard setting, monitoring and auditing, quality improvement teams, patient feedback and clinical costing, the clinical management group ideally enjoyed the benefits of TQM.

Pasternak et al. (1993) described about Lovelace Inc. (Albuquerque, New Mexico), which embarked upon a systematic effort to implement TQM throughout the organization in 1991. The process involved making management aware of TQM concepts, establishing a task force for quality improvement/quality assurance, identifying current practices and preferred practices, and conducting an outcomes-measure study.

In an article by Smith, Howard L, et al. (1993), the fundamental concepts underlying total quality management (TQM) were reviewed, and TQM's relevance to healthcare supervisors was analyzed. Examined were several strategies that healthcare supervisors could adopt for improving service quality, including cultivating a climate for innovation, motivating by example, leading staff to do what is right and to tolerate no service delivery errors, retraining staff, developing control systems, and creating barrier-free organizations. These strategies were examined from the perspective of achieving continuous improvement in health care settings.
In order to improve quality in three different departments of a hospital (operation theaters, X-ray, and medical records), Potter et al. (1994) developed an approach combining quality assurance methods with those of TQM. Their intention was to bring about improved organizational performance through an emphasis on bottom-up rather than top-down methodology and to assess the relative effectiveness of different quality strategies being used within the hospital. Baseline studies of organizational climate and of patient perceptions enabled evaluation of effectiveness.

Using the total quality management/continuous quality improvement approach adopted in many UK hospitals, a training programme for the senior staff of United Christian Hospital of Hong Kong for implementing TQM was described in a study by Cheung, Ma Hok and Koch, Hugh (1994).

A pre-test/post-test field study conducted at a large rehabilitation hospital by Sommer, Steven M, and Merritt, Daryl E (1994) showed significant improvements in work attitudes (job satisfaction, organizational commitment, group climate, and competitiveness) for TQM training recipients after the TQM intervention.

Anderson, Henry C (1994) provided an outline on the cultural changes that were necessary to maximize employees' intellectual power at the Swedish American
Hospitals in Rockford, Illinois, and explained how these changes were developed to reflect TQM philosophies. It is concluded that team work is promoted through team activity, and employee empowerment will maximize intellectual power that will in turn benefit the customer.

TQM is discussed by Dershin, Harvey (1994) as a way for health care providers to personalize, customize, and integrate healthcare in a mass production atmosphere wherein patients are moved along an assembly line of sorts from the emergency room to X-ray to the operating rooms.

Joss, Richard (1994) has described about a case in which between October 1990 and December 1993, the Centre for the Evaluation of Public Policy and Practice at Brunel University in the UK had undertaken an evaluation of the introduction of total quality management (TQM) at a sample of National Health Service (NHS) demonstration sites and at two commercial companies. The evaluation showed that there were clear factors that predicted successful implementation of TQM.

Gustafson, David H, Hundt, Ann Schoofs (1995) has explained an effort to understand what top managers need to fully embrace TQM and make it the central focus of their work. Twenty-three health care leaders who, with varying levels of success, have attempted TQM
implementation were interviewed about barriers to implementing TQM in organizations. Results indicated that lack of evidence of TQM success was a commonly listed barrier. In response, research in the innovation literature that identifies factors from successful efforts to innovate and improve was examined. Applied to TQM principles, innovation findings overwhelmingly supported customer and quality mindedness. To a lesser degree, other principles were upheld, suggesting future research in the area.

Michael A Counte et al. (1995) discussed the major reasons for assessing the TQM impact, what needs to be measured during assessment activities, and significant methodological issues that can confound the evaluation of TQM effects. An audit framework was described that could be used to depict the types of effects that TQM might have on the performance of healthcare organizations. Assessment guidelines were offered that would benefit the future efforts of institutional managers and health service researchers in their attempts to determine whether TQM activities do in fact make a significant difference.

A survey conducted by Binsham Lin and Jennifer Clousing (1995) to investigate the status of TQM efforts within hospitals in Northern Louisiana provided mixed results about the practices of TQM in these hospitals.
The authors found that even though TQM appeared to be doing well in the hospitals there was some concern about the future of TQM in healthcare owing to limited top management support and downsizing of quality assurance staff.

An article by Kohli et al. (1995) explained how TQM could be used to facilitate the co-ordination and optimization of a medium sized, multi-specialty, regional hospital's accident and emergency department and pathology laboratory operations to improve turn around time, and thus patient services. Utilization of analytical tools such as pareto diagrams and control charts to ascertain quality standards and meeting customer specifications were recommended by the authors. Huq, Ziaul (1996) offered a generic tool to evaluate the health of TQM programmes in hospitals. After developing the tool, which consisted of eighteen measurable TQM dimensions, namely, quality mission statement, customer focus, management commitment, familiarity, measures of costs of prevention, causes of quality variation, worker empowerment, communications, performance appraisal system, statistical evidence of quality, customer feedback, commitment for continual improvement, problem solving, consensus building, comparison of actual with planned performance, education and training, supplier development and quality circles. It had been applied to
the study of the TQM programmes in six mid-western US hospitals.

Brashier, Leon W et al. (1996) examined the theory of TQM/CQI in the health care industry by concentrating primarily on the first three years of TQM/CQI start-up. Traditional TQM theory was compared to that in the healthcare industry, and healthcare industry case studies were examined and contrasted. Based on the analysis of the review of literature, a model was developed to implement and maintain a TQM/CQI programme in the healthcare industry.

Motwani, Jaideep, et al. (1996) examined the issue of implementing TQM/CQI programmes in the healthcare industry by grouping the prescriptive literature into four research streams. Based on the literature, a strategic programming model for implementing TQM/CQI in the health care industry was suggested. Finally, issues relating to TQM in the healthcare sector, which need to be addressed within each research stream in the future, were provided.

Boerstler, Heidi (1996) examined quality implementation efforts by conducting in-depth site visits at ten study hospitals that were part of a larger survey investigation. Key objectives of the site visits included observing aspects of the implementation process that were difficult to capture in objective
questionnaire items and identifying best practices. The site visits revealed some support for existing views of the implementation process, but also some surprising departures from traditional perspectives.

A study by A K Aggarwal and Mohamed Zairi (1997) examined the role of TQM in the development of effective primary care delivery. The authors conclude that even at the General Practitioner level, TQM was presented as a totally compatible concept for the development and delivery of healthcare services.

The purpose of a research by Rabih, Joyce (1998) was to advance research already conducted in the Canadian healthcare industry with regard to TQM implementation, by identifying the similarities and differences between TQM literature and TQM implementation in hospitals.

A study by Yasin, Mahmoud M, et al. (1998) examined the literature related to Total Quality Management (TQM) and Benchmarking (BM) applications in healthcare. Recommendations for healthcare managers and administrators, as they chart operational and strategic directions for their organization, were provided. In this context, a conceptual framework which stresses the significance of viewing the healthcare organization as an open system was provided. The framework underscored the fact that TQM and benchmarking efforts should not be viewed in isolation. Rather, these efforts should be
viewed as an integral part of the operational and strategic facets of the healthcare organization.

A study by Andrea Brooks and Gerald Zeitz (1999) of 507 nurses in twelve hospitals found that perceived procedural justice mediated the relationship between perceived Total Quality Management traits and two dimensions of commitment to the organization. The paper suggested that hospital administrators attempting to implement TQM programs would do well to project a clear vision for the TQM programme and impart a sense of fairness and correct procedure if they wish to win full employee commitment to the program.

Patrick Asubonteng Rivers and Sejong Bae (1999) explored the history of information systems in healthcare organizations and discussed the gaps in the current information system. They recommended for altering the current infrastructure so that it will be aligned with the TQM environment of the hospital.

A quasi-qualitative study by Ziaul Huq and Thomas N Martin (2000) investigated eight workforce cultural factors in seven Midwestern hospitals. Results of the study revealed that only one of the seven hospitals successfully implemented TQM/CQI. The eight workforce cultural dimensions used in this study include (a) familiarity with TQM, (b) measures of cost of quality, (c) employee empowerment, (d) performance appraisal
system, (e) commitment to continual improvement, (f) problem-solving approach (g) activities to remove barriers for reaching consensus, and (h) education and training. These cultural dimensions were selected from a framework of eighteen theoretical TQM dimensions previously field-tested by Huq (1995).

Overetveit (2000) stated that the components of TQM in healthcare include customer focus (internal and external), process analysis (simple methods used in a systematic way to analyze quality problems using statistical process control methods), quality project teams (team building and team work), using data to identify and analyze problems and to investigate the results of change. He argued that change practice is a specific element in healthcare. Owing to the complexity and autonomy in healthcare profession change practice is the most difficult of the components to carry out in health care organizations. Physicians' involvement is an essential component, and special training for them is required which connects quality methods with applied medical research. He also noted that the development of a people-centered, quality-based culture within the healthcare system is necessary for implementing TQM.

A study by Paul Kunst and Jos Lemmink (2000) revealed that there was a positive link between progress in TQM and perceived service quality by customers. They
conclude that progress in TQM leads to higher business performance of the hospital, indicating the efficiency/cost effect, and to a higher perceived service quality by patients, indicating the effectiveness.

Isaiah O. Ugboro and Kofi Obeng (2000) surveyed organizations that have adopted TQM to determine the relationship between top management leadership, employees' empowerment, job satisfaction, and customers' satisfaction. The results revealed positive correlation between top management leadership, employee empowerment, job satisfaction, and customer satisfaction. Effective strategies for achieving employee empowerment and job satisfaction, together with top management leadership roles in a TQM environment, were also identified and discussed.

A study by John Ovretveit (2000) defined TQM in healthcare and considered examples and results of TQM in European healthcare. It distinguished between team projects using TQM methods and organization-wide TQM programs, and found more evidence for the success of projects than for programs. The paper discussed whether the differences between healthcare and many other industries explain the mixed results, and considers the prospects for future TQM programs in European healthcare.
The findings by John Ovretveit (2001) from the Norwegian total quality management experiment in six hospitals were that TQM could not be applied in its pure form in public healthcare services to ensure integration. The paper described these hospitals' approach to integrate the different projects and systems which were stimulated by their initial quality programs. The paper described the integrated quality development approach which characterized these programs.

In a case study, Uche Nwabueze (2001) suggested a common sense, practical Systems Management Approach to the implementation of TQM in healthcare. According to the paper, no organization can succeed in TQM unless its structure, strategy and systems are aligned with staff attitudes, skills, and effective management style; thus providing organizational synergy that is critical for survival.

Gary J Young et al. (2001) reported findings from a study that combined two theoretical perspectives-top manager and network/institutional-to examine the factors influencing organizations to adopt innovative management practices. Study results indicated that top manager and network/institutional factors were important determinants of whether and when organizations adopt innovations.
Kay Downey-Ennis, and Denis Harrington (2002) described the details of some forthcoming research aimed at exploring the issues and outcomes of using the European Foundation for Quality Management (EFQM) excellence model to support the search of excellence in Irish healthcare.

Ching Horng and Fenghueih Huarng (2002) collected survey data from seventy-six hospitals in Taiwan to test a multilevel model addressing the issue of TQM adaptation as one type of organizational adaptation. Results from the study indicated that both the nature of the network relationship and prospector strategy was positively and significantly related to the extent of TQM adaptation. The overall results seem to suggest that larger hospitals and non-profit hospitals were in a better position to utilize the network relationship than the smaller hospitals and for-profit hospitals.

Sunhee Lee et al. (2002) assessed systematically the implementation status of CQI in Korean hospitals, which have a relatively short experience of CQI concepts and were in the process of undergoing many organizational changes subsequent to the adoption of CQI. The major findings of their study confirmed that the use of scientific CQI techniques and quality information systems were the most critical elements that help the organization perform active CQI implementation, although
structural support and an organizational culture that was compatible with the CQI philosophy also played an important role.

An article by Brent C James (2002) addressed a common question that hospital management teams have raised as they had restructured their organizations along quality lines: how to involve physicians in TQM efforts? It first described two different roles that independent physicians played within a hospital and related those roles to a hospital's underlying business structure. It then listed a series of principles regarding physicians' behavior in each of the two roles. Finally, it argued that the critical issue surrounding physician involvement in TQM was ownership—whether independent physicians see quality management as a useful tool that would allow them to improve the care they deliver or as a mechanism through which hospital management could control their actions.

Susan Meyer Goldstein, and Sharon B Schweikhart (2002) examined the relationships among the constructs in the Baldrige Award Health Care Criteria framework to investigate whether quality management systems were related to organizational results and customer satisfaction in hospitals. Measures for the nineteen dimensions of the Baldrige Criteria were obtained from two hundred and twenty US hospitals. This study provided
empirical evidence that focusing on the content addressed in the Baldrige Criteria lead hospitals to improvement on some dimensions of performance.

A study by Paola Adinolfi (2003) reported the findings of a qualitative research study that investigated, through multiple in-depth case studies of fourteen Italian and Irish hospitals, the real extent to which Kanji's TQM model was adopted within health organizations and the way it was put into practice. The research findings revealed considerable commonalities between the two countries in the impact of quality revolution.

The aim of the research by Huseyin Arasli, and Lillia Ahmadeva (2004) is to show the way that public and private hospitals in Cyprus function, and answer the question of how to increase total quality using public opinion in the healthcare industry in developing countries. Finally, having compared the total quality efforts of public and private hospitals in the Famagusta region of Cyprus, the study concludes that the public sector is in a much worse position than the private sector in terms of total quality.

Lee Revere, et al. (2004) examined Six Sigma as a strategy for improving service which tried to reduce defects and therefore improve a firm's marketing position. The paper looked at how this had been applied
in business and then examines its place in healthcare. It concluded that the few healthcare institutions that have implemented Six Sigma have done so in the interest of business and not so much in the area of patient care, where it was proposed that it would improve things dramatically.

Kay Downey-Ennis et al. (2004) examined the human resource issues involved in managing the quality dynamic within Irish healthcare and considered some of the challenges involved in applying the quality philosophy in healthcare context.

René Schalk, Wim van Dijk (2005) assessed the relationship between quality management and employee commitment. The paper analysed the state of affairs with respect to TQM programs in The Netherlands based on the literature and interviews with key informants. An approach was described that tried to integrate employee commitment and quality management based on the concept of employees' psychological contracts with their organisation.

A research study conducted in India by G D Sardana (2003) attempted to present a conceptual framework to evaluate the performance of hospitals, both in the private and public sectors. A classification had been proposed for different ownership styles viz., the state owned, the private and the trust owned. Under each of
these categories, nine classes of hospitals had been proposed based on the size of the institutions. A grading system indicating the holistic performance of hospitals was also proposed.

A study by Mohanty Rajesh et al. (2001) tried to give an insight to the Hospital Information System implemented at the Tata Main Hospital, Jemshedpur, India, which was being fully utilized to provide quality service.

In another study by J P Sahu (1992) at three non-teaching hospitals, analysis of three components, namely, input-output factors, attitudinal factors of the hospital personnel and the quality of services which was assessed through the patients' perception were presented. High patient satisfaction and favorableness of the attitudinal factors were recorded in the voluntary hospital, while industrial and state government hospitals lagged behind in these components of health care service.

B Krishna Reddy et al. (2002) attempted to study six sigma aspects in the ultrasound department of a hospital. The study findings indicated that a significant reduction in waiting time of patients leading to a substantial improvement in quality of service at ultrasound department could be achieved through six sigma process.
A field survey conducted by Suresh Balakrishnan and Anjana Iyer (1997) at three government and three private hospitals in Karnataka revealed positive ratings from patients of government hospitals (31%), corporation hospitals (20%), and mission and private hospitals (57%). Speed money paying was observed in government hospitals (51%), corporation hospitals (87%). The cleanliness of hospitals was reported to be lowest in the government hospitals (40%), while it was 73% for mission hospitals and 81% for private hospitals.

In a cross-sectional study, Rick K Homan and K R Thankappan (1999) provided a description of the structure of the healthcare sector in Trivandrum, Kerala, India. They examined patients’ perception of quality, factors affecting the choice of the provider, evaluated the financial burden of care and analyzed the inputs and performance of both private and public hospitals in the district.

Khan M E and Tamang A K (1987) reported a comparative study of three states (Bihar, Gujarat and Himachal Pradesh) about the quality of health services. An analysis of people’s perceptions about the functioning of the primary health centre/ sub centre and the reason for its non-utilization was also reported.

In a cross sectional study in Rajasthan by Finch b. Cedric and Rajesh Misra (2000), the distribution pattern
and the profile of the private healthcare services was reported. The changing pattern of the hospitals and the economic burden on the families due to healthcare expenses and people’s perceptions about private healthcare services in the state were assessed.

**REVIEW OF LITERATURE ON ISO-9000 CERTIFICATION IN HEALTHCARE SERVICES**

The research literature on external quality assurance for healthcare services has revealed numerous models by different researchers across the world. ISO 9000 is viewed as the basis for quality management since it addresses the issue of setting and implementing a management system that produces consistent products at a particular level of quality (Voehl et al. 1994).

Lamprecht (1992) provided exceptional insight into the process of ISO 9000 registration. The documentation chronicles what a firm does and who is accountable at each step of its quality systems processes. In this respect, ISO registration can be implemented concurrently with a TQM programme (Ho, 1995).

Smith G (1995) described how Lifecare NHS Trust established core values and an ISO 9000 quality framework as the foundation for patient care quality improvement. His work discussed a procedural approach to
ensure that Lifecare defined clearly the requirements of the management of every aspect of its care system. It also presented a framework for total quality management and process improvement of care delivery.

Van der Bij J D, Vollmar T, and Weggeman M C (1998), have argued that in many cases, based on the ISO 9000 standards, a more situational approach would be preferable. A global framework for a quality system in a professional service had been presented and compared with the restrictions for quality systems in hospitals, following the PACE- standards in Netherlands.

Niek Klazinga (2000) has provided an analysis of the way the four models viz. Accreditation, ISO, EFQM and VISITATIE have been adopted and adapted in European healthcare systems over the past decade.

The usefulness of ISO certification was studied to ensure quality in the structures and organizations involved in the Italian healthcare system (Pasini E et al. 1998), in a Swiss hospital (Eicher E, 1997).

Giancarlo Ruscitti, Guido Palchetti et al. (2000) described the ISO 9000 quality assurance projects of Paediatric Hospital Bambino Gesu, a non-profit hospital in Rome which chose a systematic approach to the dynamics of administration, with emphasis on managerial procedures.
Willy Quenon (1999) has explained the quality system at Mouden District Hospital, Switzerland that has been certified to ISO 9001 for the hospital's entire range of processes, except for the purely medical ones.

The American Legion Hospital in Louisiana, USA, in order to seek a better mechanism to ensure optimal performance opted for ISO 9000 Certification (Beth Zaunbrecher, 1996). He emphasized that the certification process had inspired a heightened effort by employees to focus on the proper performance of procedures and it had made their operations more efficient.

Hesham Magd & Adrienne Curry (2003) have provided competing views on the concepts of TQM and ISO 9000. They have shown that both the concepts compliment each other and ISO 9000 should be used in association with TQM to secure organizational success.

**REVIEW OF LITERATURE ON SERVICE QUALITY**

The research literature on service quality has thrown numerous models by different researchers across the world. Healthcare service quality is multi dimensional. The multi dimensionality of healthcare quality was supported by Griffith and Alexander (2002). Given the consumers' propensity to switch service providers rather than complain, it is of paramount importance for hospitals to be acutely aware of what the general public
looks for while evaluating the professional service of a particular hospital.

Lehtinen and Laitamaki (1985) present a holistic view on how to measure, monitor, and operationalise customer perceptions of service quality in healthcare organizations. John (1989) argues that there are four dimensions of healthcare service quality: the curing dimension, the caring dimension, the access dimension, and the physical environment dimension.

Perception of hospital care is derived from a set of criteria based on perceptual cues that patients use. Parasuraman et al. (1988) conceptualized perceived service quality as "a global judgment, or attitude, relating to the superiority of the service". Also, it is not the direct level of service provided per se that determines the quality of service, but quality is the congruence of the consumer's expectations and perceptions. Among the most popular assessments tools of service quality is SERVQUAL, an instrument designed by the marketing research team of Parasuraman et al. (PZB, 1986). SERVQUAL model was developed based on a marketing perspective with the support of the Marketing Science Institute (Parasuraman, Zeithml and Berry, 1986).

Reidenbach and Sandifer-Smallwood (1990) developed an instrument based on the original ten-dimension questionnaire developed by Parasuraman et al. (1985).
They analyzed patient service needs by examining the differing perceptions of service held by patients in three basic hospital settings: emergency room services; inpatient services; and outpatient services. Differential impacts were found in all the three hospital settings.

Babakus and Mangold (1992) empirically evaluated SERVQUAL for its potential usefulness in a hospital service environment. The completed perceptions and expectations scales met various criteria for reliability and validity. Suggestions were provided for the managerial use of the scale and a number of future research issues were identified.

An empirical study in a Belgian hospital by Vandamme, R. and Leunis, J (1993) has been reported on the development of an appropriate multiple-item scale to measure hospital service quality. Discrepancies between SERVQUAL and the dimensions obtained from their study were discussed in some detail, along with the reliability and validity properties of the scale.

Bowers et al. (1994) studied the five attributes of quality from SERVQUAL model. Their results from a quantitative analysis lend support to qualitative conclusions. Caring and communication were found to be significant. Three of the generic SERVQUAL dimensions
were found to be related significant to patient satisfaction: empathy, responsiveness and reliability.

Anderson (1995) measured the quality of services provided by a public university health clinic, using a fifteen-item instrument representing the five dimensions of SERVQUAL. According to her findings, all the five dimensions measured negatively, assurance being most negatively measured. Based on these results, she made some recommendations for budgeting future quality improvement projects.

Youssef et al.(1995) measured service quality in West Midlands NHS hospital and in all the five dimensions of SERVQUAL that were measured found that patient’s perceptions failed to meet their expectations. Another study by Youssef (1996) revealed reliability as the most serious problem facing the NHS hospital providers that were involved in their study.

A study by Sewell (1997) in the NHS hospitals showed reliability as the most important dimension, followed by assurance. Empathy and responsiveness were found to be of equal importance, while tangibles were found to be the least important dimension.

Lim and Tang (2000) attempted to determine the expectations and perceptions of patients in Singapore hospitals through the use of modified SERVQUAL that included 25 items representing six dimensions; namely,
tangibles, reliability, assurance, responsiveness, empathy, and accessibility and affordability. Their study revealed the existence of an overall service quality gap between patients' perceptions and expectations.

Naceur Jobnoun and Mohammed Chaker (2003) compared the service quality rendered by private and public hospitals in the United Arab Emirates (UAE). They used the ten-dimensions instruments developed by Parasuraman et al. (1985) namely, tangibles (7 items); accessibility (5 items); understanding (3 items); courtesy (3 items); reliability (2 items), security (2 items); credibility (2 items); responsiveness (7 items); communication (3 items) and competence (5 items). Their study revealed that there was a significant difference between private and public hospitals in the overall service quality.

The review of various service quality models by Nitin Seth et al. (2005) revealed that the service quality outcome and measurement is dependent on the type of service setting, situation, time, need etc factors. In addition to this even the customer's expectations towards particular services are also changing with respect to factors like time, increase in the number of encounters with a particular service, competitive environment, etc. The paper critically examined nineteen different service quality models reported in the
literature during the period (1984-2003), covering the aspects of conventional services to web interacted services. Each of the following models is representative of a different point of view about services:

1. Technical and functional quality model (Gronroos, 1984)
2. GAP model (Parasuraman et al. (1985)
3. Attribute service quality model (Haywood-Farmer, 1988)
4. Synthesized model of service quality (Brogowicz et al. 1990)
5. Performance only model (Cronin and Taylor, 1992)
6. Ideal value model of service quality (Mattson, 1992)
7. Evaluated performance and normed quality model (Teas, 1993)
8. IT alignment model (Berkley and Gupta, 1994)
9. Attribute and overall affect model (Dabholkar, 1996)
10. Model of perceived service quality and satisfaction (Spreng and Mackoy, 1996)
11. PCP attribute model (Philip and Hazlett, 1997)
12. Retail service quality and perceived value model (Sweeney et al. 1997)
13. Service quality, customer value and customer satisfaction model (Oh, 1999)
15. Internal service quality model (Frost and Kumar, 2000)
16. Internet banking model (Broderick and Vachirapornpuk, 2002)
17. IT-based model (Zhu et al., 2002)
18. Model of e-service quality (Santos, 2003)

From the review, it is clear that majority of the models and definitions support the view of evaluating service quality by comparing their service quality expectation with their perceptions of service quality they have experienced.

REVIEW OF LITERATURE ON OBSTACLES TO TQM PRACTICES IN HEALTH CARE SERVICES

Even though there are many critical factors that influence the effective implementation of TQM practices in healthcare, there still exist some barriers in healthcare organizations when TQM is being implemented. This section reviews literature on the obstacles for the successful implementation of TQM programme in hospitals. The rigid hierarchical and authoritative structures in organizations do not allow the employees to make their suggestions for change, there by stand as barriers for TQM implementation.

Robert J. Masters (1996) lists eight barriers that plague all types of organizations. The barriers being: lack of management commitment, inability to change
organizational culture, improper planning, lack of continuous training and education, incompatible organizational structure and isolated individuals and departments, ineffective measurement techniques and lack of access to data and results, paying inadequate attention to internal and external customers, and lastly, inadequate use of empowerment and team work.

According to Hubiac & O’Donnell (1996) the main reasons for the failure of TQM programs are individualism, competitiveness, linear thinking and problem solving orientation. Mc Adam & Mc Known (1999) argued that the TQM practice could put severe financial pressure on small businesses, as these tend to have fewer financial resources. This finding is supported by the study of Wilkinson, Redman & Snape (1994) who pointed out that cost constraints and lack of resources were the biggest barriers for implementing TQM.

Meyer (1998) reported that while many quality management concepts and tools used in other industries are applicable to hospitals, various differences between healthcare and other industries remain and must be addressed. The multiple customers of healthcare increase the degree of complexity in improving efficiency and effectiveness in hospitals, thereby increasing the complexity of applying the TQM to healthcare organizations.
Reeves, Carol A and Bednar, David A (1993) reports a study exploring the difficulties that top and middle managers perceive as possibly hindering successful TQM implementation in a large Veterans Administration medical centre in the southwestern US. It was found that top managers focused on organizational implementation obstacles, while middle managers focused on operational and process barriers to implementation. Failure to accurately define and specifically differentiate these barriers across hierarchical levels further hindered effective TQM implementation.

Charles Zabada et al. (1998) present a significant review of the obstacles that face healthcare organizations that undertake TQM implementation. The authors found that the most difficult barrier to implementing TQM in hospitals is their traditionally bureaucratic, complex and highly departmentalized structure with its ensuing culture and leadership style. The unique relationship the hospitals have with physicians, the conflict between hospital management philosophies and TQM philosophies, the existing quality assurance programs and union-management relationships were also found to be the obstacles for TQM implementation in hospitals.

A study by Linda Williams Zimmerer et al. (1999) explores the reasons for the limited success of TQM/CQI,
Business Process Reengineering, Time-Based Competition and benchmarking within the healthcare industry. Sixteen barriers to change are identified, possible countermeasures to those barriers are outlined and two conceptual frameworks are offered as possible facilitators of change for the healthcare industry.

Ching-Chow Yang (2003) conducted a survey for a hospital to identify the major obstacles, which might be incurred while TQM is implemented in the healthcare industry. According to this study, an organisation's functional-hierarchical structure, leadership style (professionalism with authority), organization culture (hierarchical, bureaucratic, and authoritarian), and professional autonomy etc. are barriers for TQM implementation. A compact and applicable integrated model for TQM implementation has been developed.

Gopal K. Kanji and Patricia Moura e Sa (2003) presented a holistic and integrated system of performance measurement which is expected to overcome some of the deficiencies (e.g. insufficient support of health professionals, the lack of leadership commitment and the tendency to look at TQM in isolation rather than putting it at the core of the institution's strategy), contributing to sustaining the TQM efforts and, thus, to achieving organizational excellence.
Cultural obstacles are the hardest to remove among all the obstacles of TQM in healthcare. In a study by Shortell (1995b) several obstacles to the implementation of TQM in healthcare are described. Firstly, healthcare organizations tend to focus on the needs of professionals than on the needs of external customers. Secondly, large healthcare organizations exemplify bureaucratic cultures that resist employee empowerment. Thirdly, there is lack of senior management commitment to TQM practices in most health care organizations.

A research study by Overtveit (2000) found that the first and foremost difficulty for hospital to implement TQM was cost of investment. The findings by Ennis & Harrington (1999) and Shortell et al. (1995) support this study. The second obstacle was management resistance towards empowering employees and this result is consistent with that of Shortell et al. (1995). Another barrier found was professional resistance towards team work or learning new methods. Creating a conducive and supportive environment for the implementation of TQM was another most frequently mentioned barrier by many researchers (McNabb & Sepie, 1995; Shin, Kalinowski & EI-Encin, 1998). The obstacles to TQM practice are summarized in Table 2.1.
Table 2.1: The Obstacles to TQM Practice

<table>
<thead>
<tr>
<th>TQM obstacles</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Resistance to change</td>
<td>Ennis &amp; Harrington (1999); Overtveit (2000); Redman et al. (1995); Wilkinson et al. (1997); Yasin et al. (1998)</td>
</tr>
<tr>
<td>5. Lack of empowerment</td>
<td>Overtveit (2000); Shortell et al. (1995)</td>
</tr>
<tr>
<td>6. Insufficient resources</td>
<td>Barness et al. (1993); Ennis &amp; Harrington (1999); McAdam &amp; McKeown (1999); Wilkinson et al. (1994); Yasi &amp; Alavi (1999)</td>
</tr>
<tr>
<td>7. Poor communication</td>
<td>Reinertsen (1995)</td>
</tr>
<tr>
<td>8. Under involvement of</td>
<td>Barness et al. (1993); Overtveit (2000); Shortell et al. (1995b); Yasin et al. (1998); Zabada et al. (1998)</td>
</tr>
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<td>physicians</td>
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</table>

Summary

This chapter reviewed the relevant literature on Total Quality Management (TQM) practices in healthcare and its relationship with hospital performance. Furthermore, the literature on ISO 9000 certification and service quality in healthcare services has been reviewed. It also focused on the obstacles to the implementation of TQM in healthcare services.