

**Notre Dame University  
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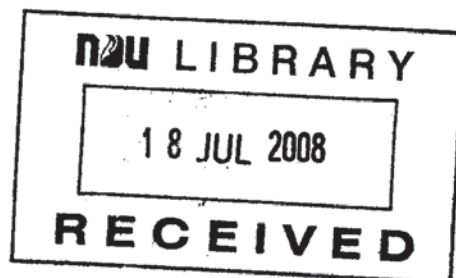
**&**

**Bordeaux Business School  
Institute of International Business**

**Joint Commission versus  
Lebanese Ministry of Health:  
Quality assessment and analysis of dietary standards  
The Case of Saint Georges Hospital**

**A Thesis Submitted in Partial Fulfillment of the  
Requirements for the Joint Degree of  
the Master of Business Administration (M.B.A.) and  
the Master of Science in International Business (M.I.B.)**

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## Approval Certificate

### Joint Commission versus Lebanese Ministry of Health: Quality assessment and analysis of dietary standards The Case of Saint Georges Hospital

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## DECLARATION

I hereby declare that this Thesis is entirely my own work and that it has not been submitted as an exercise for a degree at any other University.

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## ABSTRACT

Changes have been the password of the healthcare industry for the last three decades. It is known that the healthcare field is affected by three factors: quality, cost and operations (standard of care). These three factors are affecting each other and they are in constant change. Customer demand for better quality of care and safe patient care is increasing; new technologies and medical innovation are emerging every minute. Therefore change is inevitable in a modern healthcare system if standards of patient care are to be maintained and improved. In all businesses and in the healthcare business also, customers are now demanding higher quality, lower costs, and faster service times. To meet these requirements, healthcare organizations must continually improve their overall performance. In light of the emergence of a substantial number of hospitals and the increased competition that lies ahead, quality of patient services especially dietary services have become an important issue.

This thesis deals with the problem of improving quality of dietary services in Saint Georges Hospital –Achrafieh through a comparison between the Ministry of Health (MOH) dietary standards and those put by the Joint Commission for Accreditation of Health Organizations (JCAHO); also what gaps have to be filled and whether such standards are applicable to our culture and environment. Improvement of quality of dietary services pre and post accreditation implementation is also studied. The results show that JCAHO standards stress on the process of patient care whereas the MOH standards stress more on food service management standards. Thus both aspects, patient care and food service management, have to be taken into consideration when assessing quality in order to come up with standards that complement each other and both lead to improvement of quality in any dietary department. Moreover implementing standards in the hospital, specifically in the dietary department, significantly improved the outcome of quality of services given as shown through the statistics presented.

**Keywords:** standards, Ministry of Health, JCAHO, competition, quality

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## CHAPTER I

### INTRODUCTION

#### 1.1 General Background about the topic

Changes have been the password of the healthcare industry for the last three decades. It is known that the healthcare field is affected by three factors: quality, cost and operations (standard of care). These three factors are affecting each other and they are in constant change. Reimbursement mechanisms are changing, new payment and insurance schemes; customer demand for better quality of care and safe patient care is increasing; new technologies and medical innovation are emerging every minute. Therefore change is inevitable in a modern healthcare system if standards of patient care are to be maintained and improved. "In today's highly competitive environment, the ability to change rapidly, efficiently and almost continually will distinguish the winners from the losers". (Lorenzi and Riley, 2000). The Healthcare industry is adjusting and readjusting itself to change everyday in order to meet customers' requirements and increase market share. In all businesses and in the healthcare business also, customers are now demanding higher quality, lower costs, and faster service times. To meet these requirements, healthcare organizations must continually improve their overall performance. Furthermore, with the pressure imposed on managers to plan the effective allocation of resources to ensure high quality, standards are maintained while decreasing costs, quality management became an integral element of the strategic plan of any type of the service industry and especially to the healthcare organizations. (Anderson et. al 1996).

For all the above mentioned reasons, Healthcare managers realized that after successfully implementing Quality and Total Quality Management concepts in other industries, if introduced in Healthcare, this concept will help them solve their problems through improving service and productivity, decreasing overall costs, and increasing market share (Stamatis, 1996).

Ever since Deming started training the Japanese about Quality he emphasized the importance of market research. He has always preached that quality should be part of the service, one of its components, and not just searching for errors and removing them (Walton, 1986).

### 1.2 Need for the study

In light of the emergence of a substantial number of hospitals and the increased competition that lies ahead, quality of patient services especially dietary services have become an important issue.

So the research problems and objectives deal with the ways of how to improve quality of dietary services in Saint Georges Hospital –Achrafieh through a comparison between the Ministry of Health dietary standards and those put by the Joint Commission for Accreditation of Health Organizations (JCAHO); also what gaps do we have to fill and whether such standards are applicable to our culture and environment.

### 1.3 Purpose of the study

The importance of the topic lies in improving dietary services and creating a more competitive environment with other hospitals through a comparative study with advanced countries in order to improve quality, decrease cost and increase patient satisfaction.

### 1.4 Brief Overview of all Chapters

In the following chapters, I will be talking about Total Quality Management, its advantages and disadvantages and the history and quality in Saint Georges Hospital. I will be further broadening the subject by comparing the Joint Commission for Accreditation of Hospital Organizations standards with those of the ministry of Health in Lebanon drawing conclusions about how to improve managerial issues related to dietary services. A small survey showing the impact of quality accreditation standards on patient satisfaction pre and post accreditation will be also presented.

## Chapter II

### Literature Review

To begin with, quality has long been the building block of any product or service offered. And before tackling the ways about improving quality of a product or a service in the health care sector, one has to define what quality is, its advantages, disadvantages and history in order to better understand the whole concept.

#### 2.1 Total Quality Management (Definition)

Total Quality Management (TQM) is composed of three paradigms:

- Total: Involving the entire organization, supply chain, and/or product life cycle
- Quality: With its usual definitions, with all its complexities
- Management: The system of managing with steps like Plan, Organize, Control, Lead, Staff, provisioning and suchlike

As defined by the International Organization for Standardization (ISO):

"TQM is a management approach for an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society."

One major aim is to reduce variation from every process so that greater consistency of effort is obtained. (Royse et al.,2006)

Total Quality Management is the management of total quality. We know that management consists of planning, organizing, directing, control, and assurance. Then, one has to define "total quality". Total quality is called total because it consists of three qualities: quality of return to satisfy the needs of the shareholders, quality of products and services to satisfy some specific needs of the consumer (end user) and

quality of life - at work and outside work - to satisfy the needs of the people in the organization. This is achieved with the help of upstream and downstream partners of the enterprise. To this, we have to add the corporate citizenship, i.e. the social, technological, economical, political, and ecological (STEPE) responsibility of the enterprise concerning its internal (its people) and external (upstream and downstream) partners, and community. Therefore, total quality management goes well beyond satisfying the customer, or merely offering quality products (goods and/or services). Note that we use the term consumer or end customer. The reason is that in a Supply Chain Management approach, we do not have to satisfy our customers' needs but the needs of our customers' customers all the way to the end customer, the consumer of a product and/or service. By applying this definition an enterprise achieves Business Excellence, as suggested by the Malcolm Baldrige (American) and the EFQM (European) Performance Excellence Models. To do that, one has to go well beyond ISO 9000 Standards series as suggested by these standards (ISO 9001, then ISO 9004, then Total Quality).

It is also worth mentioning the ISO 22000 international standard which specifies the requirements for a food safety management system and involves the following elements:

- interactive communication
- system management
- prerequisite programs
- Hazard Analysis and Critical Control Points (HACCP) principles

Communication along the food chain is essential to ensure that all relevant food safety hazards are identified and adequately controlled at each step within the food chain. This implies communication between organizations both upstream and downstream in the food chain. Communication with customers and suppliers about identified hazards and control measures will assist in clarifying customer and supplier requirements.

Recognition of the organization's role and position within the food chain is essential to ensure effective interactive communication throughout the chain in order to deliver safe food products to the final consumer.

The most effective food safety systems are established, operated and updated within the framework of a structured management system and incorporated into the overall management activities of the organization. This provides maximum benefit for the organization and interested parties. ISO 22000 has been aligned with ISO 9001 in order to enhance the compatibility of the two standards.

ISO 22000 can be applied independently of other management system standards or integrated with existing management system requirements.

ISO 22000 integrates the principles of the (HACCP) system and application steps developed by the Codex Alimentarius Commission. By means of auditable requirements, it combines the HACCP plan with prerequisite programmes. Hazard analysis is the key to an effective food safety management system, since conducting a hazard analysis assists in organizing the knowledge required to establish an effective combination of control measures. ISO 22000 requires that all hazards that may be reasonably expected to occur in the food chain, including hazards that may be associated with the type of process and facilities used, are identified and assessed. Thus it provides the means to determine and document why certain identified hazards need to be controlled by a particular organization and why others need not.

During hazard analysis, the organization determines the strategy to be used to ensure hazard control by combining the prerequisite programmes and the HACCP plan.

In comparison with ISO 9001, the standard is a more procedural orientated guidance than a principle based one. Apart from that, ISO 22000 is an industrial-specific risk management system for any type of food processing and marketing, which can be closely incorporated with the quality management system of ISO 9001.

## **Total Quality Management (History)**

The Quality movement dates back to medieval Europe and since that time it has developed from a narrow scope linked to a set of product characteristics, to a broader scope where every element in the organization is related to quality and where the customer plays the important role of defining quality . Throughout the past history of quality, a lot of thinkers, scholars and pioneers talked about the quality and its evolution through time, and especially after the industrial revolution. According to Garvin (1988) the evolution of quality can be divided into four eras: Inspection, Statistical Quality Control, Quality Assurance, and Strategic Quality Management. Following is a brief summary of every era:

### **1) Inspection:**

This era started in the late 13<sup>th</sup> century with the organization of craftsmen into unions called "guilds". These guilds were responsible for putting rules for product and service quality that were enforced by inspection committees who used to mark the faultless goods with special symbols. Later these marks were perceived as a proof for quality by the customers through the medieval Europe. The United States followed the craftsmanship model in its manufacturing in the early 19<sup>th</sup> century.

In the late 19<sup>th</sup> century, Frederick W. Taylor, often referred to as the "Father of Scientific Management" developed a new management approach which was adopted by the United States (Spenny 1995). Taylor thought of workers as human machines designing the work equipment and expecting the employees to meet them without any inquiry. He wanted to increase the productivity level however without increasing the number of skilled craftsmen. This, nevertheless, affected negatively the quality of output which led to increasing the use of inspectors in order to check the output.

## 2) **Statistical Quality Control:**

In the beginning of the 20<sup>th</sup> century “processes” were included in quality practices. Walter Shewart, a statistician for Bell Laboratories, changed the concept of quality control to go beyond the prevention of defects in goods or errors in service operations by inspection. He focused on controlling processes, making quality relevant for the processes that created the product and not only for the product alone through using statistical techniques. These statistical techniques were referred as statistical quality control to see whether a process is stable and in control, or if it is being affected by special causes that should be corrected. These techniques were used by other staff at Bell Laboratories to help them in accepting the raw materials or finished goods (Evans and Lindsay, 1996). They developed sampling plans in order to limit the probability of accepting unsatisfactory batches to a certain percentage in the case of having a certain level of defects (Garvin, 1988).

During World War II, quality became a significant constituent of the war effort and played an important role in safety. The US army inspected every product made in order to ensure that it was safe to be used. Also they sponsored Walter Shewart’s “statistical quality control (SQC) techniques” training courses for suppliers in order to improve the quality of their products.

## 3) **Quality Assurance:**

Feigenbaum developed the concept of Total Quality Control which widened the concept of quality to all the departments in an organization. He emphasized the notion that the product should be controlled all the way long starting from its early design to its end point which is in the hands of the customer . Feigenbaum (1956) considered that quality of the product can be affected in every stage of the industrial cycle which includes the engineering, manufacturing, purchasing, inspection, marketing and shipping. He changed the idea of quality being the responsibility of one department, designed to detect the variation of the product specifications, to all the organization departments.

#### 4) **Strategic Quality Movement:**

After the end of World War II Japanese manufacturers shifted their production from military products for internal use to civilian products for international trade. At the beginning their products were rejected internationally due to their poor exports. This made them find new ways of thinking about quality and consequently they invited two quality "gurus" from the USA, Dr. Edwards Deming and Dr. Joseph M. Juran, to help them with the application of Quality Control principles in the Japanese industry (Spenny 1995). A set of training courses on the statistical methods devised by Shewart were provided to the Japanese by Dr. Deming during the 1950s (Walton, 1986). His trainings and concepts were adopted by the Japanese Union of Scientists and Engineers and various other Japanese scholars and practitioners like Kaoru Ishikawa and Genichi Taguchi (Ghobadian & Speller, 1994). All of this led to make Japan as a primary industrial force worldwide to produce high quality products at affordable prices. This Quality movement led to the establishment of the Total Quality Management or (Total Quality Control, as it is referred to in Japan) which is the real reason of the Japanese success (Spenny, 1995).

The birth of Total Quality Management in the United States was in direct response to the quality revolution in Japan. The quality principles taught to the Japanese by Joseph Juran and Edward Deming in the 1950s have been transformed into a "quasi-religion" known as Total Quality Management (TQM) that is now being applied to nearly every product and service. TQM was the response of the United States to emphasize not only statistics but also approaches that engage the whole organization. Almost everyone in the U.S. market was trying to implement the new quality concept even the chief executive officers of major organizations adopted this trend and took the wheel of the quality movement .

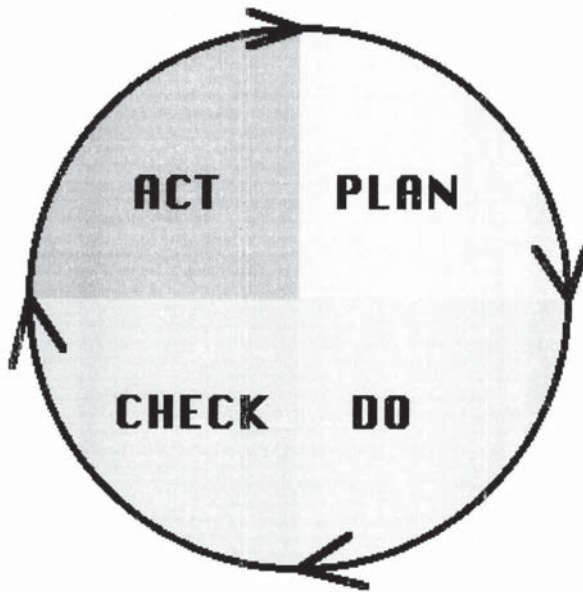
The wheel of adopting quality concepts was booming in the 1980s. Several other quality initiatives followed. The ISO 9000 series of quality-management standards, for example, were published in 1987. The Baldrige National Quality Program and Malcolm Baldrige National Quality Award were established by the U.S. Congress the same year. Regardless of such bills, American organizations were at first slow in adopting the standards but finally came on board (Gabor, 1990).



Edwards Deming proposed that business processes should be analyzed and measured to identify sources of variations that cause products to deviate from customer requirements. He recommended that business processes be placed in a continuous feedback loop so that managers can identify and change the parts of the process that need improvements. As a teacher, Deming created a (rather oversimplified) diagram to illustrate this continuous process, commonly known as the PDCA cycle for Plan, Do, Check, Act:

- **PLAN:** Design or revise business process components to improve results.
- **DO:** Implement the plan and measure its performance.
- **CHECK:** Assess the measurements and report the results to decision makers.
- **ACT:** Decide on changes needed to improve the process.

Deming's PDCA cycle can be illustrated as follows:

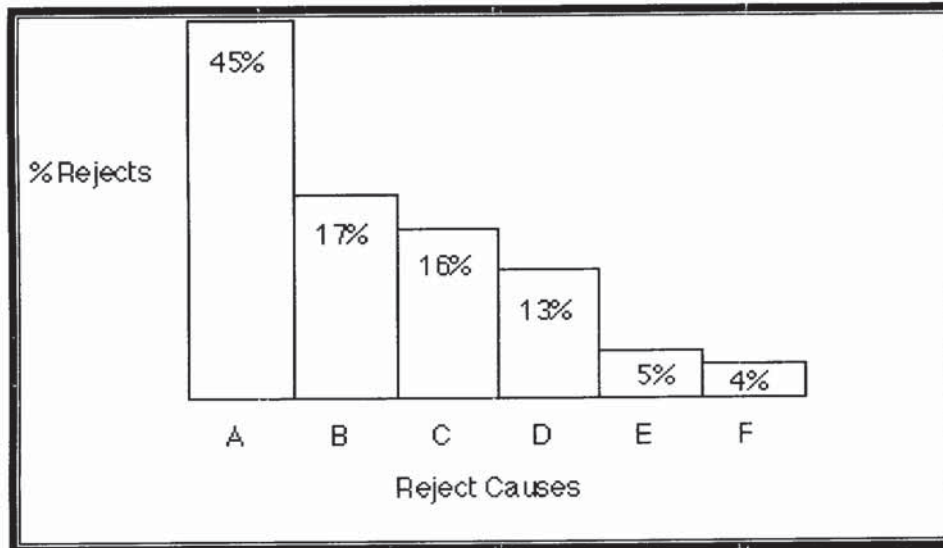


By the end of the 1990s Total Quality Management (TQM) became more than a trend to be adopted by many American business leaders (Gabor, 1990).

## 2.2 Tools of TQM

As to the tools that may be used to assess quality, they are several of which are the following:

### Pareto Principle

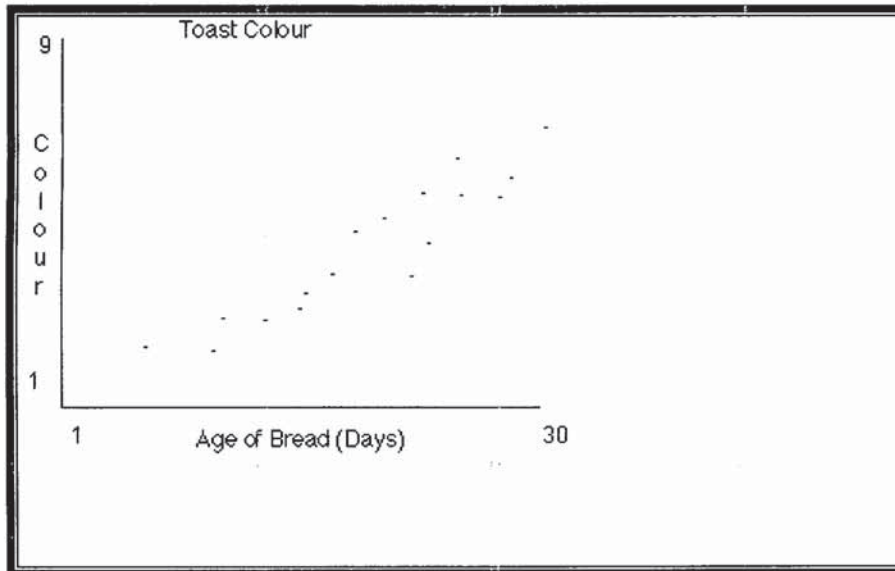


**Figure 1: Pareto Principle**

(Source: Burr, 1990)

The Pareto principle suggests that most effects come from relatively few causes. In quantitative terms: 80% of the problems come from 20% of the causes (machines, raw materials, operators etc.); 80% of the wealth is owned by 20% of the people etc. Therefore effort aimed at the right 20% can solve 80% of the problems. Double (back to back) Pareto charts can be used to compare 'before and after' situations. Its general use lies in deciding where to apply initial effort for maximum effect (Burr, 1990).

## Scatter Plots



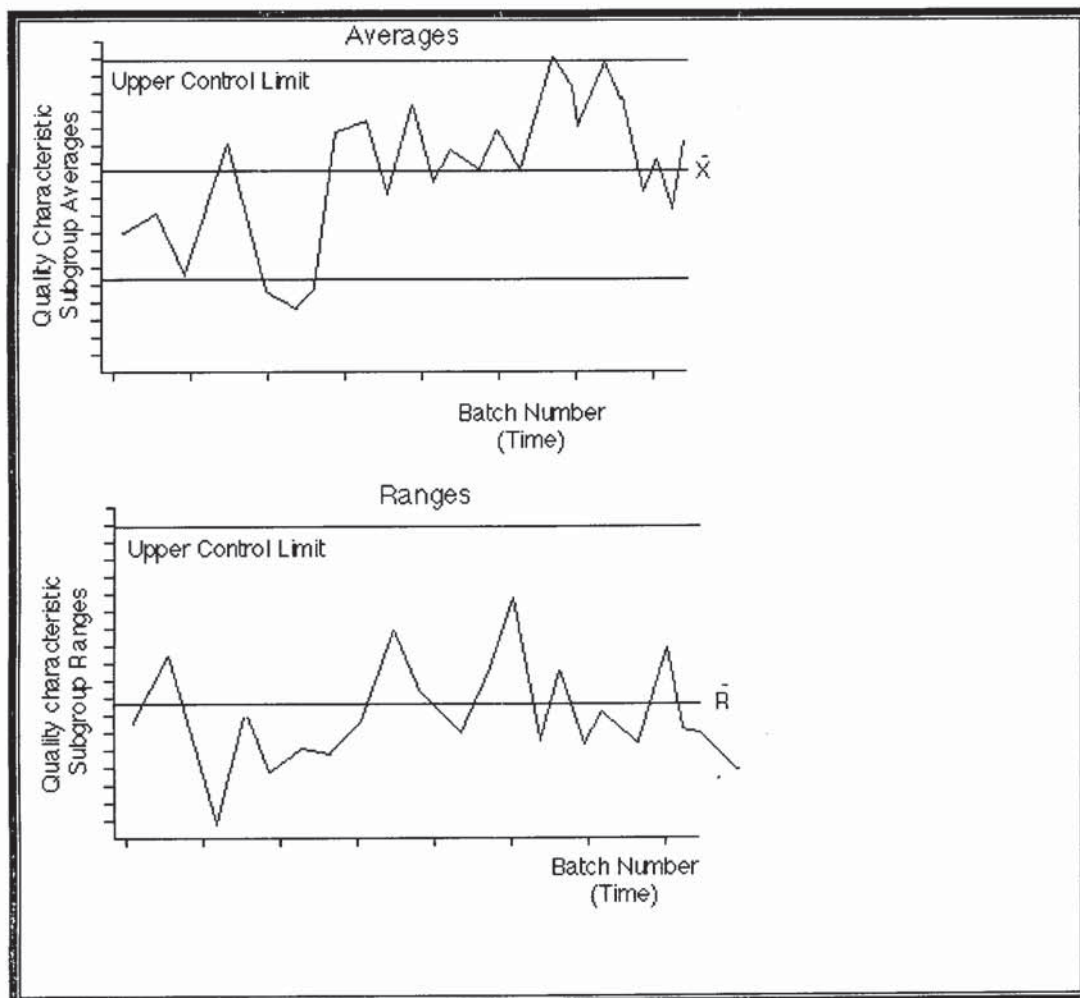
**Figure 2: Scatter Plots**

(Source: Burr, 1990)

A scatter plot is effectively a line graph with no line - i.e. the point intersections between the two data sets are plotted but no attempt is made to physically draw a line. The Y axis is conventionally used for the characteristic whose behavior we would like to predict. It is used to define the area of relationship between two variables (Burr, 1990).

Warning: There may appear to be a relationship on the plot when in reality there is none, or both variables actually relate independently to a third variable.

## Control Charts

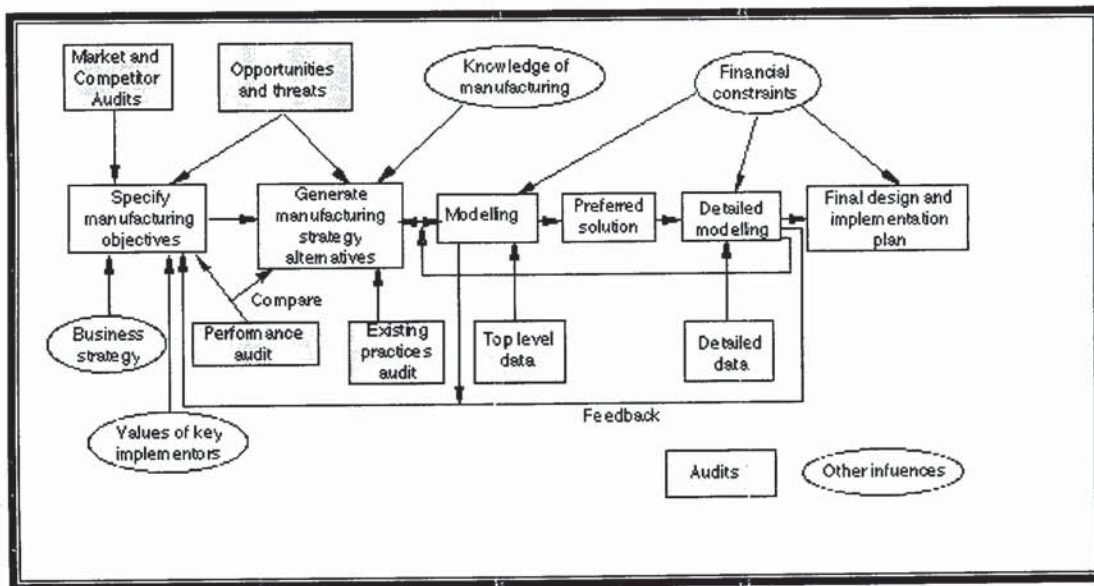


**Figure 3: Control Charts**

(Source: Burr, 1990)

Control charts are a method of Statistical Process Control, SPC. (Control system for production processes). They enable the control of distribution of variation rather than attempting to control each individual variation. Upper and lower control and tolerance limits are calculated for a process and sampled measures are regularly plotted about a central line between the two sets of limits. The plotted line corresponds to the stability/trend of the process. Action can be taken based on trend rather than on individual variation. This prevents over-correction/compensation for random variation, which would lead to many rejects.

## Flow Charts

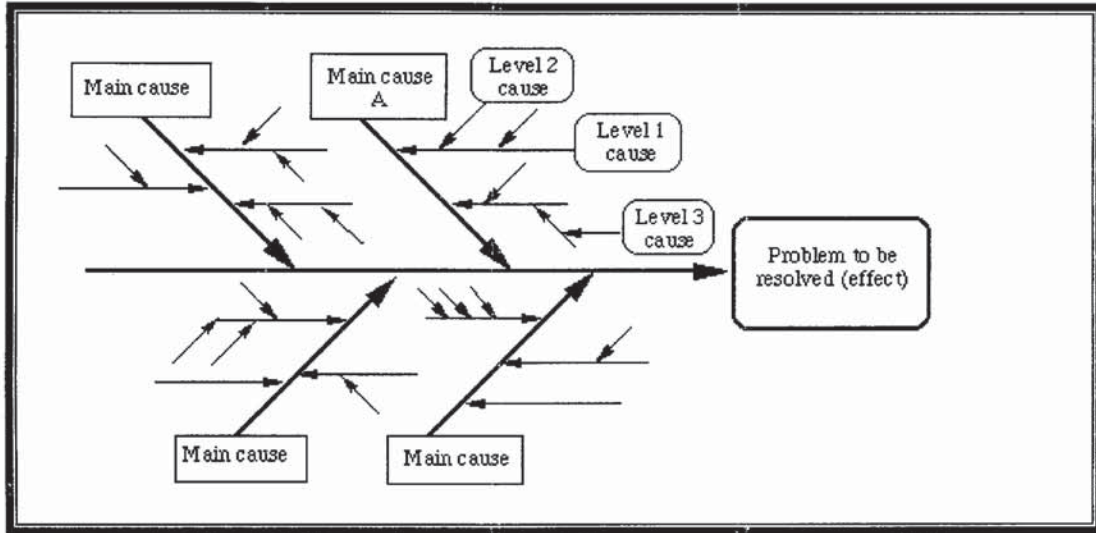


**Figure 4: Flow Charts**

(Source: Burr, 1990)

Pictures, symbols or text coupled with lines, arrows on lines show direction of flow. It enables modeling of processes, problems, opportunities and decision points. It develops a common understanding of a process by those involved. It has no particular standardization of symbology; so communication to a different audience may require considerable time and explanation (Burr, 1990).

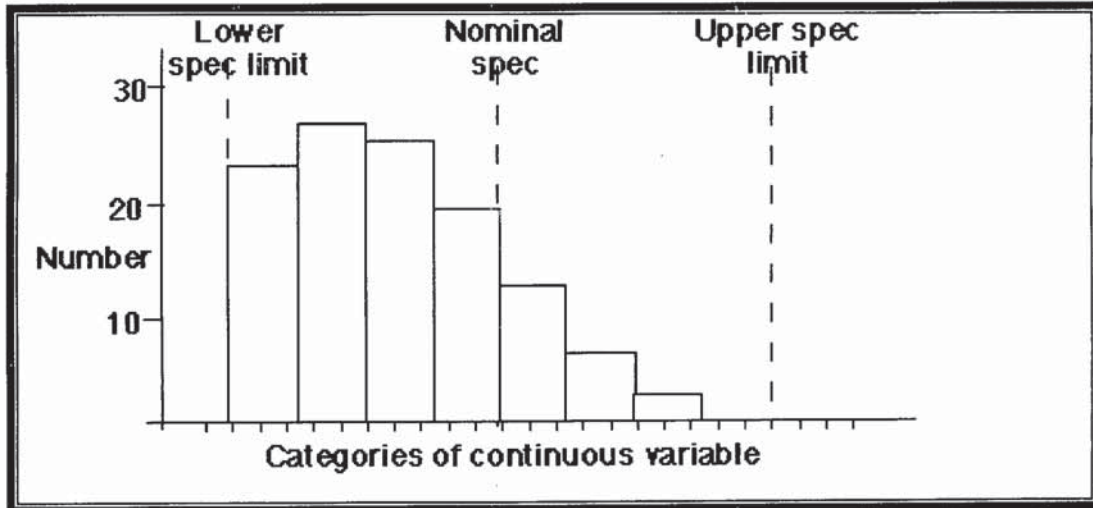
## Cause and Effect, Fishbone, Ishikawa Diagram



**Figure 5: Cause and Effect, Fishbone, Ishikawa Diagram**  
(Source: Burr, 1990)

The cause-and-effect diagram is a method for analyzing process dispersion. The diagram's purpose is to relate causes and effects. Three basic types: dispersion analysis, process classification and cause enumeration. (Effect = problem to be resolved, opportunity to be grasped, result to be achieved). It is excellent for capturing team brainstorming output and for filling in from the 'wide picture'. It helps organize and relate factors, providing a sequential view. It deals with time and direction but not quantity. It can become very complex. It can be difficult to identify or demonstrate interrelationships.

## Histogram or Bar Graph



**Figure 6: Histogram or Bar Graph**  
(Source: Burr, 1990)

A Histogram is a graphic summary of variation in a set of data. It enables us to see patterns that are difficult to see in a simple table of numbers. It can be analyzed to draw conclusions about the data set.

A histogram is a graph in which the continuous variable is clustered into categories and the value of each cluster is plotted to give a series of bars as above. The above example reveals the skewed distribution of a set of product measurements that remain nevertheless within specified limits. Without using some form of graphic, this kind of problem can be difficult to analyze, recognize or identify (Burr, 1990).

## 2.3 Advantages and Disadvantages of TQM

### Advantages of TQM:

Short-term and long-term advantages are present in any management style. Total Quality Management has few short-term advantages. Most of its benefits are long-term and come into effect only after it is running smoothly. In large organizations, it may take several years before long-term benefits are realized (Reeves and Bednar, 1994).

Long-term benefits that may be expected from Total Quality Management are higher productivity, increased morale, reduced costs, and greater customer commitment. These benefits may lead to greater public support and improvement of an organization's public image.

Eliminating errors and doing things right the first time saves time and resources. The savings may then be used for expansion of services or made available to employees in their efforts to increase service quality.

Total Quality Management may create an organizational atmosphere of excitement and sense of accomplishment through the rewarding of creativity. When experimentation-oriented failures are accepted as a part of the learning process, employees feel free to use their creative energies to develop new ideas (Reeves and Bednar, 1994)..

Instead of mistakes being hidden from management or denied, and thus being allowed to blossom into larger less easily rectified problems, they are tolerated and employees are encouraged to try again. Employees begin to develop a commitment to the organization rather than looking at it as just their employer. When employees feel they are an integral part of the organization, they feel needed and enjoy work more, which may further increase service quality.

Total Quality Management's extensive use of teamwork gives employees the experience of problem solving and using their knowledge and experiences in a collaborative effort. As employees gain experience with team problem solving, they



may be used to form cross-sectional ad-hoc "mega teams" that can attack larger organization-wide problems. TQM gives an organization greater problem-solving flexibility and increases the quality of work life for all employees.

Total Quality Management may be a "profit generator," even for public organizations. It does not actually create profit for the organizations, but if implemented properly, it may identify costly processes and cost-saving measures. Once fully implemented, the only expense of TQM is the cost of routine operations. In public organizations, saved resources may be viewed as "profits" (Reeves and Bednar, 1994).

Total Quality Management does have some detractors who have pointed out some of the disadvantages of TQM.

#### Disadvantages of TQM

Some Total Quality Management detractors have noted that long-range plans advocated by TQM may limit an organization's flexibility and agility. TQM teaches that a long-term plan is required to achieve a complete quality transformation, but a long-term plan that has been pursued for a long period may become an end unto itself. Completion of the plan becomes the ultimate goal. Objectives the plan was designed to accomplish are forgotten; achieving the transformation becomes the most important objective. Instead of maintaining continuous change, the organization may reach a stable point and stagnate. To produce continuously high quality services, an organization must react quickly to changes in the community and not be restricted by its management style (Reeves and Bednar, 1994).

TQM detractors also argue that although Total Quality Management calls for organizational change, it does not demand radical organizational reform. Real quality improvement requires radical structural change, such as flattening organizational structures. It requires liberation of employees from stifling control systems and the tyranny of functionalism, both of which stifle teamwork.

Total Quality Management calls for the elimination of the goals and objectives required by Management-by-Objectives. Critics of TQM claim that this may negatively affect motivation. They claim that having established production goals gives employees increasingly higher goals to reach, which motivates them to find new ways to reach the goals. When there are no established production goals, some employees will only produce the minimum required to keep their job.

Some maintain that Total Quality Management delegates the determination of quality to quality experts rather than to "real" people. TQM claims that quality is a complicated entity that is beyond the average employee to comprehend without specialized training in statistical techniques. It takes what is common sense to the ordinary worker and makes it sound complicated by changing the name and dressing it up with technical language (Reeves and Bednar, 1994).

Total Quality Management calls for the elimination of performance assessments that rate employees in relation to each other. Critics fear that without performance assessment managers would have too much power over employees and may use it capriciously. Many managers feel performance assessments let them document employee performance for possible reward, but some employees fear the assessments might be used against them in some disciplinary actions. Performance assessments may give employees with grievances the documentation they need to prove managers are treating them unfairly. Without them, managers could make unfair accusations about an employee's performance and the employee would not have the documentation to counter the claim (Reeves and Bednar, 1994).

### TQM in products versus services

Compared to goods, quality of services is characterized by intangibility, heterogeneity, and inseparability.

First, most services are intangible. Because they are performance rather than objects, precise manufacturing specification concerning uniform quality can rarely be set. Most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to assure quality. Because of intangibility, the firm may find it difficult to understand how consumers perceive their services and evaluate service quality (Reeves and Bednar, 1994).

Second, services, especially those with high labor content, are heterogeneous; their performance often arises from producer to producer, from customer to customer, and from day to day. Consistency of behavior from service personnel (i.e. uniform quality) is difficult to assure because what the firm intends to deliver may be entirely different from what the consumer receives (Reeves and Bednar, 1994).

Third, production and consumption of many services are inseparable. As a consequence, quality in services is not engineered at the manufacturing plant, then delivered intact to the consumer. In labor intensive services, for example, quality occurs during service delivery, usually in an interaction between the client and the contact person from the service firm. The service firm may also have less managerial control over quality in services where consumer participation is intense (e.g. haircuts, doctor's visits) because the client affects the process. In these situations, the consumer's input (description of how the haircut should look, description of symptoms) becomes critical to the quality of service performance (Reeves and Bednar, 1994).

Now that we have a good idea about what quality talks about, we can go further and talk about the history of quality in Saint Georges Hospital –Achrafieh and how things evolved through the years in order to deeply discuss and compare the MOH and JCAHO standards.

## 2.4 History of Saint Georges Hospital:

It all began over 128 years ago, when the founders of the hospital and several community leaders had a marvelous idea. They established a philanthropic society to care for the poor. This one idea, that held a thought for the less fortunate, sparked a resounding call to all who could help.

### **1878 - House to Hospital**

Mr. Panoyot Fakhoury, a member of the Orthodox community, donated two rooms in his Gemayze home to be used as a clinic and in-patient facility.

During 1880, 416 patients were treated, 18 of whom were hospitalized. By 1881, the number of patients had reached 2000. To cope with the patient load, a hospital of six rooms was constructed in 1883.

Six doctors worked tirelessly, three of whom were American citizens headed by Dr. Cornelius Van Dyke, who later founded the American University of Beirut School of Medicine.

### **1913 - Time to Grow**

As the hospital reputation grew, so did patient demand. This led to the construction of a 90 bed hospital that saw completion in 1913. The philanthropic society and the "Waqf" of the Saint George Church secured funds for the new site.

The hospital was confiscated by the French authorities between 1919 and 1923. During this time it was used as a teaching center affiliated to the Saint Joseph (French) School of Medicine.

In the 1930's, to cope with the depression, hospital management planted vegetables, raised cattle and poultry in plots of adjacent land as a regular food supply for patients.

During World War II, the hospital faced financial difficulties. These were overcome; thanks to the campaigning and fund raising of a committee of three well-known members of the community.

### **1966 - Further Expansion**

to meet the high demand of caring for a much bigger flow of patients, the hospital once again had no choice but to expand. A new 275 bed facility was completed in 1966. This facility was in use until June 2005. Funds for the new hospital were secured by the Church through the sale of land and by the contribution of generous donors.

### **1975 - Hardships**

This year saw the start of the era of hardship of Lebanon. Internal conflicts and terror demolished most of the country's infrastructure. Deaths and casualties were many. People bonded and helped each other to get through the suffering.

Saint George Hospital did not close its doors at all. Quite the opposite, there were times when surgery was performed in hallways due to lack of space. Clean drinking water and food for the elderly was distributed to homes.

### **1983 - Diamond Jubilee**

In the midst of the unrest, with a 5 years delay due to the war the hospital marked its centennial anniversary. His Eminence, Metropolitan Elias Audi, truly described the spirit of the hospital and its mission with those words: "It is not by accident that we are in this part of the world, but as a living witness to His glory. We shall stay, serve and preserve unto the end by the grace of God."

### **1984-1987 New Services**

As the conflict continued its rage and ravage, the struggle to provide quality health care and service continued. During these years three major services became available at the hospital: CT scan, Open Heart, and Quality Assurance.

**1995 - 2001 New Horizons**

The country's struggle ended in 1990. Peace brought with it the opportunity to inject new high tech services, such as:

- ▣ In-vitro fertilization (IVF)
- ▣ Magnetic Resonance Imaging (MRI)
- ▣ Kidney Transplant Unit.
- ▣ Endovascular unit
- ▣ Osteodensitometry
- ▣ Molecular Biology Laboratory
- ▣ Quality Systems for Health Care
  - ▣ ISO 9000 (International Organization for Standardization) certification
- ▣ Faculty of Medicine in association with the University of Balamand

**2003 - 125th Year Anniversary**

A year full of events to celebrate 125 years of service to the community. A year to be remembered by many who participated in some of the 24 activities ranging from conferences to cultural events, concerts, recitals, a photo contest, a walkathon, a health fair and planting of trees. A year that culminated on April 4, 2004 with a Gala Evening dinner held at the Phoenicia Hotel.

**2004 and Beyond: Inauguration of the New Extension**

The stone laid down during the ground-breaking ceremony in February 1998 yielded a new 200 bed hospital in June 2004 which became fully operational in June 2005 (Phase I). The following new high tech equipments were added to the 2001 acquisitions:

- ▣ Panoramic Dental Machine
- ▣ Audiometry
- ▣ Advanced Prodigy Densitometry Unit
- ▣ Electromyogram (EMG)
- ▣ Urodynamics
- ▣ New 16 Multi-Slice CT-Scan
- ▣ Flat-Panel Cardiac Catheterization Machine
- ▣ Electro-Physiology Unit
- ▣ Enhanced Sleep Apnea Unit
- ▣ New Flat Panel X-Ray Machine
- ▣ New Physiotherapy Center with Pool
- ▣ Community Health Clinic

Before discussing further quality in Saint Georges Hospital or what the Ministry of Health is actually following as standards, let's take a look at the Joint Commission for Accreditation of Health Organizations (JCAHO) to know more about this organization; its origins, history and standards.

## 2.5 Joint Commission for Accreditation of Health Organizations (JCAHO) (History and Standards)

### **Brief History of JCAHO**

JCAHO is the world's oldest, largest and leading health care accrediting body, from which virtually all other accrediting bodies and governmental agencies have patterned their standards and regulations. JCAHO evaluates and accredits almost 17,000 health care organizations and programs in the United States, including more than 4,500 hospitals. Nearly 80 percent of all U.S. hospitals are currently accredited by JCAHO (Sandrick, 2004).

The first hospital inspections were performed by the American College of Surgeons (ACS) in 1918, based on the ACS Minimum Standard for Hospitals. In 1951, the ACS joined with the American College of Physicians, the American Hospital Association, the American Medical Association, and the Canadian Medical Association to form the Joint Commission on Accreditation of Hospitals (JCAH)--an independent, not-for-profit organization whose primary purpose was to provide voluntary accreditation. In 1952, JCAH took over the hospital standardization program from ACS, and in 1953, it published the JCAH Standards for Hospital Accreditation (Franko, 2002).

With the passage of the Medicare Act in 1965, the role of JCAH shifted, becoming more closely tied with government. The law provided that hospitals accredited by JCAH were "deemed" in compliance with most of the Medicare Conditions of Participation for Hospitals and, thus, were deemed eligible to participate in the Medicare program.

In 1975, JCAH broadened its reach by accrediting ambulatory health care facilities through the Accreditation Council for Ambulatory Health Care. Four years later, JCAH established professional and technical advisory committees (PTAC) for each



accreditation program. It is through this latter advisory structure that AORN has interacted most consistently with JCAH. In 1987, JCAH changed its name to the Joint Commission on Accreditation of Healthcare Organizations to reflect its expanded scope of activities. Five years later, JCAHO recognized the importance of including a voice for nursing in policy leadership by adding an at-large nursing representative to its board of commissioners (Franko, 2002).

### **Standards related to dietary services**

These standards focus on provision of appropriate nutrition care, including food and nutrition therapy in a timely, effective, and efficient manner using all appropriate resources.

Like all patient care, nutrition care is an interdisciplinary process. Nutrition care is integrated with other aspects of patient care and involves the physician, registered dietitian, nurse, pharmacist, and other appropriate disciplines (JCAHO manual, 2000).

Nutrition care consists of the following processes:

- screening, assessing, and reassessing nutrition needs
- developing the plan for nutrition therapy
- prescribing or ordering food and other nutrients
- preparing and distributing or administering food and other nutrients,
- monitoring patient response to nutrition care

Nutrition screening is conducted to determine the patient's need for a comprehensive nutrition assessment. Approved policies define the content of nutrition screening and may establish specific parameters for evaluating the patient's nutrition status, such as patient weight compared to height (JCAHO manual, 2000).

When indicated by results of the nutrition screen, a nutrition assessment is completed and updated at specified intervals.

#### **TX4.**

##### Each patient's nutrition care is planned.

Based on the results of the nutrition screen and, when appropriate, nutrition assessment and reassessment, the nutrition therapy plan is implemented for all patients determined to be at nutritional risk. Patients at nutritional risk include:

- patients with actual or potential malnutrition
- patients on altered diet or diet schedules
- patients with inadequate nutrition
- lactating and pregnant women
- geriatric surgical patients

Organization criteria guide development of the nutrition therapy plan. A nutrition therapy plan is not ordinarily developed for patients receiving only a regular diet by mouth. All patients regardless of their nutritional status or need receive a prescription or order for food or other nutrients. The food or other nutrients ordered can range from nothing by mouth (NPO orders), to regular diets, to parenteral or enteral tube nutrition.

#### **TX4.1**

##### An interdisciplinary nutrition therapy plan is developed and periodically updated for patients at nutritional risk.

A more intensive plan for nutrition therapy may be indicated for patients at high nutritional risk. The plan identifies measurable goals and actions to achieve them. The patient's physician, the registered dietitian, nursing, and pharmaceutical services staff participate in developing the plan; and their roles in implementation are clearly defined.

Nutrition screening indicates that a patient is at high nutritional risk, for example. Based on the patient's condition, nutritional status and needs, parenteral nutrition is prescribed or ordered for a specified period of time.

The patient's nutrition therapy plan defines:

- the central goal( return to food by mouth) and other goals (such as restoration of normal serum electrolyte levels)
- quantifiable measures to determine the patient's progress toward goals
- strategies for achieving goals
- time frames for goal achievement and
- the roles of the physician, nutrition care department staff, nursing staff, pharmacy staff, and others.

#### **TX4.1.1**

When appropriate to the patient groups served by a unit, meals and snacks support program goals.

Depending on the types or ages of patients served ,some units may provide snacks or meals for special occasions or recreational activities. For example, on a child or adolescent service the child learns to select appropriate snacks according to a plan for nutrient care. When appropriate, facilities that permit patient involvement are available for preparing and serving meals and snacks. Staff members assist patients when necessary and ensure that each patient receives an adequate amount and variety of food.

#### **TX4.2**

Authorized individuals prescribe or order food and nutrition products in a timely manner.

Food and nutrition products are administered only when prescribed or ordered by medical staff, authorized house staff or other individuals with appropriate clinical privileges. Consistent with medical staff rules and regulations, verbal prescriptions or orders for food and nutrition products are accepted by designated personnel. Verbal prescriptions and orders are authenticated by the initiator within a defined time

frame. All prescription orders are documented in the patient's medical record before any food or other nutrient is administered to the patient. A prescription or order for food or other nutrient is accepted by designated personnel. Such orders are documented in the patient's medical record before any food or other nutrient is administered to the patient.

For example, nutrition prescriptions or orders are necessary for all patients, even those who are not at nutritional risk. A prescription or order is documented in the patient's medical record before food or nutrition products are administered. Prescription or orders for food or nutrition products are consistent with guidelines in a nutrition care manual or handbook. When prescriptions or orders do not comply with the requirements of the nutrition care manual or handbook, resulting nutrient deficiencies are noted in the patient's medical record.

#### **TX4.3**

Responsibilities are assigned for all activities involved in safe and accurate provision of food and nutrition products.

Staff responsibilities for preparation, storage, distribution, and administration of food and nutrition products are clearly defined to ensure safety and accuracy. For example, prescriptions or orders for food or nutrition products are communicated in a timely and accurate manner to those responsible for preparation, such as the nutrition care or pharmaceutical service (in the case of an order for parenteral nutrition). Prescriptions or orders are verified with the prescriber or orderer where questions or discrepancies arise.

The organization uses the HACCP process to manage food and enteral tube feeding safety using performance-improvement techniques.

#### **TX4.4**

Food and nutrition products are distributed and administered in a safe, accurate, timely, and acceptable manner.

Food is distributed in a timely manner to preserve nutrient value and serving temperature and provide nutrition that is appetizing and palatable. Food and nutrition products are distributed and administered to the patients for whom they were prescribed or ordered.

The hospital adheres to sanitation laws and regulations for food handling and preparation, including the state health code and the FDA Food Code. Precautions include

- proper thawing of potentially hazardous foods
- proper procedures to avoid contamination of foods, including cross-contamination
- achieving correct minimum cooking temperatures for potentially hazardous foods
- rapid cooling for potentially hazardous hot foods being cooled
- proper reheating for potentially hazardous hot foods being reheated
- use of disposable gloves or utensils to reduce bare-hand contact with ready-to-eat food (food in a form that is edible without further washing, cooking, or additional preparation).
- maintaining food at proper temperatures during preparation and until service

A standard food and nutrition product identification system includes:

- a system for identifying patient meal trays
- safe labeling of enteral and parenteral nutrition, including accessory or cautionary statements and expiration dates.

The FDA Food Code, as it applies to transport and service of patient trays, states that time only may be used as the public health control for ready-to-eat potentially hazardous food that is displayed or held for service for immediate consumption if

- (A) the food is marked or otherwise identified with the time in which it shall be cooked, served, or discarded;

- (B) the food is served or discarded within 4 hours from the point in time when the food is removed from temperature control ( a one-hr time period is recommended);
- (C) food for which time expires is discarded;
- (D) written procedures that assure compliance with (A) and (C) of this section are maintained and made available to the regulatory authority upon request.

The key elements of the time-based HACCP plans are:

- (1) Food must be held at proper temperatures on the tray line (provides the temperature controls in (B) of the Food Code;
- (2) Each cart used to transport trayed food carries a label that identifies the time that the first tray was loaded and indicates that the last tray must be served within one hour of that time;
- (3) The time that the last tray was served is recorded on the cart label; and
- (4) The labels are returned to the kitchen with the carts and maintained on file for at least fourteen days. Although the hospital chose to use time rather than temperature as the Criterion for Control, it was decided that periodic auditing techniques to assure palatability and patient satisfaction would be utilized, as recommended by Food Service Associates.

#### **TX4.5**

Each patient's response to nutrition care is monitored.

Ongoing patient monitoring is essential to effective, appropriate, and continuous nutrition care. Nutrition care monitoring is a collaborative process that may involve;

- a formal nutrition care team
- representatives from multiple disciplines conducting patient care rounds
- communication among the various disciplines or
- integration of nutrition care with the patient care team

Nutrition care monitoring includes the following activities:

- monitoring the patient's consumption of and therapeutic response to food and nutrition products
- regularly reviewing the patient's therapeutic regimen including the appropriateness of food and nutrition products and the administration route
- drawing conclusions and communicating them to those responsible for the patient's care
- documenting conclusions and interdisciplinary conference results in the medical record
- reassessing and revising patient's nutrition plan therapy
- intensive monitoring of a patient who is not receiving adequate nutrient intake and
- intensive monitoring of transitional feedings from parenteral to enteral, oral, or tube feeding (or vice versa)

The following disciplines collaborate on nutrition care monitoring;

- a licensed independent practitioner
- a registered dietitian –using information from the nutritional assessment and the medical record, helps the practitioner identify situations that warrant further consideration, alerts the practitioner to suboptimal responses or potential adverse events, and evaluates the effectiveness of the nutrition therapy plan
- a nurse monitors and reports the effect of nutrition care on an ongoing basis and
- the pharmacist helps the practitioner and registered dietitian identify potential drug-nutrient interactions, based on his or her expertise and familiarity with the medical record and medication profiles.

The clinical team focuses on the results of the collaborative effort of nutrient care monitoring. When patients are not at nutritional risk and receive a regular diet by mouth, their nutrition intake (such as the percentage of food consumed by the patient) is observed during the normal course of patient care monitoring.

**TX4.6**

The nutrition care service meets patients' needs for special diets and accommodates altered diet schedules.

Food and nutrition services include processes for

- meeting special diet of diet schedule needs
- providing food or nutrition products at times other than the regular delivery schedule
- accommodating personal dietary requests and
- storing, handling and controlling food or nutrition products obtained from outside sources.

For example the nutrition care service meets the needs of patients who

- receive enteral or parenteral nutrition not reflected in the nutrition care manual or handbook
- do not receive the regular meal service or receive meals on an irregular schedule
- require specially prepared meals or
- obtain food or nutrition products from outside sources

**TX4.7**

The medical staff, the nutrition care service or department, and other disciplines (for example, nursing) collaborate in developing and maintaining standardized approaches to nutrition care. Approaches are communicated and used throughout the organization.

1. A nutrition care committee includes expert representation from the medical staff, nutrition care service, pharmacy service, and nursing service. An interdisciplinary committee develops and maintains a nutrition care manual that contains diets and menus for a variety of nutrition needs scenarios. Diets are included in the nutrition care manual based on criteria that are specific to the organization and its patients.

The nutrition care manual reflects the standards for nutrition care established by the Recommended Dietary Allowances of the Food and Nutrition Board, National



Research Council, or the National Academy of Sciences and other published guidelines.

The nutrition care manual is reviewed and revised at least every three years to reflect advances in nutrition knowledge. All master menus and modified diets that require approval by a registered dietitian are identified in the manual.

The nutrition deficiencies of diets that do not comply with the recommended dietary allowances are documented during the development process.

By agreement of all involved disciplines, the manual is accepted as a complete and representative selection of diets, and approved by the medical staff. The manual serves as the basis for all prescriptions or orders for food and nutrition products including enteral and parenteral nutrition.

Each patient care unit has access to a copy of the manual.

2. An interdisciplinary committee reviews the organization's HACCP plan which delineates the handling of food, enteral tube feeding, and water. Through this review, the committee identifies areas that have potential for risk, and incorporates appropriate procedures into the staff in-service calendar. Members of the committee periodically survey the food and enteral tube feeding handling process against the procedures outline in the HACCP plan. Any inconsistencies are noted and addressed for correction. Results of these in-house surveys and the corrective actions are communicated to staff through in-services and meetings.

3. The organization plans menus in advance of providing patients with their meals, according to time frames established by the organization.

4. Menus are easy to read and posted in areas that patients can access.

5. The organization prepares food and nutrition products using, whenever possible, proper sanitation, temperature, light, moisture, ventilation, and security.

6. When possible, the organization accommodates the patient's cultural, religious, or ethnic food and nutrition preferences, unless contraindicated.

7. The organization stores food and nutrition products, including those brought in by patients or their families, using proper sanitation, light, moisture, ventilation, and security.

8. Staff feed or assists those patients who require help.

9. The hospice must procure, store, prepare, distribute, and serve all food under sanitary conditions.

10. Qualified staff plans menus that meet the nutritional needs of each patient, following the orders of the patient's physician, and to the extent medically possible, the recommended dietary allowances of the Food and Nutrition Board of the National Research Council of the National Academy of the Sciences..

11. For Medicare-certified hospices that provide inpatient care directly: the hospice must serve at least three meals or their equivalent each day at regular times, with not more than 14 hours between a substantial evening meal and breakfast.

12. For Medicare-certified hospices that provide inpatient care directly: if the hospice has patients that require medically prescribed special diets, the menus for those patients are planned by a qualified dietician.

13. For Medicare-certified hospices that provide inpatient care directly: qualified staff sees to it that the menu plan is followed and that the patient accepts the menu plan.

## **PE1.2**

Nutritional status is assessed when warranted by the patient's needs or condition.

1. A qualified individual performs a follow-up assessment when screening criteria identifies a patient who is at high nutritional risk. The qualified individual uses the following criteria in the follow-up assessment:

- adequacy of nutrient intake: current, previous, and required
- anthropometric measurements and evaluations, including weight and weight history
- nutritional implications of selected laboratory tests or their results
- physical examination for manifestations of nutrient deficiency or excess
- medications that may affect ingestion, digestion, absorption, or use of nutrients
- food intolerances and allergies
- religious, cultural, ethnic, and personal food preferences and
- diet prescription or number of days nothing by mouth.

2. When screening criteria identifies a pediatric clinic patient at high nutritional risk, a dietitian or other qualified individual performs further assessment, including some or all of the components listed in the example above.

3. The hospital appointed a multidisciplinary work group to establish the nutritional screening criteria. The work group included the chief dietitian, the chiefs of the departments of medicine and surgery, all head nurses, the chief pharmacist, and the chief physical therapist. Together, they developed a list of nutritional screening criteria used by nurses during the admission assessment of every patient admitted to the hospital, both inpatients and those admitted for the first time to the outpatient clinics. These criteria were to be applied within the first 24 hours of admission in order to identify those patients at risk for nutritional deficiencies. When a patient was identified to be at nutritional risk, a request was automatically initiated for the dietitian to perform a complete nutritional assessment.

#### **PE. 1.5**

Patients are educated about potential drug-food interactions, and provided counseling on nutrition and modified diets.

Hospitals offer education to patients and families to give them the specific knowledge and skills they need to meet the patient's ongoing health care needs. Clearly, such instructions need to be presented in ways that are understandable to those receiving them.

Openness and flexibility are important elements in patient education, and can make a critical difference in whether the patient follows instructions. In assessing a patient's needs, abilities, and readiness for education, staff members take into account such variables as

- the patient's and family's beliefs and values
- their literacy, educational level, and language
- emotional barriers and motivations
- physical and cognitive limitations
- the financial implications of care choices

When school-age children or adolescent patients are hospitalized for long periods of time, state or local laws may specify the requirements for meeting the child's schooling needs. Although the hospital may not provide school teachers directly, it is responsible for providing access to schooling, according to state education law.

In addition, the hospital uses guidelines in educating patients on the following topics:

- safe and effective use of medication
- safe and effective use of medical equipment
- diet and nutrition
- rehabilitation
- educational resources in the community and
- follow up care

For example, for hospitals providing maternity services, pregnant women are given educational information and instructions about the management of breast-feeding, proper breast-feeding technique, proper nutrition while lactating and breast-feeding, or community contact names and telephone numbers for post discharge assistance with any feeding concern. In addition, women are reevaluated prior to discharge.

## 2.6 Ministry of Health-Lebanon (History and Standards)

According to Ammar & Wakim (2005), the Lebanese Ministry of Public Health (MOPH) financing role in covering uninsured patients by contracting with private hospitals without any objective selection criteria had a negative impact on quality of hospital care in Lebanon. Furthermore the oversupply of physicians who come from different medical schools, such as the French system, and the American system, as well as the diversity of ownership by private hospitals i.e. private hospitals either owned by universities, religious and charitable congregations or physician, led to poor quality care in the absence of nationally adopted clinical protocols, the lack of transparent policies, and procedures at the administrative, financial and medical levels.

For all the above reasons, the Lebanese Ministry of Public Health introduced the accreditation system for acute care hospitals in 1999. This project was divided into four stages: developing standards and procedures and testing them, conducting the first national survey, conducting a second survey i.e. follow up audit, and finally, revising the standards and conducting a third national survey. The main objective of this project was to create incentives for continuous quality improvement by developing an external evaluation based on scientific process. The emphasis was put on mechanism to improve patient safety, staff safety and patient advocacy, infection control mechanisms, data collection and reporting such as mortality, morbidity, utilization and workload statistics.

The accreditation system at first was devised into basic and accreditation standards by a contracted consultant in May 2000 as part of a Total Quality Program. This system that was based on quality assurance shifted the focus from structural aspects to procedural aspect. The main focus of these standards was put on staff education, documentation of all policies and procedures that are necessary for the operations of the hospitals as well as data collection to help in the quality improvement plans setting. Based on these standards Lebanese hospitals were surveyed during the period between 2001 and June 2002 and results were issued accordingly.

Later in the year 2003 these standards were revised with all involved in the healthcare sector, and combined to form "Hospital revised accreditation standards" that aimed at ensuring that all documented policies and procedures required by the first set of standards were properly applied and led to quantified and measurable outcomes. Also it aimed at ensuring that all collected data were properly analyzed to monitor clinical care as well as management functions that will all eventually lead to improving quality (Ammar & Wakim, 2005). Furthermore, the revised standards, written with very specific knowledge of Lebanese hospitals, included new concepts to the Lebanese healthcare quality such as regular performance appraisal and competency testing for all hospital employees. In the year 2005 these accreditation standards were approved by the Lebanese government to become a decree # 14263 which was issued in the official newspaper. Following the ministry audit the Lebanese hospitals will be categorized into pre-determined bands/categories A/B, C, D, or fail, A/B being the highest category.

The accreditation standards are divided as per hospital departments. They include a specific section for the Quality System to promote the quality culture in the Lebanese hospitals. These standards mandate the existence of a quality improvement committee to drive the implementation of quality program in the hospital. Also, the standards mandate the existence and importance of having a system to determine patient satisfaction, recording their complaints and issuing corrective and preventive actions accordingly.

## Standards

The provision of healthy appropriate food to patients during their hospital stay is an important responsibility for management. It is imperative therefore that food storage, preparation, handling and serving is conducted in line with sanitary requirements. The environmental and structural layout as well as equipment must support safe and hygienic work practices. There must also be evidence of regular cleaning and pest control activities in the kitchen and food storage areas. Special diets and menus must be designed by a qualified dietitian and reviewed regularly. If a dietitian is not on staff full time then records of consultations and contact details must be available and evidence that urgent assistance can be sought from a qualified dietitian when required. There should be provision for the dietitian to document any and all consultations held with a patient in the patient's medical record.

Policies and procedures should be available in the department and all staff should have access to them. Work practices must be commensurate to the policies and procedures which should be reviewed annually. The policies and procedures are to include workplace health and safety issues, both general and those pertinent to the kitchen, commencing at orientation. Safety considerations to include amongst other things: staff wearing covered shoes with a non slip sole; manual handling instructions; non slip floor covering in the wet areas; regular health checks and infection control principles and practice. Internationally, face masks are not worn in the kitchen area unless the employee has rhinitis or a cough. Any illness however, must exclude the person from work until a medical clearance is provided.

The above information is not intended to be all inclusive. Thus individual hospitals and each department have a responsibility to research and source information that allows them to comply with the standards below.

All staff who has any dealings with the food service should have attended education sessions on, at basic, food hygiene principles and records kept of attendance. Staff should be exposed to HACCP principles and the hospital be actively working towards implementing them. This should commence with education and an understanding of how the kitchen activities should be conducted followed by any

new or replacement equipment being purchased in line with HACCP principles. Temperature control of food should be monitored in line with HACCP and a system in place to rectify problems identified. Ideally external temperature monitoring devices are present and refrigerators / freezers are connected to an alarm system and are on a UPS back-up system. The hospital has an obligation to ensure that all supplies meet a predetermined standard and that policy and procedures outline activities to meet these standards. The hospital wide quality system should be evident in the kitchen and evidence must be available to demonstrate integration. Integration of the quality system should demonstrate the quality loop; surveys; data collection; statistical analysis and planned intervention to identified deficits. The quality activities in the kitchen should also extend to the hospital wide system of manual handling, infection control and orientation.

The following are the standards related to dietary services:

#### **DN 1**

The person responsible for this department is a qualified dietician or has direction and supervision from a consultant dietician.

#### **DN 2**

- 2.1** • In a decentralized management system where the dietician/kitchen manager holds personnel files for each individual staff member, the file must contain a signed job description; or
- 2.2** • In a centralized management system, the head of each department must retain master copies of all descriptions relevant to the staff in their departments.
- 2.3** • In both cases personnel files must contain evidence of educational qualifications.
- 2.4** • Evidence must be provided that formal performance appraisals have been conducted.
- 2.5** • Job descriptions are reviewed regularly.



**2.6•** A documented performance appraisal is conducted in line with the job descriptions.

### **DN3**

**3.1•** A staffing schedule is available in the department.

**3.2•** A list of staff with contact details and designation is available in the department.

### **DN4**

Department holds an orientation manual which includes:

**4.1•** Section for general hospital issues

**4.2•** Subsection for this department

**4.3•** A checklist to verify that all sections of the orientation program has been completed (this must be signed and retained in the individual's personnel file)

### **DN5**

**5.1 •** Evidence that the dietician / manager or representative of the department is a regularly attending member of an infection control committee

**5.2 •** Minutes of meetings are available in the department.

### **DN6**

A policy and procedure manual exists in the department, specific to this hospital and the management issues relevant to the dietetic/nutrition service.

**6.1•** Policies are clearly identified.

**6.2•** Procedures are clearly identified.

**6.3•** Policies and procedures are presented in a hospital wide uniform manner.

**6.4•** The index for the policy and procedure manual is accurate.

Policies and procedures include but are not limited to the following:

- 6.5• Receiving or purchase of food
- 6.6• Preparation and handling of raw/processed food
- 6.7• Storage of prepared food and leftovers
- 6.8• Distribution of food
- 6.9• Patient snacks and late trays
- 6.10• Preparation of enteral feedings
- 6.11• Employee safety
- 6.12• Employee health and hygiene
- 6.13• Infection Control
- 6.14• Preparation of isolation trays
- 6.15• Cleaning of the department (if not provided by a centralized housekeeping department)
- 6.16• Sanitation of chopping boards

#### **DN7**

- 7.1• Dedicated food storage/refrigeration areas exist to ensure food preservation.
- 7.2• Food storage areas / refrigerators are maintained appropriately.
- 7.3• All food products are stored off the floor.
- 7.4• Cleaning supplies are stored in a separate location away from food.

#### **DN8**

- Separate dedicated food preparation areas exist.

#### **DN9**

- 9.1• Twice daily temperature records of refrigerators and freezers
- 9.2• Fully functioning self-releasing mechanisms for walk in refrigerators and freezers

**DN10**

All windows are fly-screened.

**DN11**

**11.1•** Evidence of random food temperature control records are retained.

**11.2•** Records that random temperature controls are taken from point of service to point of delivery to patients

**11.3•** Food distribution to patients occurs in temperature appropriate food service trolleys (hot food kept hot and cold food kept cold).

**11.4•** There is evidence of the introduction of HACCP.

**DN12**

**12.1•** The dietician can demonstrate ongoing education programs to all kitchen staff.

**12.2•** Documented evidence is available of testing of staff competencies specific to roles and responsibilities in the kitchen.

**12.3•** Evidence of all staff in the kitchen having completed competency testing

**12.4•** Regular testing of staff competencies

**12.5•** Evidence of corrective action to ameliorate deficiencies identified following competency testing

**12.6•** The dietician can demonstrate ongoing education to general hospital staff.

**DN13**

**13.1•** Evidence that the dietician responds to requests to assess patients.

**13.2•** Review is documented on a standardized form in patients' medical records.

**13.3•** Evidence and policies and procedures that snacks are available and provided to the obstetric department, children's department and for all late admissions

**DN14**

Collection of garbage and kitchen waste is in covered containers and is removed daily from the food services area.

**DN15**

**15.1•** Data has been collected and computerized for the kitchen services

**15.2•** Rationale for data collection has been documented.

**15.3•** Audit tools established for this specific area

**15.4•** Audits have been conducted.

**15.5•** Analysis and planned intervention resulting from audits is documented.

**DN16**

Dedicated staff toilets with hand wash basin are provided.

**DN 17**

A separate sink dedicated for hand washing is available in the kitchen.

**DN18**

Dining room exists for use by all staff.

**DN19**

• A quality improvement plan that is consistent with the hospital wide QI plan is developed for the department.

- It must contain key performance indicators that are measurable and realistic and have timelines.
- Evidence of continual monitoring of this plan must be available.
- Audit tools have been constructed specifically for this.

In conclusion, the JCAHO standards deal more with patient issues and food service management issues, unlike the MOH standards which deal only with food service management issues.

As a result and after discussing quality and its impact on services and products and after tackling the JCAHO versus MOH standards and history, we will move on to see how standard implementation affected the quality of dietary services in Saint Georges Hospital to further discuss deeply in the next chapters about the similarities and differences between the two standards and how improvement can be made.

## Chapter III

### Procedures and Methodology

Quality management, throughout history, had a great impact on customer satisfaction whether be it for goods or services; that is why standards are set and quality measurement tools are used to maintain consistency and continuous progress. The measurement of quality change to track the effect of improvement is as important as implementing standards.

In this section, a comparison of quality indicators pre and post accreditation is presented to see how accreditation standard implementation affects the whole quality issue. Whether or not standard implementation had an effect on quality of dietary services is what will be tested further on.

#### 3.1 Comparison of Quality pre and post accreditation

In order to study the impact of standard application on quality, surveys were done addressing the response of patients to food quality from different perspectives as will be discussed later. These surveys were done in the year 2002 (pre accreditation) and in the year 2004 (post accreditation).

Variables measured were:

- Presentation of the food
- Tastiness of meals
- Appropriate temperatures i.e. hot food hot and cold food cold.
- Satisfactory portioning of food
- Freshness of bread

**Statistics for the year 2002 (pre-accreditation):**

Table 1 summarizes the satisfaction results done on 574 patients-52 patients had no appetite and did not answer the survey

Questions* Appreciation	PP	TM	HMH	CMC	PE	BF	Mean
<b>Good</b>	272	243.7	272.3	273.7	264.3	271	266.17
	96.73%	87.43%	96.26%	98.03%	94.86%	98.16%	95.25%
<b>Fair</b>	7.7	28	9.7	4	9.3	3.3	10.33
	2.53%	9.64%	3.33%	1.36%	3.30%	1.14%	3.55%
<b>Bad</b>	2.3	8	1.3	2	5.3	2.3	3.53
	0.74%	2.93%	0.41%	0.61%	1.84%	0.70%	1.20%

**Table 1. Statistics 2002**

(Source: Dietary Dept of Saint Georges Hospital)

- \*PP=plate presentation
- TM=tasty meal
- HMH=hot meal served hot
- CMC=cold meal served cold
- PE=portion is enough
- BF=bread is fresh

On average, 95.25% of patients had good responses, 3.55% had fair responses and 1.2 % had bad ones as shown in Table 1.

## Summary

Statistics for the year 2002 (pre- accreditation):

Comments *	VP	SRS	VN	NES	CE	DF
Percentage	26.70%	28.30%	20.40%	9.80%	10.70%	4.10%

**Table 2. Summary of comments 2002**

(Source: Dietary Dept of Saint Georges Hospital)

- \*VP=very positive
- SRS=special requests satisfied
- VN=very negative
- NES=not enough salt
- CE=could not eat
- DF=dislikes hospital food

All in all, 26.7% had very positive answers, 20.4% had negative answers and only 4.1% did not like hospital food as shown in Table 2.



### Statistics for the year 2004 (post-accreditation):

During the year 2004, 1245 discharges patients were visited by the dietitians to fill the satisfaction survey questionnaire. From these patients, 1148 answered the survey (92.2%). 97 patients had no appetite and did not answer the questionnaire (7.8%).

Questions* / Appreciation	PP	TM	HMH	CMC	PE	BF	Mean
Good	95.10%	81.10%	91.40%	95.60%	95.80%	96.10%	92.52%
Fair	3.80%	16.00%	6.70%	2.70%	4.30%	2.10%	5.93%
Bad	0.20%	1.70%	0.90%	0.16%	0.46%	0.36%	0.63%

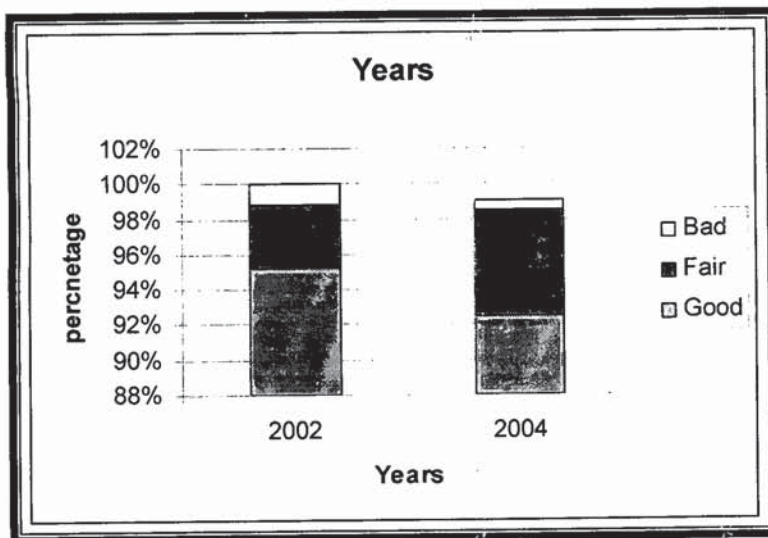
**Table 3. Statistics 2004**

(Source: Dietary Dept of Saint Georges Hospital)

- \* PP=plate presentation
- TM=tasty meal
- HMH=hot meal served hot
- CMC=cold meal served cold
- PE=portion is enough
- BF=bread is fresh

In 2004, on average 92.52% had good responses, 5.93% had fair responses and 0.63% had bad ones as shown in Table 3.

The difference between years 2002 and 2004 is clearly shown in Figure 1



**Figure 7. Summary of Satisfaction**  
(Source: Dietary Dept of Saint Georges Hospital)

### Summary

Statistics for the year 2004 (post- accreditation):

Comments*	VP	SRS	VN	NES	CE	DF
Percentage	75.80%	12.40%	5.70%	2.00%	1.00%	0.70%

**Table 4. Summary of comments 2004**  
(Source: Dietary Dept of Saint Georges Hospital)

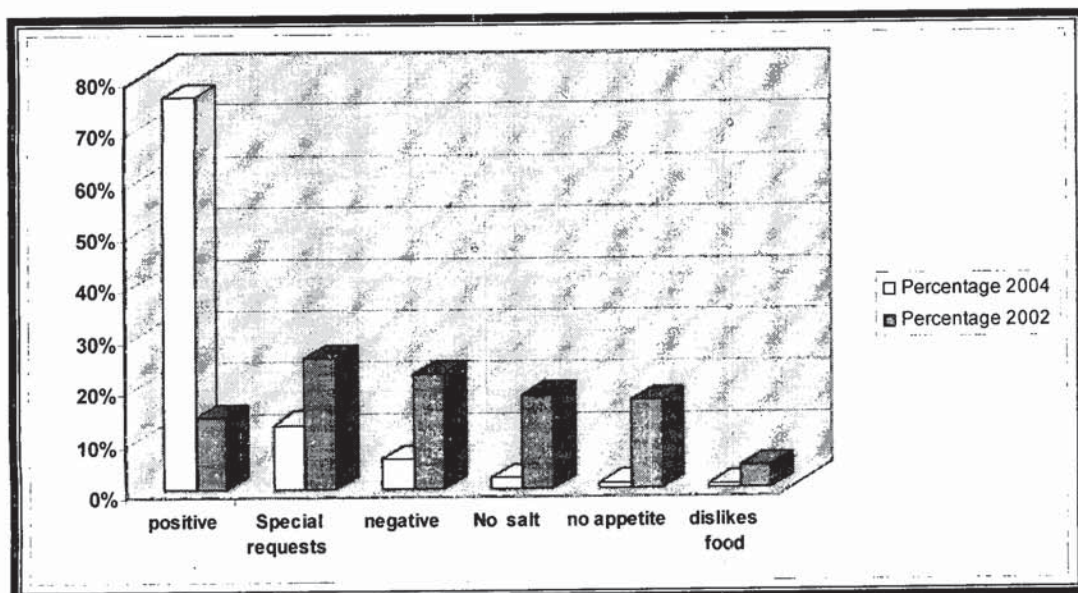
\*VP=very positive  
SRS=special requests satisfied  
VN=very negative  
NES=not enough salt  
CE=could not eat  
DF=dislikes hospital food

After accreditation, a significant increase was seen in the patients answering positively i.e. (from 26.7% to 75.8%), and a significant decline was seen in those answering negatively (from 20.4% to 5.7%) and those having special requests (from 28.3% to 12.4%). Only 0.7% did not like hospital food compared to 4.1% in 2002.

(See Figure 2.)

In Table 3 which shows the statistics post accreditation, we see that although the number of patients satisfied about the food declined a bit to 92.52% , those with fair responses increased from 3.5% in 2002 to 5.93% and those with bad responses declined form 1.2% to 0.63%.

All these results are seen clearly and significantly in Fig 2.



**Figure 8. Pre and Post Accreditation Comparison**

(Source: Dietary Dept of Saint Georges Hospital)

As a result, standard implementation had a positive impact on the outcome of dietary services offered. Services are not only affected by standards but also by flexibility, cost, employee education, experience and so on. But these variables were far from being measured due to lack of information.

Moving on to the next chapter, the major difference between the two standards and what may be done to improve the overall situation will be further discussed.

## Chapter IV

### Findings

JCAHO standards address standards in processes such as care of patients, assessment of patients, education and others in a way to standardize the service throughout the process of patient care so that no discrepancy occurs and uniformity is achieved throughout all the process of patient care whether is it in nutrition, patient care, and education. In other words, standards are implemented from the time the patient is assessed and a meal plan is developed, until food is administered and feedback is obtained from the patient.

Nutrition Care is integrated with other aspects of patient care and involves the physician, the registered dietitian, the nurse, the pharmacist and other appropriate disciplines.

The JCAHO standards stress on nutrition screening, assessment, and reassessment by developing a plan for nutrition therapy as well as preparing, distributing or administering food based on HACCP principles and monitoring feedback from patients. It emphasizes nutrition orders even for patients who are not on a special diet.

Patient education is an integral part in the JCAHO standards, the fact which is not seen in the MOH standards. Educating the patient about medications, medical equipments and diet is important for the patient and his family. Also caring for the education of school-aged children is very important in JCAHO standards which seek to provide children with long hospital stays with the proper schooling follow-ups. This cannot be implemented in the MOH standards due to unavailability of financial coverage since insurance companies and the national social security fund do not cover such expenses.

In the JCAHO manual, nutrition orders must comply with a diet manual which must reflect standards for nutrition care established by the Recommended Dietary Allowance (RDA) of the Food and Nutrition Board and the National Research Council or the National Academy of Sciences. This manual should be revised every

three years and it must be distributed to each unit in the hospital. On the other hand, the MOH standards mention the need for a nutrition care manual but there is no mentioning of an RDA, Board or a Council to be abided by.

According to the JCAHO, menus must be easily read, posted in areas that patients can access; and the patient's culture, religion or ethnic preference must be accommodated into the patient's menu plan. The meals served must be three with no more than fourteen hours between breakfast and the evening meal. The fact which is not mentioned at all in the MOH standards.

On the other hand, the Ministry of Health (MOH) standards are classified according to departments. In this case, one department may outperform other departments and therefore the level of care may not be uniform throughout the whole process of patient care.

A registered dietitian is a main requirement in the JCAHO standards, but is not mentioned in the MOH standards.

MOH standards are more into managerial issues and compiling information into documents, policies and procedures whereas JCAHO standards are more involved in the process of patient care. In the MOH, standards are more related to food service management rather than patient care plus food service management as a whole as seen in the JCAHO standards.

The surveys done and the statistics compiled reveal that standard implementation had a positive impact on quality of dietary services offered. Feedback from patients was better and the percentage of patients disliking the food service declined as well those having a very negative impact.

So in order to improve the quality of services offered and to decrease errors, the following may be suggested:

- Do continuous research and statistics to track any faults or mistakes.
- Undergo continuous personnel training on HACCP principles.
- Stress continuous education by urging employees to attend relevant seminars.
- Perform competency testing more frequently to ensure abidance by standards needed.

Although the standards had many beneficial advantages and imposed a very positive impact on the quality of dietary services, much of the standards may be difficult to apply due to differences in culture and many financial constraints which many hospitals face due to unavailability of support from the government or other institutions.

## Chapter V

### Conclusions and Recommendations

In conclusion, many similarities and differences were noted between the JCAHO and MOH standards. Some gaps may be filled and others not due to differences in governmental rules, cultures and policies.

As seen in the JCAHO standards, standards related to dietary services must be seen as a whole entity, not just from one single angle. In other words, standards must be applied to the whole process of patient care, from the time the patient is admitted till he is discharged home. The process of patient care must be integrated with other services such as nursing, pharmacy and education.

Not only should standards be implemented to the process of patient care, but also to food service management where certain criteria must be implemented to come up with safe and healthy food.

Therefore the Ministry of Health standards are very narrow and tackle the issues related to food service management neglecting the process of patient care, assessment and education; thus many gaps need to be filled to complement the whole picture such as education, patient assessment, education and continuous follow-up and the integration of patient assessment with other staff such as nursing and pharmacy.

Standards of MOH seem to be very bureaucratic in nature and rely more on policies, procedures and documentation.

On the other hand, some standards may be difficult to implement due to differences in culture and financial coverage. For example, schooling for children with long hospital stays may be difficult to achieve because this is expensive to cover and social securities or insurance companies do not cover such expenses.

Concerning the study done on patients, many limitations can be observed that might have affected the result such as bias for or against the hospital which is affiliated to the orthodox sect. The psychological state of the patient also has an impact, because sometimes if the patient is not feeling well, he might perceive good things as bad or vice versa. In addition, the number of patients surveyed was not the same i.e. 574 patients in year 2002 and 1245 patients in year 2004 and this might affect the result. Moreover, unavailability of sufficient data, privacy of information, confidential databases of patients was also a limitation.

Although a positive impact was seen from the surveys done, they must be ongoing to track any discrepancies noted, to keep up with the standards needed and to try as much as possible to abide by international standards in management and decision making. Variables related to patient care must also be tested in addition to those related to food service management. Moreover, management must see this standard implementation as a plus to the hospital because the hospital would have a different image and a different positioning among other hospitals. For instance the American University Hospital has a good reputation due to the fact that it holds JCAHO certification. In other words, management must be open to change, open to other cultures if improvement is the goal.

Governmental auditing on hospitals from time to time should stress more on how things are being done and the process of patient care in addition to compiling documents and papers because these may be present but nothing may be actually implemented. Moreover, departments must be integrated into each other with respect to standards in order to achieve harmony and to avoid imbalances in standard implementation.



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