Assessment of Work System at Internal Medicine and General Surgery Clinics in Fayoum University Hospital

**Aim of work**

**Goal**

Exploring the factors that may affect the quality of services provided at Internal Medicine and General Surgery out-patient clinics in Fayoum University Hospital to upgrade the quality of services.

**Objectives**

1. Study the patient satisfaction with services offered at Internal Medicine and General Surgery out-patient clinics in Fayoum University Hospital.
2. Understand the health service providers' satisfaction with system of work at Internal Medicine and General Surgery out-patient clinics in Fayoum University Hospital.
4. Set a plan to improve services in Internal Medicine and General Surgery out-patient clinics according to the results of the study.
INTRODUCTION

Services are becoming an increasingly important element of national economies and it is crucial to distinguish the qualities of services. Perception of service quality is an attitude. Service quality can be divided into two sets, i.e. functional, which include measures such as ambiance; provider attentiveness and technical such as outcome that describes how the service is delivered (Carman, 2000).

Healthcare quality is defined as the extent to which health services provided to patient populations improve desired health outcomes. The care should be based on the strongest clinical evidence and provided in a technically and culturally competent manner with good communication and shared decision making (Pelletier and Beaudin, 2008). Health service quality has three dimensions: client, professional and management quality. Client quality is the dimension that receives most attention based on how satisfied clients with their care (Carman, 2000).

In the past, the medical service providers ran their business by adopting selling orientation rather than customer orientation approach. The supply is more than the demand in medical service market and the patient’s perception is arising. Therefore, the medical service administrators adopt customer orientation approach to run their business for creating values of patients and increasing patient satisfaction (Lee Wan et al., 2010). Determining factors associated with patients’ satisfaction is thus critical for healthcare providers in order to understand what is valued by patients, how the quality of care is perceived by the patients and to know where, when and how service changes and improvements could be made (De Jager, 2010).

An accurate assessment of work climate can identify the obstacles to the health care providers interfering with their best performance. It an indicative of how the organization is realizing its full potential (Abdel-Aziz et al., 2005). The work of individual staff must be assessed so that each person's strengths and weakness can be identified and appropriate support can be provided (ESPA, 2004). Performance assessment is defined as the measurement of an individual's ability to carry out specific task. The use of the term "performance" focuses attention on the total
behavior of an individual in accomplishing a task including their organization, retention, and use of specialized knowledge, as well as their attitudes and interaction with other people. *(WHO & UNICEF, 2003)*

The terms “culture” and “climate” have been used interchangeably. Organizational climate refers to the atmosphere of aggregate attitudes and perceptions of how individuals feel about their places of work, which are associated with both individual and team motivation and satisfaction. The climate within an organization represents a moveable set of perceptions related to conditions within the workplace, which can be changed by the values, attributes, skills, actions, and priorities of organization leaders and managers *(Clarke SP., 2006)*.

A safety climate is a type of organizational culture and is the result of effective interplay of structure and processes factors and the attitude, perception, and behavior of staff related to safety. A climate of safety is represented by employee perceptions of: the priority of safety within the work environment on their unit and across the organization, and is influenced by management decisions; safety norms and expectations; and safety policies, procedures, and practices within the organization *(Gadd S., Collins AM., 2007)*.

Customer satisfaction is a person’s feeling of pleasure or disappointment resulting for comparing service’s perceived or outcome in relation to his or her expectations *(Avis et al., 1995)*. If the performance falls short of expectations, the Customer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly satisfied or delighted. *(Sinay, 2002)*

Patient's satisfaction is one of the main components of quality of care which includes respect for the patient and understanding their need and providing services accordingly. It is a major indicator of the quality of service, assessed by mapping out patient satisfaction with care providers. A hospital may be well organized, ideally located and well equipped but it will fail its responsibility to provide quality care if patient satisfaction is not of a high calibre. *(Tarantino, 2004; March et al., 2006; Alzolibani, 2011)*.
The patient is not just a customer in these processes. The patient is always a controlling, active participant and is as much a processor and supplier to the process as a customer. The best hospitals give their physicians, nurses, and other staff the tools and support they need to practice high-quality medicine on a daily basis and to identify and investigate quality problems when they do services (Meyer et al., 2002).

Out-patient clinic in any hospital is considered to be shop window of the hospital. There are various problems faced by the patients in outpatient clinic like overcrowding, delay in consultation, lack of proper guidance etc that leads to patient dissatisfaction (Srinivasan, 2000). Medical service providers that focus on interaction with people, make patients satisfied are their priority; so achieve their ultimate goal to sustainable development (Lee Wan et al., 2010).

Public healthcare organisations all over the world are increasingly concerned about their insufficient financial resources and their ability to meet social obligations. Increasing financial aid alone will not improve healthcare systems, but drastic restructuring with sound management principles need to be implemented (De Jager et al., 2000).

Quality must be associated with high technical capabilities providing effective care in an efficient manner requires high technical skills of health care professionals, who must do the right thing right the first time and do it better the next (WHO, 2004).

According to Cunningham (1991), the patient's definition of quality consists of nine elements: good patient care, responsiveness, good doctors, good reputation, up-to-date equipment, cleanliness, adequate food, limited noise, and prompt and accurate billing (Chilgren, 2008).

Factors influencing satisfaction with medical care include confidence in the system and a positive outlook on life in general. Finally; satisfaction is the judgment of the patient on the care that has been provided. The physician remains a key element in patient satisfaction. The measurement of satisfaction is, therefore, an important tool for research, administration and planning (Baker, 2006). The organizational structure of public healthcare providers must facilitate the delivery of a responsive and flexible healthcare system that is people centered with the interest of the clients guiding the decision making (De Jager et al., 2000). Employee satisfaction, loyalty, and commitment had a sizable impact on product and service quality (Beatson et al., 2008).
Rational of the study:
In Egypt, the health care infrastructure is reasonable in terms of facilities and personnel. The real challenge is to improve staff performance and patient satisfaction in order to minimize rework wastage, delay and costs. Today, we recognize that quality as perceived by the health care recipient is vitally important. As a result of this new focus, measurement of customer satisfaction has become important (Gadallah et al., 2003).

This study was done to Explore the factors that may affect the quality of services provided at Internal Medicine and General Surgery out-patient clinics in Fayoum University Hospital to upgrade the quality of services and raise the patient as well as the healthcare providers satisfaction.
Introduction about the hospital:

The University hospital was opened inside one of the University buildings; where it is treated architecturally to fit with the function of the hospital.

The vision of the hospital is to supply the local communities, national, regional and international with a qualified doctor able to recognize and solve the community health problems. Also conduct researches to ensure health promotion and to be a tool to change and improve the health beliefs and behaviors.

The mission of the hospital is training of all employees in the health sector including the students of the Faculty of Medicine, house officers and residents and postgraduate students, in a safe environment that preserve the rights of the trainee and the rights of the patient through an integrated quality health care. Implementation of a research related to health problems in the community to develop the best solutions to deal with it with a health education and behavioral change of the community.

(Available at: http://www.fayoum.edu.eg/Medicine/AboutCollegePage1.aspx 2013)

The important goals of hospitals are to deliver high quality health services and to respond to the needs of the patients. Patient satisfaction is one of the most sensitive indicators of the quality of their services as it measures the gap between what is expected and ideal from one side and what actually exists in reality (Aldebasi and Issa, 2011). The delivery of healthcare depends on individual providers, coordination within teams, and the structure of the work setting (Kelly et al., 2010).
Chapter (1)  

Health System in Egypt

The Egyptian health care system faces multiple challenges in improving and ensuring the health and wellbeing of the Egyptian people. The system faces not only the burden of combating illnesses associated with poverty and lack of education, but it also respond to emerging diseases and illnesses associated with modern, urban lifestyle. A high birth rate combined with a longer life expectancy is increasing the population pressure on the Egyptian health system (ESPA, 2002).

Egypt has a highly pluralistic health care system, with many different public and private providers and financing agents. Health services in Egypt are currently managed, financed, and provided by agencies in all three sectors of the economy (government, parastatal, and private). The government sector represents activities of ministry that receive funding from the Ministry of Finance (MOF). The government health services in Egypt are organized as an integrated delivery system in which the financing and provider functions are included under the same organizational structure. This means that government providers receiving budgetary support from the government general revenues (MOF) are also subject to the administrative rules and regulations that govern all civil service organizations. For example, staffs are subject to the Civil Service Employment Law, and remuneration is based on the civil service salary scale determined by the Central Agency for Organization and Administration (CAOA). Government providers are permitted to generate their own income through various means, including charging user fees in special units or departments known as economic departments. Income from these non budgetary sources is classified as “self-funding” (WHO, 2006).

The parastatal sector is composed of quasi-governmental organizations in which government ministry have a controlling share of decision-making, including the Health Insurance Organization (HIO), the Curative Care Organization (CCO) and the Teaching Hospitals and Institutes Organization (THO). Although the distinction between the government sector and the parastatal or quasi-governmental sector is usually made when describing the Egyptian health sector, both sectors are run by the state. From an operational and a financial perspective, the
parastatal sector is governed by its own set of rules and regulations, has separate budgets, and exercises more autonomy in daily operations. However, from a political perspective, the Ministry of Health and Population (MOHP) has a controlling share of decision-making parastatal organizations "(WHO, 2006).

The private sector includes for-profit and nonprofit organizations and covers everything from traditional midwives, private pharmacies, private doctors, and private hospitals of all sizes. Also in this sector there are a large numbers of nongovernmental organizations (NGOs) providing services, including religiously affiliated clinics and other charitable organizations, all of which are registered with the Ministry of Social Affairs (MOSA). The private sector has 2,024 inpatient facilities, with a total of about 22,647 beds. This accounts for approximately 16 percent of the total inpatient bed capacity in (Handoussa H et al., 2010).

**Organization of the Ministry of Health and Population**

The organizational structure of the MOHP consists of two functional structures: the administrative structure and the service delivery structure.

- **Administrative Structure**
  The administrative organization of the MOHP comprises the central headquarters and the governorate level health directorates.

- **Service Delivery Structure**
  The MOHP is currently the major provider of primary, preventive, and curative care in Egypt, with around 5,000 health facilities and more than 80,000 beds spread nationwide. There are no formal referral systems in the MOHP delivery system. The MOHP service delivery units are organized along a number of different dimensions. These include geographic (rural and urban), structural (health units, health centers, and hospitals), functional (maternal child health centers), or programmatic (immunization, and diarrheal disease control) (Mahi Al Tehewy et al., 2009). Integrated hospitals are small, 20- to 60-bed hospitals providing primary health care and specialized medical services in the rural areas. Integrated hospitals contain well-equipped surgical theatres, X-ray equipment, and laboratories and are responsible for serving a catchment population of between 10,000and 25,000 people (ESPA, 2002).
District hospitals are 100- to 200-bed hospitals that provide more specialized medical services and are available in every district. District hospitals are responsible for serving a catchment population of between 50,000 to 100,000 people in the urban district area. General hospitals contain more than 200 beds and contain all medical specialties. General hospitals are available in every capital of a governorate. Specialty hospitals are located in urban areas and include specialties such as eye, psychiatric, chest (34), fever (88), heart ophthalmology (31), tumors, and gynecology and obstetrics. Specialty hospitals are available in all governorates (Saleh, 2006).

**MOHP Public Health Programs**

The MOHP has attempted to target many health priorities in Egypt through vertical programs that rely heavily on donor assistance. These programs include the following:

- Reproductive Health, and Family Planning Program
- Control of Diarrheal Diseases and Acute Respiratory Infections Programs
- Expanded Program on Immunization
- Maternal Health

**Health Reform Strategy**

The government of Egypt has articulated as its long-term goal of basic health services coverage of all citizens. It has also stated the importance of targeting the most vulnerable population groups as its priority. Major components of the strategy include expanding the social health insurance coverage from 47 percent (in 2003) of the population to universal coverage based on the “family” as the basic unit. An affordable and cost-effective package of basic health services based on the priority health needs of the population will be provided (Sameh El-Saharty, 2004).

The health sector reform strategies are assisted through the Health Sector Reform Program (HSRP), it includes: Provision of the basic package will be based on competition and choice among the different public and private service providers, under a single Public and Health Insurance Fund (PHIF) using incentive-based and other provider payment mechanisms. Strengthening management systems and developing a regulatory framework and institutional relationships to ensure quality of care and to support the reform of the health sector. Developing
the domestic pharmaceutical industry and reducing government involvement in the production of pharmaceuticals while strengthening its role as a financier (Egypt National Human Development Report, 2005).

**Other Government and Public Sector Agencies**

Many other ministries operate their own health facilities that cater to their employees. The most important is the Ministry of Interior, which operates health facilities for police and the prison population; the Transport Ministry, which operates at least two hospitals for railway employees; the Ministry of Agriculture; the Ministry of Religious Affairs; and the Defense Ministry, which is responsible for health facilities run by the Armed Forces. Egypt has 14 medical schools (Faculties of Medicine), affiliated with the major universities and 36 university hospitals. University hospitals are regarded as secondary and tertiary care facilities and tend to be much more advanced in terms of technology and medical expertise in comparison with MOHP facilities. Cairo University, with a new modern hospital, is considered the largest and most sophisticated hospital in this group. These university hospitals are operated under the authority of Ministry of Higher Education (ESPA, 2002).

**Parastatal Sector**

The parastatal organizations are governmental establishments operated through the MOHP or other ministries. They include the Teaching Hospitals and Institutes Organization (THO), the Health Insurance Organization (HIO), and the Curative Care Organization (CCO).

**General Organization of Teaching Hospitals and Institutes**

THO includes nine institutes and nine hospitals distributed over Egypt. The nine THO hospitals are distributed as follows: four hospitals in Cairo, two hospitals in Upper Egypt governorates, and three hospitals in Lower Egypt governorates.

**Health Insurance Organization**

There are four broad classes of HIO beneficiaries: all employees working in the government sector, some public and private sector employees, pensioners, and widows. In February 1993, the Student Health Insurance Program (SHIP) was introduced to cover 15 million students and school
age children, thus increasing the total beneficiary population from 5 million in 1992 to 20 million in 1995. The 1997 Ministerial Decree 380 extended coverage to newborns (under one) and, by 2002, had increased the eligible beneficiary population to more than 30 million (Eliya et al., 1997).

The Curative Care Organizations

The Curative Care Organization (CCO) is a nonprofit system established in 1964 under the ultimate authority of the MOHP. CCOs operate 11 hospitals, which together account for about 1.5 percent of Egypt's total hospital beds. Each CCO is run independently on a nonprofit basis, with surplus revenue being invested into service improvement. In general, the 11 hospitals are high-quality institutions, providing a full range of quality curative care services and programs. In 2002, the CCOs operated facilities with 2,127 beds (Jafar et al., 2011).

Private and Nongovernmental Sector

Private-sector provision of services includes everything from traditional healers, midwives, private pharmacies, private doctors, and private hospitals of all sizes. Also in this sector are a large number of NGOs providing services, including religiously affiliated clinics and other charitable organizations, all of which are registered with the Ministry of Social Affairs (ESPA, 2002).

Private Practices

Physicians represent the most powerful professional group in the health sector. Doctors are permitted to work simultaneously for the government and in the private sector. Those who are employed by the government but run a private practice because of their low salaries account for a large portion of private providers. Many other physicians, however, cannot afford to open their own private clinics and work in more than one nongovernmental religious or private facility in addition to their government jobs.

The Egyptian National Health Care Provider Survey (Nandakumar et al., 1999) showed that 89% of the physicians with private clinics had multiple jobs. 73% of the physicians had two jobs, 14% had three jobs, and 2% had four jobs. The MOHP employs 53% of physicians with
multiple jobs, followed by universities with 14%, and HIO with 11%. The remaining physicians include well-established and qualified senior physicians who are usually faculty members in the major medical schools or shareholders in modern private hospitals. These physicians have the technology, the resources, and the visibility required to run very successful and profitable private practices.

**Nongovernmental Organizations**

Nongovernmental organizations (NGOs) provide many developmental, social, and health care services, including reproductive health and family planning service delivery. Reproductive health and family planning services are delivered through the Egyptian Family Planning Association (EFPA), the Clinical Services Improvement (CSI) project, and other NGOs that are able to provide health services (e.g., mosque health units, church health units, and other NGO clinics). According to the 2000 Egypt Demographic and Health Survey, the public sector is providing 49% of family planning services in Egypt, and the private sector is providing 44%. PVOs/NGOs were found to be providing 7% of family planning services. There is a system of supervision and monitoring based on a regular follow-up for the NGO clinics. Supervision is conducted at two levels: from local directors at clinics and from the central staff (*EDHS, 2000*).

**Teaching hospitals**

A teaching hospital is a hospital that provides clinical education and training to future and current doctors, nurses, and other health professionals, in addition to delivering medical care to patients. They are generally affiliated with medical schools or universities (hence the alternative term university hospital), and may be owned by a university or may form part of a wider regional or national health system. (*Wikipedia 2012*)

When people need medical treatment they may be given it in a “teaching hospital.” This is a place where student doctors and other trainee healthcare workers are receiving part of their education. Teaching hospitals are usually large establishments and in most countries they are regarded as being among the very best hospitals available, with leading physicians and surgeons among the staff. It is usually assumed that patients who are being treated in a teaching hospital are lucky, because they are getting such high-quality healthcare. However, it has sometimes been
suggested that, because some of the people involved in their care are still in training, the patients may face higher risks than those who are in nonteaching hospitals. (Panagiotis N., et al. 2006)

Teaching hospitals foster a higher quality of care, including the treatment of rare diseases and complex patients, the provision of specialized services and advanced technology, and the conduct of biomedical research. Some services, such as specialized surgery are provided predominantly at teaching hospitals (Vartak S., et al. 2012). Other distinctive missions of teaching hospitals include medical education and training, innovations in clinical care, and treatment of indigent patients, particularly at public teaching hospitals (Kupersmith J. 2005).

The Education Ministry through its budget supports twenty university hospitals, with over 15,000 beds. These provide a higher quality of care than MOH facilities, and receive a higher level of government subsidies per unit of service. The university hospitals are linked to the universities, but they are open to all patients. They charge user fees from patients (Ravi P. Rannan Eliya, et al. 1997).

Teaching hospitals in fact rely heavily on income from more routine services, such as the care of heart disease, pneumonia, and stroke. They therefore may justify their comparatively higher charges for these clinical services by claiming that they provide better care than other hospitals do. It is possible, however, that for common conditions, teaching hospitals may offer a lower quality of care than do nonteaching hospitals, particularly if the substantial involvement of inexperienced trainees and the attenuated role of senior physicians in teaching hospitals results in more fragmented and less appropriate care. Both purchasers and patients have an interest in knowing whether teaching hospitals provide added value through a higher quality of care or whether services of comparable quality could be obtained at a lower cost in nonteaching hospitals (John Z. and Joel S. 2002).

**Role of teaching hospitals**

- Teaching hospitals are valuable assets as they educate future generations of health care professionals.
- Conduct state of the art research to discover cures and advance surgical techniques
- Provide care to the nation’s underserved and uninsured populations.
- Serve as referral centers for complex and severely ill or injured patients (Hayanga AJ., et al. 2010).

**Advantages of teaching hospitals**

- Teaching hospitals work in larger teams than in a district general hospital.
- Manage a greater variety of patients. These include patients with complex illness or rare conditions.
- There is also exposure to tertiary (highly specialist) practice.
- The subspecialty environment of a teaching hospital can be good to extend knowledge in an area of interest.
- The regular ‘grand rounds’ and other teaching sessions give an insight into rarer conditions which might otherwise pass trainees by.
- Teaching hospitals also provide an excellent opportunity to ‘sample’ a specialty, which is important in career choice.” Another key attraction of teaching hospitals is the opportunity to be involved in the many trials, audits, and research projects going on within the departments (John Z. and Joel S. 2002).
Chapter (2) Quality in health care

There are different definitions to the term "Quality of care". It is a kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that attend the process of care in all its parts (*IOM, 1990*). It is the degree to which the treatment dispensed increases the patient’s chances of achieving the desired results and diminishes the chances of undesirable results regard to the current state of knowledge (*WHO, 1998*). It is the level of attainment of health systems’ intrinsic goals for health improvement and responsiveness to legitimate expectations of the population (*WHO, 2000*). It is the care that meets the expectations of patients and other customers of healthcare services(*Conway and Weingart, 2005*).

*Al-Assaf and Sheikh (2004)* explained the different terms of Quality as: quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Quality assurance is the process of planning for quality, development of objectives and goals for quality, setting standards, communicating standards to users, developing indicators, setting thresholds and collecting data to monitor compliance with set standards. Quality improvement is reducing variation of performance from standards in order to achieve a better outcome for the organization’s customers. Quality management is structural umbrella over all processes and activities related to Quality assurance and Quality control. Quality Control is the ongoing effort to maintain the integrity of a process to maintain the reliability of achieving an outcome.

Quality management has a specific meaning within many business sectors. This definition can be considered to have four main components: quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product/service quality, but also the means to achieve it. Quality management therefore uses quality assurance and control of processes as well as products to achieve more consistent quality.
Health expenditure in industrialized countries has doubled in the last 30 years; however, the highest spending countries are not always those with the best results. One reason is the fragmentation of their health care delivery systems. Taking a systems perspective, and orienting systems to the delivery and improvement of quality, are fundamental to progress and to meeting the expectations of both populations and health-care workers (Rose and Kenneth, 2005).

Achieving the Millennium Development Goals (MDGs) in low income countries require an organized whole system perspective. However, many low income countries have substantial difficulties in achieving the MDGs. The lack of sufficient financial investment, the fragmentation of the delivery of health services, and poor quality are considered key obstacles to the successful implementation of health programs. A reflection of this is shown in Pakistan, Sri Lanka, and the United Republic of Tanzania studies as poor people bypass local services perceived as being low quality, and instead going to the private sector in spite of geographically distant or even costs. This practice may aggravate poverty (Leatherman and Sutherland, 2004).

**Quality principles:**

**Principle 1: Customer focus**
Since the organizations depend on their customers, therefore they should understand current and future customer needs, meet their requirements and try to exceed customers' expectations. An organization attains customer focus when all people in the organization know both the internal and external customers' requirements try to be met with insurance of customers' satisfaction (Rose and Kenneth, 2005).

**Principle 2: Leadership**
Leaders of an organization establish unity of purpose and direction of it. They should go for creation and maintenance of such an internal environment, in which people can become fully involved in achieving the organization's quality objectives.

**Principle 3: Involvement of people:** People at all levels of an organization are the essence of it. Their complete involvement enables their abilities to be used for the benefit of the organization.
**Principle 4: Process approach** the desired result can be achieved when activities and related resources are managed in an organization as process.

**Principle 5: System approach to management** an organization's effectiveness and efficiency in achieving its quality objectives are contributed by identifying, understanding and managing all interrelated processes as a system.

**Principle 6: Continual improvement** one of the permanent quality objectives of an organization should be the continual improvement of its overall performance.

**Principle 7: Factual approaches to decision making** effective decisions are always based on the data analysis and information.

**Principle 8: Mutually beneficial supplier relationships** since an organization and its suppliers are interdependent; therefore a mutually beneficial relationship between them increases the ability of both to add value. These eight principles form the basis for the quality management system standard ISO (9001:2008).

*(Westcott and Russell, 2003)*

**Quality improvement**
There are many methods for quality improvement. These cover product improvement, process improvement and people based improvement. Some of the common differentiators between success and failure include commitment, knowledge and expertise to guide improvement, scope of change, and adaptation to enterprise cultures. Enterprises therefore need to consider carefully which quality improvement methods to adopt *(WHO, 2000).*

It is important not to underestimate the people factors, such as culture, in selecting a quality improvement approach. Any improvement takes time to implement, gain acceptance and stabilize as accepted practice. Improvement must allow pauses between implementing new changes so that the change is stabilized and assessed as a real improvement, before the next improvement is made. Improvements that change the culture take longer as they have to overcome greater resistance to
change. It is easier and often more effective to work within the existing cultural boundaries and make small improvements than to make major transformational changes. On the other hand, transformational change works best when an enterprise faces a crisis and needs to make major changes in order to survive. Well organized quality improvement programs take all these factors into account when selecting the quality improvement methods (Thareja, 2008).

**Dimensions of quality of care**

- Effectiveness and Efficiency refers to which the intervention produces the intended effects with minimum resources (WHO, 2000). The goal is to continually identify waste and inefficiency in the provision of health care services and eliminate them (Starfield, 2002).
- Access and Appropriateness of health services: availability of health services and treatment to the person needed and at the proper time. (Ann Bowling, 2002). Health care needs to be organized to meet the needs of patients in a timely manner.
- Safety refers to the reduction of risk to the patient including problems in practice, products, procedures, and systems. Patient safety has traditionally been considered as one among many dimension of quality of care, but it is increasingly being seen as absolutely key to quality overall (Kohn et al., 2000).
- Equity and Acceptability and Responsiveness to patients as fairness so that, in some circumstances, individuals will receive more care than others according to their particular needs.
- Patient-centered care (Satisfaction) recognizes that listening to the patient’s needs, values, and preferences is essential to providing high-quality care. Health care services should be personalized for each patient, care should be coordinated, family and friends on whom the patient relies should be involved and care should provide physical comfort and emotional support (Schoen et al., 2007).
- Efficacy and Assessment refers to the degree to which effective health care has been implemented and achieved and results have been attained (Council of Europe, 2006). The choice of dimensions to measure quality of care is critical as it will influence the health care policies adopted. Thus, the key challenge for every country to recognize these diverse
expectations and to reconcile them in a responsive and balanced health system (Shaw and Kalo, 2002).

Levels of quality of care
The quality is divided into four levels at which it can be assessed:

- The first level involved providers, patients and communities as well as the setting in which health care takes place.
- The second level involves the amenities of care, focusing on the desirable attributes of the settings in which care is provided.
- The third level refers to the actual implementation of care, responsibility for which is shared between the provider and the patient.
- The final level refers to the care received by the community as a whole and considers issues of social distribution of levels of quality. Thus, the definition of quality becomes either narrower or more expansive, depending on how the concept of health and related responsibilities are being defined. Good structure increases the likelihood of good process, and good process increases the likelihood of good outcome” (Donabedian, 1988; Braithwaite and Dwan, 2005).

Quality assessment
Service quality is viewed as the degree and direction of discrepancy between clients perceptions and expectations”. Patients’ satisfaction is truly measured based on two factors, their expectations of the service and their perceptions of the actual service they received (Tarantino, 2004). They developed a model of service quality based on the magnitude and directions of five “gaps,” which include client expectations-experiences discrepancies in addition to differences in service design, communications, management, and delivery (Legido et al., 2008).

Evaluating the Quality of Health Care
One of the challenges in understanding quality is how to measure, and how to improve it. The influence of physical, socioeconomic, work environments, income, race, and gender affect health. They found that differences in internal factors, such as collaborative relationships with physicians,
decentralized clinical decision-making, and positive administrative support, impact nurse and patient outcomes and the quality and safety of care (Rosenstein et al., 2002).

Differences in external factors, such as insurance and geographic location, can influence access to available health care professionals and resources, what type of care is afforded patients and the impact of care on patients. The structure, process, and outcome dimensions of quality are influenced by both internal and external factors (Clarke et al., 2002).

Evaluation of the process of care can be done by applying the six goals for health care quality. Was the patient’s safety protected? Was care timely and not delayed or denied? Were the diagnosis and treatments provided consistent with scientific evidence and best professional practice? Was the care patient centered? Were services provided efficiently? Was the care provided equitable? Answers to these questions can help us understand if the process of care needs improvement and where quality improvement efforts should be directed (IOM, 2003).

Structure of Health Care
The structure of health care broadly includes the facilities, personnel (e.g., number of nurses and physicians) on-call resources, technology and support services (laboratory, pharmacy, radiology) that create the capacity to provide health services. Also adequacy of the structural resources of health care facilities is the foundation upon which quality health care services are provided. The value of health care services lies in their capacity to improve health outcomes for individuals and populations. Health outcomes are broadly conceptualized to include clinical measures of disease progression, patient-reported health status or functional status, satisfaction with health status or quality of life, satisfaction with services, and the costs of health services (Mark et al., 2003).

Benchmarks Definition:
Benchmarking in health care is defined as the continual and collaborative discipline of measuring and comparing the results of key work processes with those of the best performers in evaluating organizational performance.
**Types of Benchmarking:**

There are two types of benchmarking that can be used to evaluate patient safety and quality performance:

- Internal benchmarking is used to identify best practices within an organization, to compare best practices within the organization and to compare current practice over time. The information and data can be plotted on a control chart with statistically derived upper and lower control limits. However, using only internal benchmarking does not necessarily represent the best practices elsewhere.

- Competitive or external benchmarking involves using comparative data between organizations to judge performance and identify improvements that have proven to be successful in other organizations. *(National Healthcare Quality Report, 2006).*

Efforts to improve quality need to be measured to demonstrate “whether improvement efforts lead to change in the primary end point in the desired direction, contribute to unintended results in different parts of the system and require additional efforts to bring a process back into acceptable ranges (Varkey et al., 2007).

The rationale for measuring quality improvement is the belief that good performance reflects good-quality practice and that comparing performance among providers and organizations will encourage better performance *(Schoen et al., 2006).* Some providers have been sensitive to comparative performance data *(Marshall et al., 2000).* And consumers have had problems interpreting the data in reports and consequently not used the reports to the extent hoped to make informed decisions for higher-quality care *(Schneider and Lieberman, 2001).*

The complexity of health care systems and delivery of services, the unpredictable nature of health care and the occupational differentiation and interdependence among clinicians and systems make measuring quality difficult *(Ferlie et al., 2005).* One of the challenges in using measures in health care is the attribution variability associated with high-level cognitive reasoning, discretionary decision-making, problem-solving and experiential knowledge *(Berwick, 2002).* Another measurement challenge is whether a near miss could have resulted
in harm or whether an adverse event was a rare aberration or likely to recur. The Agency for Healthcare Research and Quality (AHRQ), the National Quality Forum, the Joint Commission and many other national organizations endorse the use of valid and reliable measures of quality and patient safety to improve health care. Measures of quality and safety can track the progress of quality improvement initiatives using external benchmarks (*National Healthcare Quality Report, 2006*).

### Quality Improvement Strategies

A quality improvement strategy is defined as “any intervention aimed at reducing the quality gap for a group of patients’ representative of those encountered in routine practice” (*Shojania et al., 2004*). Quality improvement is also defined “as systematic data-guided activities designed to bring about immediate improvement in health care delivery in particular settings” (*Shojania et al., 2004*).

Quality improvement projects and strategies differ from research: while research attempts to assess and address problems that will produce generalizable results, quality improvement projects can include small samples, frequent changes in interventions, and adoption of new strategies that appear to be effective (*Varkey et al., 2007*). There are criteria that distinguish the two:

1. Quality improvement applies research into practice, while research develops new interventions; 
2. Risk to participants is not present in quality improvement, while research could pose risk to participants; 
3. The primary audience for quality improvement is the organization, and the information from analyses may be applicable only to that organization, while research is intended to be generalizable to all similar organizations; and 
4. Data from quality improvement is organization-specific, while research data are derived from multiple organizations (*Reinhardt and Ray, 2003*).

The TQM model is an organizational approach involving organizational management, teamwork, defined processes, systems thinking, and change to create an environment for improvement. This approach incorporated the view that the entire organization must be committed to quality and improvement to achieve the best results. In health care, continuous quality improvement (CQI) is used interchangeably with TQM. CQI has been used as a means to
develop clinical practice and is based on the principle that there is an opportunity for improvement in every process and on every occasion. Hospital quality assurance (QA) programs generally focus on issues identified by regulatory or accreditation organizations such as checking documentation, reviewing the work of oversight committees and studying credentialing processes (Wallin et al., 2003).

The lack of scientific health services literature has inhibited the acceptance of quality improvement methods in health care. It has been asserted that a quality improvement project can be considered more like research when it involves a change in practice affects patients and assesses their outcomes, employs randomization or blinding and exposes patients to additional risks or burdens, all in an effort towards generalizability (Lynn, 2004). Regardless of whether the project is considered research, human subjects need to be protected by ensuring respect for participants, securing informed consent, and ensuring scientific value (Harrington, 2007).

**Methods of improvement:**

1. **Plan-Do-Study-Act (PDSA)**
This is a method that has been widely used for rapid cycle improvement. One of the unique features of this model is the cyclical nature of impacting and assessing change, most effectively accomplished through small and frequent PDSAs rather than big and slow ones, before changes are made system wide. The purpose of PDSA quality improvement efforts is to establish a functional or causal relationship between changes in processes (specifically behaviors and capabilities) and outcomes. The PDSA cycle starts with determining the nature and scope of the problem, what changes can and should be made, a plan for a specific change, who should be involved, what should be measured to understand the impact of change and where the strategy will be targeted. Change is then implemented and data are collected. Results from implementation study are assessed and interpreted by reviewing several key measurements that indicate success or failure. Lastly, action is taken on the results by implementing the change or beginning the process again (Berwick, 2003).
2. Six Sigma

Six Sigma, originally designed as a business strategy, involves improving, designing, and monitoring process to minimize or eliminate waste while optimizing satisfaction and increasing financial stability (*Pande et al., 2000*). The performance of a process is used to measure improvement by comparing the baseline process capability with the process capability after piloting potential solutions for quality improvement (*Barry et al., 2003*). One component of Six Sigma uses a five-phased process that is structured, disciplined, and rigorous, known as define, measure, analyze, improve, and control (DMAIC) approach. DMAIC is pronounced "de-may-ick," is a tool for improving an existing process. The steps can be summarized as follows:

- **Define**: State the problem, specify the customer set, identify the goals, and outline the target process.
- **Measure**: Decide what parameters need to be quantified, work out the best way to measure them, collect the necessary data, and carry out the measurements by experiment.
- **Analyze**: Identify gaps between actual and goal performance, determine causes of those gaps, determine how process inputs affect outputs, and rank improvement opportunities.
- **Improve**: Devise potential solutions, identify solutions that are easiest to implement, test hypothetical solutions, and implement actual improvements.
- **Control**: Generate a detailed solution monitoring plan, observe implemented improvements for success, update plan records on a regular basis, and maintain a workable employee training routine. (*Tushar and Shrivastava, 2008*)

To begin, the project is identified, historical data are reviewed and the scope of expectations is defined. Next, continuous total quality performance standards are selected, performance objectives are defined and sources of variability are defined. As the new project is implemented, data are collected to assess how well changes improved the process. To support this analysis, validated measures are developed to determine the capability of the new process (*Pande and Newman, 2002*).
3. Toyota Production System/Lean Production System

Application of the Toyota Production System used in the manufacturing process of Toyota cars resulted in what has become known as the Lean Production System or Lean methodology (Sahney, 2003). This methodology overlaps with the Six Sigma methodology, but differs in that Lean is driven by the identification of customer needs and aims to improve processes by removing activities that are non-value-added. This methodology depends on root-cause analysis to investigate errors and then to improve quality and prevent similar errors (Endsley et al., 2006). Printezis and Gopalakrishnan, (2007) reported that using Toyota Production System methods in health care organizations improved patient safety and the quality of health care by systematically defining the problem; using root-cause analysis; then setting goals, removing ambiguity and workarounds and clarifying responsibilities. When it came to processes, team members in these projects developed action plans that improved, simplified and redesigned work processes.

4. Root Cause Analysis

Root cause analysis (RCA) used extensively in engineering and similar to critical incident technique is a formalized investigation and problem-solving approach focused on identifying and understanding the underlying causes of an event as well as potential events that were intercepted (Kemppainen, 2000). RCA is a technique used to identify trends and assess risk that can be used whenever human error is suspected with the understanding that system, rather than individual factors are likely the root cause of most problems (IOM, 2004).

The Joint Commission requires RCA to be performed in response to all sentinel events and expects, based on the results of the RCA, the organization develop and implement an action plan consisting of improvements designed to reduce future risk of events and to monitor the effectiveness of those improvements. The final step of a traditional RCA is developing recommendations for system and process improvement based on the findings of the investigation (Joint Commission, 2003).

5. Failure Modes and Effects Analysis

Failure modes and effects analysis (FMEA) is an evaluation technique used to identify and eliminate known and/or potential failures, problems and errors from a system, design, process and/or service before they actually occur (Spath and Hickey, 2003). FMEA used to proactively
identify steps in a process that could reduce or eliminate future failures. The goal of FMEA is to prevent errors by attempting to identify all the ways a process could fail, estimate the probability and consequences of each failure, and then take action to prevent the potential failures from occurring. In health care, FMEA focuses on the system of care and uses a multidisciplinary team to evaluate a process from a quality improvement perspective (Reiling et al., 2003).

6. Health Failure Mode and Effect Analysis (HFMEA)

The health failure modes and effects analysis (HFMEA) tool is used for risk assessment. There are five steps in HFMEA:
(1) Define the topic.
(2) Assemble the team.
(3) Develop a process map for the topic, and consecutively number each step and sub step of that process.
(4) Conduct a hazard analysis.
(5) Develop actions and desired outcomes. In conducting a hazard analysis, it is important to list all possible and potential failure for each of the processes, to determine whether the failure modes warrant further action and to list all causes for each failure mode when the decision is to proceed further. Then it is important to consider the actions needed to be taken and outcome measures to assess including describing what will be eliminated or controlled and who will have responsibility for each new action (DeRosier et al., 2002).

7. 5 S

Is the name of a workplace organization method that uses a list of five Japanese words, they all start with the letter "S". These words are (Seiri, Seiton, Seiso, Seiketsu, Shitsuke).

The list describes how to organize a work space for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new order. The decision-making process usually comes from a dialogue about standardization, which builds understanding among employees of how they should do the work. 5 S is an organization-wide participation program involving everyone in the place. It is recommended to start implementing 5 S in a well-chosen pilot unit or pilot process, and spread to the others step by step. It is within the reach of organizations of any size; small, medium, and large results are
visible to everyone; insiders and outsiders. Visible results will enhance the generation of more and new ideas (Mike Bresko, 2013).

Factors for Successful 5 S

- Continued commitment and support by top management.
- 5 S starts with education and training of all workers.
- There are no observers in 5 S, everyone participates.
- Repeat the 5 S cycle in order to achieve a higher standard.

An organization that is implementing 5 S successfully is always: High in Productivity, consistent in quality, cost-effective, accurate in delivery, safe for people to work in and High in Morale (Mike Bresko, 2013).

The 5 S Principles

- Seiri : Organisation/Sort
- Seiton : Orderliness/Systemize
- Seiso : Cleaning/Shining
- Seiketsu: Standardize
- Shitsuke : Sustain/Discipline

(Paula and Pedene, 2012).
Chapter (3) Patient satisfaction

Definitions:

Patients' satisfaction with health care service is mainly dependent on the duration and efficiency of care, degree of communication and empathetic with the health care providers. Also, informed patients of the clinical procedures and the time it is expected to take are generally more satisfied even if there is a longer waiting time (Pulia, 2011).

Satisfaction, like many other psychological concepts, is easy to understand but hard to define. The concept of satisfaction overlaps with similar themes such as happiness, contentment, and quality of life. A simple and practical definition of satisfaction would be the degree to which desired goals have been achieved. Satisfaction comprises both cognitive and emotional facets and relates to previous experiences, expectations and social networks (Keegan et al., 2003).

Customer satisfaction is an important measure of service quality in health care organizations. From a management perspective, Gadallah et al., (2003) explained the importance of patient satisfaction with health care in the following reasons:

1. Satisfied patients are more likely to maintain a consistent relationship with a specific provider.
2. An organization can address system weaknesses, thus improving its risk management by identifying sources of patient dissatisfaction.
3. Satisfied patients are more likely to follow specific medical regimens and treatment plans.

Finally, patient satisfaction measurement adds important information on system performance, thus contributing to the organization’s total quality management.

Factors influencing patient satisfaction

When including patient satisfaction mechanisms in health care systems; should take account of the capacity of users to understand what is being asked of them and to communicate their opinions and feelings effectively. Important factors influencing patients in this regard include literacy levels, intellectual and physical/sensory disability levels and difficulties with language.
proficiency or ethnic and cultural diversity. Social elements within our society must be considered as they can often dictate whether the consumer will provide feedback and express their satisfaction or otherwise, e.g., financial status, educational status, demographics, technology. Satisfaction may be influenced by many factors that should be considered:

1. Patient expectation

The meeting of patient expectations is assumed to play a role in the process by which an outcome can be said to be satisfactory or unsatisfactory. Expectations are an important influence on the patient’s overall measurement of satisfaction with a health care experience. Patient satisfaction is influenced by the degree to which care fulfills expectation (Mahon, 1996). The link between satisfaction and fulfillment of patient expectations is not necessarily the case, since it is possible that the patient’s evaluation of a service may be largely independent of actual care received (Williams, 1994).

Patients with inappropriately high expectations may be dissatisfied with optimal care, and those with inappropriately low expectations may be satisfied with deficient care. Furthermore, observed differences in satisfaction between people from different social classes, age, sex and cultural group or between different services and types of care may be confounded by match or mismatch between expectation and the service received (McKinley and Roberts, 2001).

2. Age

Older respondents generally record higher satisfaction; possible explanations include lower expectations of health care and reluctance to articulate their dissatisfaction (Pope and Mays, 1993; Williams and Calnan, 1991; Owens and Batchelor, 1996).

3. Illness

Every patient who comes for consultation has expectations based on his or her understanding of their illness. Patients with better self-reported health status have rated their satisfaction with access to care better than those with poor health (De Boer et al., 2010).
Several studies have found that people with chronic conditions are less satisfied with the quality and access to health services than the other population. As frequent users of health services, patients with chronic conditions have more opportunities to experience difficulties in access, such as long waiting times, costs of care, fragmentation of care, and lack of continuity and coordination of care (Bentur et al., 2004).

4. **Prior experience of satisfaction**
Satisfaction was linked to prior satisfaction with health care and granting patients’ desires (Crow et al., 2003).

5. **Patient/professional relationship**
There is consistent evidence across settings that the most important health service factor affecting satisfaction is the patient/practitioner relationship, including information and technical competence, doctor understanding of patient expectations, feelings, and social context of his illness. When doctor's perceptions and patient's preferences are not concordant, it results in dissatisfaction of patients and poor outcomes of consultation. It was also found that people who are satisfied with their doctor have more positive attitudes about the health reforms and evaluate the health system better (Põlluste et al., 2004).

6. **Gender, ethnicity, and socio-economic status**
The cost of care has also been found to be a reason for dissatisfaction with access to care (Kinci and Sinay, 2003).

The last few decades have witnessed fast economic growth and revolution in information technology worldwide has led to increased demands and new expectations of patients. Now increasingly knowledgeable patients armed with the information from the media confront physicians with the expectation of quality care of highest standards. On the other hand technological innovations in medicine have shifted doctor's attention away from the personal care of the patients. The sense of the growing gap between what patients wants and what practitioners
perceive as important has resulted in increased dissatisfaction of patients with the health care system (Mechanic, 2003).

**Patient perspectives of quality**
Quality is the core of a healthcare organization's excellence. A focus on quality should be the foundation of every interaction with every patient, and it is management's responsibility to ensure that quality processes are followed throughout the organization. Excellence is determined by the patients' perception that they received extraordinary service and quality. This is the factor that makes the organization, in the mind of patients, unique and unparalleled among competing facilities. Simply, this new definition of quality is based on how a patient experienced a service, rather than whether the actual service was effective (Studer, 2003).

Patient evaluation of care is increasingly seen as a valuable outcome in itself besides measures of clinical effectiveness. It may reveal quality problems and provide suggestions of not only improving the quality of care but to improve clinical and functional outcomes (Peers, 2002).

**The Difference between Quality and Patient Satisfaction**
The new definition of quality is really the existing meaning of "patient satisfaction", Accreditation is tied to this definition. The Joint Commission and the National Committee for Quality Assurance, require healthcare organizations to submit patient satisfaction data. This requirement demonstrates that the overall satisfaction of customers has a role in determining the value of providers. The primary focus of physicians and other providers, involves the clinical quality, scientific measurement and comparison of specific healthcare data and outcomes. Although it is an important aspect of the overall definition of quality, it is largely outside the knowledge of patients because it uses language and methods that are too technical for regular patients. As such, clinical quality is not viewed by patients as a critical contributor to their overall experience of quality care. Patients care more about the overall experience of a healthcare visit rather than any particular clinical element of the encounter (Hereford and LePore, 2001).

The patient's view of quality is influenced by everything that goes on in the hospital or clinic at the time of the visit, including the interactions between patient and provider and the
surrounding sounds and sights; these all add to the patient's perception of quality care. As patient-perceived overall quality, the healthcare providers can predict whether patients will return to the organization, will recommend the facility to others, and perhaps even will sue regarding a legal issue. If patients deem that they are being genuinely cared for and if they trust their healthcare providers, they are more inclined to follow or comply with recommended treatment plans. Those patients have a "greater tolerance for uncomfortable or frightening procedures (Press, 2006).

Specific preferences about healthcare and quality naturally differ for each patient and each organization. However, information and data about patient satisfaction are well known to healthcare managers. Patient's definition of quality consists of nine elements: good patient care, responsiveness, good doctors, good reputation, up-to-date equipment, cleanliness, adequate food, limited noise, and prompt and accurate billing. (Allison, 2008) explained the first four elements:

1. Good patient care includes proper nursing care, effective communication, clear and easy-to-understand explanations, and a compassionate and caring nursing staff.
2. Responsiveness is the ability of nurses to respond "right away" when the call button is activated.
3. Good doctor relates to the patient's opinion of his or her doctor. If the patient thinks the doctor is excellent, he or she is likely to think highly of the hospital as well.
4. Good reputation is based on the word-of-mouth observations by friends and family.

Twelve of the top 15 drivers of patient satisfaction are not clinical factors. Instead, they relate to courtesy and empathy of staff and providers, including compassion, caring, helpfulness, kindness, and ability to comfort. These are the factors driving up their satisfaction with the healthcare experience. Ultimately, this satisfaction feeds into improved clinical quality. If patients get a smile and squeeze of the hand during a difficult procedure rather than brash treatment, they are most likely to classify their experience as high quality. This is also the case if a nurse calls to check in on the patient two days after a procedure. Of course, clinical excellence also contributes to total patient satisfaction, but delivering the intangible factors well can make up for complications in technical care that are sometimes unavoidable (Allison, 2008).
Chapter (4): Employee Satisfaction

Employees in service-based industries strongly influence customer satisfaction. As the U.S. and other advanced economies continue to shift from manufacturing to information and service-based industries, employees take on an increasing role in driving organizational performance. One of the most important ways that employees affect performance is in their interactions with customers. Accordingly, it is vital that companies understand concepts such as employee engagement and satisfaction and how the levels of engagement and satisfaction relate to customer satisfaction and overall customer experiences (Newman et al., 2001).

The role of employees in quality care:

A healthcare manager's job is to ensure that patients receive an experience that makes them want to return to the facility to continue treatment or to set up an appointment for another service. Managers have a great level of control over this area and can deliver on the patient's expectation of quality by focusing first on their employees. Without satisfied and confident employees, quality practices have no hope of being successful as satisfied employees do a better job. Employees want only three things: to believe that the organization has the right purpose, to know that their job is worthwhile, and to make a difference in other's lives (Studer, 2003).

The irony is that the person who greets you in any company probably is going to be one of the lowest-paid individuals on staff, yet what they do and how they say it can make all the difference in the world to the success of any business. According to (Lauer, 2002) healthcare customers are the same as any other business consumers, so they should be greeted with a "quality customer service attitude." Simply, healthcare customers desire to be treated with dignity, respect, and care. However, patients are often treated abruptly, which detracts from their overall experience of care or their perceived experience of quality.

Every staff member feels personally and passionately responsible for recommending and implementing quality improvement measures. Satisfied employees are an excellent representation
of the organization and provide stellar service to all customers, which add to the total experience and are in turn perceived as high quality by patients (Selberg, 2007).

**Employee Engagement**

**Definitions:**
A heightened emotional connection that an employee feels for his or her organization, that influences him or her to exert greater discretionary effort to his or her work (Gibbons and Woock, 2006). Another definition is a state of aroused, situation specific motivation that is correlated with both attitudinal and behavioral outcomes (Thomas and Christopher, 2007).

**Dimensions of engagement:** intellectual engagement: thinking hard about the job and how to do it better, affective engagement: feeling positively about doing a good job and Social engagement: actively taking opportunities to discuss work-related improvements with others at work. (CIPD, 2008).

**Effects of employee engagement on employee's satisfaction:**

**A. Reduce the Job Stress & Turnover**
There is a negative relationship between empowerment and job stress, suggesting that as employees are more empowered; their job stress decreases (Joine et al., 2004). In addition to stress, increased employee satisfaction helps reduce employee turnover, leaves of absence, and lower work-related disability and violence claims (Harmon et al., 2003). There are several ways in which the lack of engagement and high turnover rates impact health care organizations (Morrison et al., 2007). Some of these factors include turnover costs, which range between 3.4% and 5.8% of the operating budget (Waldman and Kelly, 2004). High turnover rates are also thought to lead to higher discharge costs, so there are financial concerns to administrators beyond just recruitment and retention costs (Jcaho, 2005).

When employees feel unsatisfied and unappreciated and leave the organization this puts higher workloads and stress levels on those who remain and ultimately further drives down satisfaction for both employees and patients. Feelings of support and sense of accomplishment at work which may play an integral role in middle management retention and attracting nurses to
management positions. Conversely, this would suggest that organizations that do not foster employee empowerment may experience problems retaining and attracting middle level managers (Fukuyama, 1995; Patrick and Laschinger, 2006).

B. Active Role in Decision Making, Feelings of Support & Accomplishment

Organizations that promote employee empowerment can help nurses take a more active role in daily care decisions, which is believed to enhance employee satisfaction (Berlowitz et al., 2003). When employees are more active in decision making not only in nursing practice and unit management but also patient care, they feel more engaged which leads to higher satisfaction and lower turnover rates (Reif, 1995). Changes in the perception of employee empowerment appear to have long-lasting positive effects on employee satisfaction. Changes in access to structural empowerment impacted staff nurses’ feelings of psychological empowerment and satisfaction with their jobs over a three-year time frame (Laschinger et al., 2004).

Nurses at magnet hospitals experience higher levels of empowerment and job satisfaction due to greater access to work empowerment structures when compared with nurses from non-magnet hospitals (Upenieks, 2003). Employees of nursing homes where Quality Improvement (QI) practices were adopted exhibited significantly higher job satisfaction than others due to empowerment to take a more active role in daily care decisions. In other words, by empowering employees to make decisions, hospitals can increase employee engagement and in turn employee satisfaction. The impact of empowering work conditions may play an even more important role at the middle level of nurse management (Berlowitz et al., 2003).

C. Better Relationships with Management

The primary factor in employee’s satisfaction and loyalty to that employer is the employee’s relationship with his or her immediate supervisor. This finding further demonstrates the need for health care administrators to be concerned with employee satisfaction as hospitals face nursing shortages (Wagner, 2006). It also is in line with findings that nurses indicated management that is out of touch with the realities of patient care lead to lower nurse satisfaction and loyalty (Curran, 2001).
The quality of relationships including communication between management and employees not only impacts the employees themselves but also has an impact on organizational effectiveness by affecting productivity and turnover rates. When management helps an employee feel engaged and offers them the support and resources necessary to provide quality patient care, employees are not only more satisfied with their employer but also remain more loyal (Brunetto and Wharton, 2006).

While many studies show that engagement and empowerment in health care settings can lead to greater job and organizational satisfaction, not everyone has found a connection between the two (Suominen et al., 2006) determined that based on their study of a multidisciplinary team at the Rheumatism Foundation Hospital in Finland, job satisfaction is not related to any of the fields of empowerment. While this differs from previous studies, it does raise the question of when and how does empowerment and engagement impact employee satisfaction.

The increased interest from health care administrators also stems from the belief that high turnover rates and the lack of commitment negatively affect the provision of care and ultimately the financial performance of organizations (Morrison et al., 2007). The important distinction between job engagement and organizational engagement. (Saks, 2006) determined that perceived organizational support predicts both job and organization engagement. Therefore, health care organizations need to find ways to address these internal marketing issues at both the job and organizational levels.

While employee engagement and recognition programs have always been important to administrators, it is only recently that these practices have seen an increased level of interest in health care because the employee’s role in patient care is more evident when considering the scarce resources of hospitals and the overall shortage of nurses (Freed, 1999).

Management and organizational culture, along with empowering employees appear to be three of the biggest factors in employee engagement levels. The span of control had some effect on employee engagement and that adding management positions to reduce the span of control helped increase employee engagement scores (Cathcart, 2004).
There are many factors that influence employee engagement as workplace culture, organizational communication and managerial styles, trust and respect, leadership, and company reputation (Lockwood, 2007). Specifically, high involvement work practices may enhance the financial performance of health care organizations (Huselid, 1995; Harmon et al., 2003).

Elements that appear to account for differences in empowerment and job satisfaction scores include: (1) greater accessibility of leaders, (2) better support of clinical autonomous decision making by leaders, and (3) greater access to work empowerment structures such as opportunity, information, and resources. These suggest that hospitals that have highly accessible leaders, provide support for autonomous decision making, and provide access to empowerment structures have a greater likelihood of increasing employee satisfaction (Upenieks, 2003).

Health care organizations that routinely achieve high employee satisfaction scores tend to have the following in common (1) accessible leadership, (2) frequent communication, and (3) employees are empowered to satisfy patients (Fassel, 2003).

Internal marketing efforts have been shown to develop better relationships between employees and their organizations while increasing satisfaction and retention. It was determined that structural bonds followed by social and financial bonds have the most impact on nurse loyalty. (Peltier et al., 2003).

A study of nurses and midwives in London hospitals determined that the three main factors influencing their job satisfaction were patients, the inherent characteristics of nursing, and the nursing team. It was found that improving working conditions was more important than increased pay. It was found that improving working conditions was more important than increased pay. This seems to be in line with (Peltier et al., 2003) findings that structural and social bonds were more important than financial bonds from an internal marketing perspective. While pay for performance activities may lead to increased satisfaction and higher quality of care, these types of reward systems tend to be short-lived in comparison to other recognition or engagement programs (Newman et al., 2002).
By allowing employees to provide higher quality care to patients, the employees tend to take greater pride in their job and feel good about the organization and its values. Also notes the importance of sustaining engagement, something that will help have a long-lasting impact on employee satisfaction and the delivery of high quality care \( (Freed, 1999) \).

The concept of internal marketing in the health care sector suggests that the best way to satisfy patients is by viewing employees as internal customers and that by understanding and meeting employees’ needs, wants, expectations, and concerns their level of satisfaction will increase thereby leading to better quality of care and higher patient satisfaction \( (O’Neill, 2005) \). A relationship marketing approach to HR practices is one way health care organizations can overcome the global problem of nursing shortages. By focusing on improving the quality of care, health care organizations can not only improve patient satisfaction, but also improve employee satisfaction and loyalty to the organization. This in turn will further impact the quality of care because of the interrelationship of this chain \( (Peltier et al., 2003; 2004; 2007) \).

**Effects of Employee Satisfaction on Patient Care and Patient Satisfaction**

There’s a clear interrelationship between employee satisfaction, the quality of care, and patient satisfaction. Employee dissatisfaction negatively impacts the quality of care and ultimately has an adverse effect on patient loyalty and in turn hospital profitability \( (Newman et al., 2001) \). Quality improvement initiatives were shown to have a positive correlation with employee satisfaction as well as client satisfaction \( (Kammerlind et al., 2004) \). Health care employee morale also demonstrates a strong correlation with patient satisfaction scores, showing that the lack of commitment and engagement have far-reaching impacts on more than just employee turnover \( (Jcaho, 2005) \).

Employees’ satisfaction with their organization is a better predictor of client satisfaction than employees’ job satisfaction. The volatile relationship between employee and client satisfaction which can be in conflict. While employees are more satisfied when they have regular work schedules this decreases client satisfaction as employees are deemed less available to patients. This shows that employee and patient satisfaction are related, but sometimes at conflict with each other \( (Ott and van Dijk, 2005) \).
Employee satisfaction also appears to have a strong relationship with the quality of care delivered and related costs. When employees are more satisfied it helps reduce stress, turnover, leaves of absence, and lower work-related disability and violence claims (Harmon et al., 2003; Joiner and Bartram, 2004). All of these factors help increase the level of care given to patients. Nurses who are satisfied with their jobs exhibit higher levels of patient safety and less medication errors which help increase patient satisfaction (Rathert and May, 2007).

Satisfied employees also were found to lead to shortened lengths of stay for patients and lower variable costs (Karasek, 1990; Harmon et al., 2003). The reductions in recruitment and retention costs and fewer employees missing work combined with lower patient variable costs and mistakes make improving employee satisfaction more appealing.

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Quality leadership in health care organizations helps foster an environment that provides quality care which is linked with patient satisfaction. Organizations who seek to improve patient satisfaction and encourage return visits or customer loyalty should focus on improving the quality of care. quality leadership that provides empowering work environments are more likely to result in engaged employees and tend to be the most successful at increasing the quality of care provided. This again gets at the point that management plays an integral role in the level of care provided even when they are not directly involved (Al-Mailam, 2005).

Front-line staff--including nurses, laboratory technicians, and receptionists is extremely important contributors to quality. Receptionists have the first and last "touch" in many healthcare organizations, and as such they give the first and last impressions of the hospital or clinic, which are critical for any visitor (Studer, 2003).
There's a chain of connectivity such that internal conditions and environment affect the service capability of staff which influences nurse satisfaction which, in turn, affects retention of nurses. All of those factors can reduce quality of patient care and ultimately the level of patient satisfaction. Organizations that desire to improve patient satisfaction must therefore be concerned about internal issues related to employee satisfaction and view their employees as customers too. A connection appears to exist between how engaged an employee is with the employee’s role in the patient care process and the level of patient satisfaction. This interrelationship affects not only satisfaction levels but also patient loyalty and financial performance (Newman et al., 2001).
Chapter (5): Communication in Health Care

A doctor's communication and interpersonal skills encompass the ability to gather information in order to facilitate accurate diagnosis, counsel appropriately, give therapeutic instructions, and establish caring relationships with patients. These are the core clinical skills in the practice of medicine, with the ultimate goal of achieving the best outcome and patient satisfaction, which are essential for the effective delivery of health care (Fong, 2010).

Doctors are often hurried and unable to adequately listen to all their patients' concerns. Nurses are a vital aspect in providing patient communication in the hospital. Patients heal better and feel safer when they have a nurse that they feel is an advocate for them and their health. It is the job of the nurse to relay the vital information to the doctor. Among the many other duties a nurse performs in the hospital, listening to what their patients have to say about how they are feeling and what they need is one of the most important aspects of being a good nurse. Another reason that patient communication is so vital is because health care providers are human and accidents happen sometime (Puspoky et al., 2006).

As important to the hospital community as doctors are, nurses are the communication glue that holds everything together and ensures the safe recovery of the patients (Mineko et al., 2006).

Categories of Communication:

- **Content skills**: what health care provider says e.g., the substance of the questions he asks and the answers he receives, the information he gives, the differential diagnosis list, the medical knowledge base he works from.

- **Process skills**: how health care provider says it, e.g., how he asks questions, how well he listens, how he sets up explanation and planning with the patient, how he structures his interaction and make that structure visible to the patient through signposting or transitions, how he build relationships with patients.
**Perceptual skills:** what health care provider is thinking and feeling, e.g., awareness of his own decision making and other thought processes, awareness of and response to his own attitudes and emotions during an interview, whether he likes or dislikes the patient, his biases and prejudices, noise or discomfort that distracts him from attending to the patient. Content and process skills are more interpersonal in nature, while perceptual skills are more intra-personal.

The three types of skills are linked and each influences the other. Communication process skills were given the least attention in medical education. Currently process skills tend to be the primary focus of communication skills programs while content and perceptual skills receive significant secondary emphasis (Kurtz, 2002).

Teamwork and communication failures are a leading cause of patient incidents. Though many healthcare providers must work in teams, they are not well trained in teamwork and communication skills; also they come from different backgrounds, making it difficult to establish a shared mental model in a team setting. Moreover, healthcare workers may not be supported by the organisational culture in which they work. Team collaboration is essential. When health care professionals are not communicating effectively, patient safety is at risk for several reasons: lack of critical information, misinterpretation of information, unclear orders over the telephone, and overlooked changes in status (Joint Commission, 2005).

Lack of communication creates situations where medical errors have the potential to cause severe injury or unexpected patient death. According to the Joint Commission on Accreditation of Healthcare Organizations, (JCHAO), if medical errors appeared on the National Center for Health Statistic’s list of the top 10 causes of death in the United States, they would rank number (5) ahead of accidents, diabetes, and Alzheimer’s disease, as well as AIDS, breast cancer, and gunshot wounds. More specifically, the Joint Commission cites communication failures as the leading root cause for medication errors, delays in treatment, and wrong-site surgeries, as well as the second most frequently cited root cause for operative and postoperative events and fatal falls (Joint Commission, 2005).
Traditional medical education emphasizes the importance of error-free practice, utilizing intense peer pressure to achieve perfection during both diagnosis and treatment. Errors are therefore perceived normatively as an expression of failure. This atmosphere creates an environment that precludes the fair, open discussion of mistakes required if organizational learning is to take place (Flin et al., 2003).

**Common Barriers to inter-professional Communication:**

Personal values and expectations, Personality differences, Hierarchy, Disruptive behavior, Culture and ethnicity, Generational differences, Gender, Historical inter professional and intra professional rivalries, Differences in language and jargon, Differences in schedules and professional routines, Varying levels of preparation, qualifications, Differences in requirements, regulations, and norms of professional education, Fears of diluted professional identity, Differences in accountability, payment, and rewards, Concerns regarding clinical responsibility, Complexity of care and Emphasis on rapid decision making (Hughes and Rockville, 2008).

The barriers within disciplines, most notably between physicians and residents, surgeons and anesthesiologists, and nurses and nurse managers (Gaba et al., 2001). However, most often the barriers manifest between nurses and physicians. Even though doctors and nurses interact numerous times a day, they often have different perceptions of their roles and responsibilities as to patient needs, and thus different goals for patient care. One barrier compounding this issue is that cultural differences can exacerbate communication problems. In cultures such as these, nurses may communicate their concern in very indirect ways. Culture barriers can also hinder nonverbal communication. For example, some cultures ascribe specific meaning to eye contact, certain facial expressions, touch, tone of voice, and nods of the head (Joint Commission, 2005).

The common barrier to effective communication and collaboration is hierarchies. Communication failures in the medical setting arise from vertical hierarchical differences, concerns with upward influence, role conflict, and ambiguity and struggles with interpersonal power and conflict. Communication is likely to be distorted or withheld in situations where there are hierarchical differences between two communicators, particularly when one person is
concerned about appearing incompetent, does not want to offend the other, or perceives that the other is not open to communication (Weick, 2002). Staff who witness poor performance in their peers may be hesitant to speak up because of fear of retaliation or the impression that speaking up will not do any good (Rosenstein et al., 2002).

Leaders in both medicine and nursing have issued ongoing initiatives for the development of a cooperative rather than a competitive agenda to benefit patient care. A powerful incentive for greater teamwork among professionals is created by directing attention to the areas where changes are likely to result in measurable improvements for the patients they serve together, rather than concentrating on what, on the surface, seem to be irreconcilable professional differences. The fact that most health professionals have at least one characteristic in common, a personal desire to learn, and that they have at least one shared value, to meet the needs of their patients or clients, is a good place to start (Rosenstein and O’Daniel, 2005).

Hughes and Rockville, (2008) enumerate the components of successful teamwork as:

- Open communication
- Non punitive environment
- Clear direction and known roles and tasks for team members
- Respectful atmosphere
- Shared responsibility for team success
- Appropriate balance of member participation for the task at hand
- Acknowledgment and processing of conflict
- Clear specifications regarding authority and accountability
- Clear and known decision-making procedures
- Regular and routine communication and information sharing
- Enabling environment, including access to needed resources
- Mechanism to evaluate outcomes and adjust accordingly

Unfortunately, many health care workers are used to poor communication and teamwork, as a result of a culture of low expectations that has developed in many health care settings. This culture, in which health care workers have come to expect faulty and incomplete exchange of
information, leads to errors because even conscientious professionals tend to ignore potential red flags and clinical discrepancies. They view these warning signals as indicators of routine repetitions of poor communication rather than unusual, worrisome indicators (Chassin and Becher, 2002).

Although poor communication can lead to tragic consequences, effective communication can lead to the following positive outcomes: improved information flow, more effective interventions, improved safety, enhanced employee morale, increased patient and family satisfaction, and decreased lengths of stay (Joint Commission, 2005). Gittell et al., (2000) showed that implementing systems to facilitate team communication can substantially improve quality. Effective communication among staff encourages effective teamwork and promotes continuity and clarity within the patient care team. Good communication encourages collaboration, fosters teamwork, and helps prevent errors. (Cleary, 2003).

**Team performance**

Teamwork can be conceptually nested within team performance as a “set of interrelated cognitions, attitudes, and behaviours contributing to the dynamic processes of performance”. Team effectiveness represents an evaluation of team performance outcomes relative to some criteria set (Legido et al., 2008). Thus, the definitions of performance and effectiveness on the team level encompass the activities engaged in while completing a task and an appraisal of the outcomes of that activity (Rooney and Vanden, 2004).

The Salas conceptual framework identifies five core components for effective teamwork: team leadership, collective orientation, mutual performance, backup behaviour and adaptability. The interplay among the five components suggest that, 1) leadership directly affects collective orientation, performance monitoring and backup behaviour; 2) collective orientation and back up behaviour influence performance monitoring; 3) performance monitoring and backup behaviour generate adaptability (Lynn, 2004). These relationships are promoted through three coordinating mechanisms, shared mental models, closed loop communication and mutual trust (Benner et al., 2002; Berwick, 2003; Harrington, 2007).
Table (A): *Mickan (2005)* showed the Outcome measures of effective teamwork

<table>
<thead>
<tr>
<th>Organizational benefits</th>
<th>Team benefits</th>
<th>Individual benefits</th>
<th>Patients</th>
<th>Team members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced hospitalisation time and costs</td>
<td>Improved coordination of care</td>
<td>Enhanced satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced unanticipated admissions</td>
<td>Efficient use of health care services</td>
<td>Acceptance of treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better accessibility for Patients</td>
<td>Enhanced communication</td>
<td>Improved health outcomes</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Professional diversity</td>
<td></td>
<td></td>
<td>Enhanced job satisfaction</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Greater role clarity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enhanced well-being</td>
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</tr>
</tbody>
</table>

**Structured communication techniques**

Communication between individuals is often “informal, disorganised and variable” However, in situations where specific and complex information must be communicated and responded to in a timely manner, combined with the dire consequences of omitting critical information, it is essential to add structure to the exchange. Such structure can ensure that the right information is shared at the right time with the right people. Some specific structured communication techniques that patient care teams can use include: briefings, debriefings, SBAR, assertive language, critical language, common language, closed communication loops, active listening and callouts (*Makary et al., 2005*).

**Briefings**

Briefings are a critical element in team effectiveness and determine whether people work together as a cohesive team or as a group of individuals in proximity to one another. Briefings set the tone for team interaction, ensuring that care providers have a shared mental model of what is going to happen during a process, identify any risk points and plan for contingencies. When done effectively, briefings can establish predictability, reduce interruptions prevent delays and build social relationships and capital for future interactions (*Makary et al., 2005*).
Debriefings
Debriefings are concise exchanges that occur after events have been completed to identify what happened, what was learned, and what can be done better next time. It allows the team to determine how members are feeling about processes and recognises opportunities for improvement and further education (Frankel and Leonard, 2008).

SBAR
SBAR is an acronym for Situation, Background, Assessment, and Recommendation. The communication process involving SBAR is as follows; the Situation is conveyed by the initiating individual and establishes the topic of discussion; the Background involves any information needed to make an informed decision for the patient; in Assessment, report the patient’s situation and status; finally, the Recommendation (Guise and Lowe, 2006).

Assertive language
Because medicine has an inherent hierarchal structure with power distances between individuals, it is important that, health care providers politely assert themselves to support patient safety. Effective assertion is pleasant, persistent, timely and clear in offering solutions to presenting problems (Frankel and Leonard, 2008).

Critical language
Sometimes, using assertive language may not be strong enough to signal a problem. Critical language may include a phrase such as, “I need a little clarity” as a strategy to garner another’s attention. Teams that respond to agreed upon critical language recognize the immediacy of a concern and direct their attention to resolving the situation. (Adachi and Lodolce, 2005).

Common language
Using a common language, which is agreed upon by all providers in a particular setting to describe critical issues or observations, may be helpful to ensure consistency and comprehensiveness in communication (Frankel and Leonard, 2008).
Chapter (6): Doctor-Patient Relationship

Quality of doctor–patient communication is a multidimensional concept which includes both medical technical and psychosocial aspects but also involves facets of the interaction. The quality of the doctor–patient interaction also determines patients' active participation and encourages self-management skills that are necessary when dealing with chronic diseases (Cooper et al., 2009). Moreover, fostering the doctor–patient relationship is considered an essential and universal value within medical practice (Epstein and Street, 2007).

The doctor-patient relationship is central to the practice of healthcare and is essential for the delivery of high-quality health care in the diagnosis and treatment of disease. The doctor-patient relationship forms one of the foundations of contemporary medical ethics. Most universities teach students from the beginning, how to maintain a professional rapport with patients, uphold patients’ dignity, and respect their privacy. The quality of the relationship is important to both parties. The better the relationship in terms of mutual respect, knowledge, trust, shared values and perspectives about disease and life, and time available, the better will be the amount and quality of information about the patient's disease transferred in both directions, enhancing accuracy of diagnosis and increasing the patient's knowledge about the disease (Pulia, 2011).

Factors affecting the doctor-patient relationship:

The following issues negatively affect the doctor-patient relationship:

- **Physician superiority:**
  The physician may be viewed as superior to the patient, because the physician has the knowledge and credentials. The physician-patient relationship is complicated by the patient's suffering and limited ability to relieve it on his/her own, resulting in a state of desperation and dependency on the physician. A physician should be aware in order to optimize communication with the patient. It may be beneficial for the doctor-patient relationship to have a form of shared care with patient empowerment to take a major degree of responsibility for her or his care (Bensing and Verhaak, 2006).
• **Benefiting or pleasing**
A dilemma may arise in situations creates a disagreement between the physician and the patient, for any number of reasons. In such cases, the physician needs strategies for presenting unfavorable treatment options or unwelcome information in such a way that minimizes strain on the doctor-patient relationship while benefiting the patient's overall physical health and best interests (*Quilliam, 2011*).

• **Formal or casual**
There may be differences in opinion between the doctor and the patient in how formal or casual the doctor-patient relationship should be. Some familiarity with the doctor generally makes it easier for patients to talk about intimate issues such as sexual subjects, but for some patients, a very high degree of familiarity may make the patient reluctant to reveal such intimate issues (*Quilliam, 2011*).

• **Transitional care**
Transitions of patients between health care practitioners may decrease the quality of care in the time it takes to reestablish proper doctor-patient relationships. Generally, the doctor-patient relationship is facilitated by continuity of care in regard to attending personnel. (*Gröne and Barbero, 2002*).

• **Presence of other people**
These may provide psychological support for the patient, but in some cases it may compromise the doctor-patient confidentiality and inhibit the patient from disclosing uncomfortable or intimate subjects (*Kawabata et al. 2009*).

• **Bedside manner**
A good bedside manner is typically one that reassures and comforts the patient while remaining honest about a diagnosis. Vocal tones, body language, openness, presence, and concealment of attitude may all affect bedside manner. Poor bedside manner leaves the patient feeling unsatisfied, worried, frightened, or alone. Bedside manner becomes difficult when a healthcare professional
must explain an unfavorable diagnosis to the patient, while keeping the patient from being alarmed (Pulia, 2011).

**Nurse Patient Relationship**

**Importance of nurse patient relationship:**
Nurses spend more time with patients than doctors. Patients see nurses’ interactions with others on the care team and draw conclusions about the hospital based on their observations. Nurses’ attitudes toward their work, their coworkers and the organization affect patient and family judgments of all the things they don’t see behind the scenes. The work environment in which nurses provide care to patients can determine the quality and safety of patient care. Nurses apply their knowledge, skills, and experience to care for the various and changing needs of patients. A large part of the demands of patient care is centered on the work of nurses (IOM, 2004).

A positive nurse patient relationship, make an environment that supports anxiety reduction and healing. Patients and families count on nurses to keep them informed, to connect them to their physicians, to listen to them, to ease their anxiety, and to protect and watch over them during their healthcare experience. Service improvement strategies in health care have emphasized cosmetic aspects of the service relationships. Nurses are keenly aware of working with people who are emotionally drained and emotionally charged, and facing traumatic life circumstances. Making them happy hardly seems like a relevant goal, and nurses perceive it as superficial and discounting of the important work they do. Resistance to raised service standards is also understandable when nurses perceive leaders as doing too little to remove obstacles to provide excellent care and service (Kurki et al., 2001)
Chapter (7): Patient rights & responsibilities

Patients' Rights
The Royal College of Surgeons of England (2005) reported the patients' rights as follow:

- Be Treated with Respect.
- Make a Treatment Choice.
- Refuse Treatment.
- Obtain Your Medical Records.
- Privacy of Your Medical Records.
- Informed Consent.
- Be treated with courtesy and with respect for his privacy and dignity.
- Receive treatment on the basis of his clinical need.
- Be able to choose to have a relative or friend with him during consultations and
- Staff to understand that he might be feeling anxious and vulnerable and that this may affect the way he behaves.
- Be told approximately when an appointment is likely to be.
- Be encouraged to ask questions about his diagnosis and treatment and to receive clear information in writing.
- Be given a telephone number and the name of someone he can ring.
- Know the names and professional status of all the staff involved in his care.
- Be operated on by an appropriately trained and experienced surgeon or one under the close supervision of a suitably experienced surgeon.
- Be told what aftercare including rehabilitation and how long this Should last and the anticipated outcome
- Receive an explanation and where appropriate an apology if things go wrong.
The entitlement of patients' rights is accompanied by patients' responsibilities, too. In order to get the best care and find our most successful medical outcomes, we must adhere to these responsibilities.

**Patients' Responsibilities**

The Royal College of Surgeons of England (2005) reported the Patients' Responsibilities as follow:

- Responsible for
  - Maintaining healthy habits
  - Being respectful and honest to providers
  - Complying with treatment plans
  - Preparing for Emergencies
  - Making Decisions Responsibly
  - Understanding prescription drugs and their possible effects
  - Meeting financial obligations
  - Reporting fraud and wrong doing
  - Avoiding putting others at risk
  - To inform the hospital at once of any change in contact address or telephone number.
  - To attend appointments on time, or give reasonable notice of inability to attend.
  - To understand that there are pressures and limitations of resources on the health service and those working within it.
  - To consider the consequences of refusing treatment or not following medical advice and accept responsibility for his own actions.
  - To let the staff know if he have any allergies or sensitivities to medications.
  - To give staff full information about his condition including permanent disabilities along with details of any medicines he is taking.
  - To treat other patients with courtesy and respect.
  - To attend follow up appointments as requested.
  - Wise patients understand all three: their rights, their responsibilities. Understanding them will make it easier to get the care and outcomes they seek.
**Patient empowerment**

**Concepts and Definitions:**
The patient empowerment concept, a recent outgrowth of the natural health movement, asserts that to be truly healthy, people must bring changes in their social situations and in the environment that influences their lives, not only in their personal behavior (*Moynihan and Smith, 2002*). Empowerment has been broadly defined as an enabling process through which individuals or communities take control of their lives and their environment.

Patient empowerment in the health care context means to promote autonomous self-regulation so that the individual's potential for health and wellness is maximized. Patient empowerment begins with information and education seeking about illness or condition, and actively participating in treatment decisions (*Berger and Kavookjian, 2002*).

Patient involvement is understood as the extent to which patients participate in decisions related to their condition through informed consent, therapy plan or self-management and contribute to organizational learning through their expert knowledge acquired during illness and hospitalization (*IOM, 2001*). Empowerment is a process of helping people to assert control over factors that affect their health. The concept of empowerment can be described as a “social process of recognizing, promoting, and enhancing people’s abilities to meet their own needs, solve their own problems, and mobilize necessary resources to take control of their own lives”. There is a strong link between the concept of empowerment and that of development of the community (*Moynihan and Smith, 2002*).

There is a difference between individual and community empowerment. **Individual empowerment** refers primarily to the individual's ability to make decisions and have control over his or her personal life. **Community empowerment** involves individuals acting collectively to gain greater influence and control over the determinants of health and the quality of life in their community (*WHO, 1998*).
Real definitions of patient empowerment are hard to find. "The term “patient empowerment” describes a situation that citizens are encouraged to take an active part in their own health management. Patient empowerment is considered as a philosophy of health care that proceeds from the perspective that optimal outcomes of health care interventions are achieved when patients become active participants in the health care process (Monteagudo and Moreno, 2007).

Patient empowerment has a handful of definitions. Most focus on the concept of the patient taking an active role in his disease management and supporting that participation by learning all he can about his disease or condition and treatment options. Until the past few years, the thought that a patient would participate so fully was unheard of. Today, many patients realize that this level of participation is vital to maintaining health in the face of medical problems or challenges (Trisha, 2009).

**Tools of patient empowerment**

1. Disclosure: the patient should be informed of the nature of his condition, the various options, potential risks, the professional’s recommendation, and the nature of consent as an act of authorization.
2. Understanding: information is provided at the patient's level of understanding, using appropriate language.
3. Voluntaries: the patient must be in a position to practice self-determination free from any coercion, manipulation, or constraint.
5. Consent: a freely given authorization to the medical or nursing intervention.

To enable patients to express their informed preferences, patients must be given sufficient and appropriate information, including detailed explanations about their conditions and the likely outcomes with and without treatment (Trisha, 2009).
Limits for patient empowerment

The patients express difficulties in obtaining information relevant to their needs due to the following reasons:

(A) Barriers to the informations:

- Health care professionals might have underestimated a patient’s desire for and ability to cope with information.
- Consultation times are limited and thus there is often insufficient time to fully explain the condition and the treatment choices.
- The extent of the information to be given to the patient is difficult to decide.
- Too much information may deter the patient from having necessary treatment.
- The ways in which information is delivered and the kind of materials given to the patient are of particular importance to support a patient’s involvement in treatment decisions.
- Many information materials adopt a patronizing tone and few actively promote a shared approach to decision making. Information should therefore be made simple in order to maximize its comprehension and to minimize any potential imposition of the professional’s view.
- An interval should elapse between the presentation of the advantages and possible disadvantages of the proposed treatment and the patient's decision, so that there is an opportunity for the patient to consider the decision, to ask further questions, and to discuss it with family and significant others.

(American Medical Association, 2011)

(B) Systemic Barriers: The structure of the medicolegal system can also serve as a barrier. Achieving the desired outcome of consumer-driven health care requires health care providers who are skilled in communication and who are able and willing to discuss the relative benefits of given treatment options in light of a specific patient’s condition and values.

1. Systems and structures

- Some providers may also fear participating with their patients in shared decision making, believing that patients who experience an adverse outcome of
their decision may sue. Indeed, a patient sued successfully in just such a scenario (Alex et al., 2007).

- Fear of malpractice suits is an additional incentive for providers to order unnecessary care. Although it is difficult to identify exactly what percentage of health care costs could be eliminated by tort reform, one study estimated savings of 5 percent to 9 percent (Paul Ginsburg, 2008).

2. Attitudes and Skills of Medical Professionals Clinician attitudes and training can affect patients’ ability to participate effectively in decisions about their health care (Ellen Fox, 2011).

Elements of empowerment

Are knowledge, behavioral skills and self-responsibility. To ensure the success of patient empowerment, enhancement of the working partnership between patients and health care professionals is important. Finding out what matters to patients, making use of information technology to disseminate knowledge, establishing standards for disease management, and promotion of clinical research are likely to increase the benefit of the health care provided. Trisha (2009) has noted the elements as follow:

- Taking responsibility: Realizing that the one knows his body better than anyone else, he will refer to all the resources at his disposal from people to the printed word and you will use that knowledge to help make decisions about the treatment that are the decisions to make.

- Setting goals: Understanding that the human body does not always react the way we expect it to; therefore, it's best to set a treatment goal and work toward that goal. In some cases a patient can have a goal to heal, another may simply want to manage a disease or condition, or another may need to learn to cope with a new medical problem.

- Collaboration with others: Active participation in the healthcare team, including providers, support personnel, payors and even other patients helps in the decision-making aspects of the diagnosis and treatment processes.
- **Gathering evidence:** Including resources that range from observation to recording symptoms and family histories to participating in medical tests, to discussions with providers and other patients, to using the Internet and libraries for researching relevant diseases, conditions and treatments.

- **Being a smart healthcare consumer:** Sometimes the challenges a patient faces are related more to customer service and costs of service than they are to the health aspects of care. Understanding health insurance choices or learning when to walk away from a doctor's practice when necessary, are examples of these kinds of choices.

- **Staying safe in the healthcare environment:** We often read about major medical errors, but millions of "smaller" mistakes take place every day. Administration of the wrong drugs, acquiring infections in hospitals even surgeries gone bad. These are all examples of the safety problems an empowered patient should be aware of.

- **Understanding and support:** the tenets of patient advocacy. In the bigger picture, the patient can take advantage of those who have learned about his medical problems before him and you can help patients who come after to find better medical outcomes. Advocacy runs the gamut from government and not-for profit organizations to individual navigators that help patients transition through the steps of their diagnosis and care.

- **Adherence to decisions:** Since you will have collaborated with knowledgeable members of your healthcare team to arrive at decisions, you will feel confident following along with the decisions you've made together.

To achieve patient engagement, policymakers must reduce or eliminate barriers to patient decision making, including patient ignorance of and insulation from the true costs of care, the lack of information on medical prices and options, and medical malpractice and inadequate skills among doctors and nurses and other medical professionals in dealing with an engaged patient. Policymakers need to make the health care sector far more transparent. They can do this by promoting a free market for health insurance coverage in which prices and the content of insurance are clear and transparent; creating an information-driven system of choice to enable patients to better understand the range of available benefits and services; enacting medical malpractice reform in the states where it is sorely needed; and encouraging better education of
medical professionals to prepare them to communicate more effectively and clearly with all patients, including those facing a long illness or the end of life itself (Karen McKeown, 2011).

**Patient Education**

**Definition:**

Is the process by which health professionals and others impart information to patients that will alter their health behaviors or improve their health status. Education providers may include: physicians, pharmacists, registered dietitians, nurses, hospital discharge planners, medical social workers, psychologists, disease or disability advocacy groups, special interest groups, and pharmaceutical companies. Health education is also a tool used by managed care plans, and may include both general preventive education or health promotion and disease or condition specific education (Koongstvedt, 2001).

**The value of patient education:**

- Improved understanding of medical condition, diagnosis, disease, or disability.
- Improved understanding of methods and means to manage multiple aspects of medical condition.
- Improved self advocacy in deciding to act both independently from medical providers and in interdependence with them.
- Increased Compliance: Effective communication and patient education increases patient motivation to comply.
- Patient Outcomes: Patients more likely to respond well to their treatment plan fewer complications.
- Informed Consent: Patients feel that they have provided with the information they need.
- Utilization: More effective use of medical services and fewer unnecessary phone calls and visits.
- Satisfaction and referrals: Patients more likely to stay with the physician practice and refer other patients.
- Risk Management: Lower risk of malpractice when patients have realistic expectations (Rankin et al., 2005).
Patient Responsiveness

According to *(WHO, 2000)* report, there's some systems are highly unresponsive. A common complaint in many countries about public sector health workers focuses on their rudeness in relation with patients.

**Definitions:**

Is a measure of how the system performs relative to non health aspects, meeting or not populations’ expectations of how it should be treated by providers of prevention, curative services *(Sara and Christopher, 2009)*.

**Elements of responsiveness:**

1. **Dignity**

   The right of a care seeker to be treated as a person in their own right rather than merely as a patient who due to asymmetric information and physical incapacity has rescinded his/her right to be treated with dignity. This includes:
   - The safeguarding of human rights such as the liberty to free movement even for individuals who have leprosy, tuberculosis or are HIV+
   - Treatment with respect by health care staff;
   - The right to ask questions and provide information during consultations and treatment;
   - Privacy during examination and treatment
   - Being shown respect.
   *(Yongyuth and Wim Van, 2006).*

2. **Confidentiality of information**

   Information relating to the patient and his illness should not be divulged during the course of care, except in specific contexts, without the prior permission of the patient. This is linked to the idea that the patient’s welfare is the supreme concern of the health care provider. This would involve:
   - Conducting consultations with the patients in a manner that protects their
privacy
- Safeguarding the confidentiality of information provided by the patient, and information relating to an individual's illness, except in cases where such information needs to be given to a health care provider, or where explicit consent has been gained.
- Medical history kept confidential.
- Consulting with health providers in a manner that his discussions could not be overheard. *(Pongsupap and Van Lerberghe, 2006).*

3. **Autonomy**
- Being involved in deciding on your case and treatment if he wants to.
- Having the providers ask his permission before starting treatments or tests.
- The right of an individual to information on his/her disease and alternative
- The right to be consulted about treatment
- Informed consent in the context of testing and treatment
- The right of patients of sound mind to refuse treatment
*(Pongsupap and Van Lerberghe, 2006).*

4. **Prompt Attention**
- Patients should be entitled to rapid care in emergencies, and
- Patients should be entitled to care within reasonable time periods even in the case of non-emergency health care problems or surgery so waiting lists should not cover long periods.
- Patients seeking care at healthcare units should not face long waiting times for consultations and treatment.
*(Pongsupap and Van Lerberghe, 2006).*

5. **Communication**
- Having the provider to listen to him carefully.
- Having the provider explain things so he can understand.
• Having patients to ask questions.

6. **Quality of Basic Amenities**
   - clean surroundings
   - regular procedures for cleaning and maintenance of hospital buildings and premises
   - adequate furniture
   - sufficient ventilation
   - clean water
   - clean toilets
   - clean linen
   - healthy and edible food

*(Pongsupap and Van Lerberghe, 2006).*

7. **Access to social support networks during care**
   - Regular visits by relatives and friends
   - Provision of food and other consumables by relatives and friends, if not provided by the hospital
   - Religious practices that do not prove a hindrance to hospital activities or hurt the sensibilities of other individuals

*(Pongsupap and Van Lerberghe, 2006).*

8. **Choice of Care Provider**

**Differences between responsiveness and patient satisfaction**

Responsiveness is different from patient satisfaction and quality of care though there are many overlapping aspects. Three main differences can be highlighted:

(1) Scope: patient satisfaction focuses on clinical interaction in specific health care settings whereas responsiveness evaluates the health system as a whole;

(2) Range: patient satisfaction generally covers both medical and non-medical aspects of care while responsiveness focuses only on the non-health enhancing
aspects of the health system;

(3) Rationale: patient satisfaction represents a complex mixture of perceived need, individually determined expectations and experience of care.

Responsiveness evaluates individual’s perceptions of the health system against ‘legitimate’ universal expectations.

*(Sara and Christopher, 2009)*

**Medical records**

Medical records are the footprints we make through the medical system. From the moment we are born, to the day we die, our medical records are a chronology of everything that has affected our health or has created a medical problem. Until the past few years, those records were kept entirely on paper, filed in folders in various doctors' offices and hospitals. Today, more and more of those records are being recorded and stored electronically. One doctor on one side of the globe might be able to instantly access the records being kept by a provider located in a different corner of the world. More practically, primary care physicians refer us to specialists, and before we even arrive at the specialist's office, our records are transferred electronically, and reviewed on her computer monitor. Our footprints are no longer restricted to one folder in one doctor's office *(Trisha, 2009).*

This new use for technology may seem like a great advance for patients and providers alike and for the most part it is. But the advancement of electronic medical record storage has also highlighted and expanded three problems:

- **Privacy / Security:** Who can legally access a patient's records and how may they be shared? What happens if medical records fall into the wrong hands?
- **Errors / Mistakes in Patient Medical Records:** If mistakes are recorded in a patient's file, they may be replicated through the use of electronic recordkeeping. How do we make sure that doesn't happen?
- **Denials:** Covered entities are required by law to provide patients with copies of their medical records, but not all records are provided the way they should be.
Chapter (8): Strategies to manage the long waiting time

An inadequate supply of providers is leading to a crisis in access. Pressures are being placed to increase panel sizes. The impact of these pressures on clinical processes, patient satisfaction and waiting times is largely unknown, although evidence from recent literature shows that longer waiting time results in higher mortality rates and other adverse outcomes. Panel sizes are correlated with clinical process indicators, patient satisfaction and waiting times, controlling for practice, provider and patient characteristics. Larger panel sizes are related to statistically significant increases in waiting time. However, larger panel sizes appear to have generally small effects on patient process indicators and satisfaction. Panels with more support staff have lower waiting times and small improved outcomes (Stefosetal, 2011).

Definition of Waiting Time:
The total time from registration until consultation with a doctor. There were two waiting times, the first is time taken to see a doctor and the second is time to obtain medicine (Jamaiah et al., 2003).

Definition of Registration Time:
Defined as waiting time from the moment patients submit a clinic appointment card or referral letters at the counter until getting a call from the counter. During this time the payment process and record classification are made. Registration time is part of patient’s waiting time (Lim and Manaes, 2001).

Causes of long Waiting Time:
Murray et al (2007) expressed the causes of long waiting time as follow:

- **Poorly organized services**: inefficiencies, lack of coordination among all those involved in delivering services, poor planning, slow down the system and create bottlenecks in providing surgeries and other services.
- **Shortages of health care workers**: if patients can't get to see a doctor quickly (or at all) they turn to emergency rooms (ERs), extending wait times in ERs.
• **Physicians don’t work in teams:** most doctors' offices work alone, so all appointments and procedures leading up to surgery are managed individually, leading to delays and inefficiencies at every step.

• **Cuts to hospital services:** between (1988 – 2002) there were 64,000 hospital beds cut in Canadian hospitals.

• **The need for more long-term care and home care:** under-funding of home care and residential long-term care has increased inappropriate and preventable hospitalization and adds pressure on emergency rooms.

• **Better outcomes:** when we improve services, more people can benefit from them. This mean increase the number of external customers and increase utilization of services leading to increase waiting time (e.g. many patients now have surgeries that would have been too dangerous a few years ago. So many patients start to use health services would have been dangerous or not available in the past.

**The public health care solutions:**

• **Fund the public solutions:** the governments need to make system-wide improvements based on the successful projects in public hospitals and clinics that are dramatically reducing wait times. We need more than isolated pilot projects.

• **Put patients before profits:** it seems obvious, but when efficient and appropriate patient care is made a priority, administrative and clinical practices improve and wait times are shortened.

• **Common waiting lists:** all patients waiting for certain surgeries go into a single list for the first available surgeon. Patients could still choose their surgeon, but they might have to wait longer.

• **Better coordination:** by staggering start-time for surgery and standardizing surgical equipment and procedures including-screening and tests. Where this has been tried, wait times dropped 75% and the number of surgeries completed increased increased by 136%.

• **Expand team work:** establishing teams of health care providers including physicians, nurses, nurse practitioners and other health professionals eliminates duplication, improves coordination and makes better use of scarce resources.

• **Modernizing electronic information systems:** so everyone in the health care team has timely access to accurate and up-to-date patient information and there is no unnecessary waiting for patient records.
• **Improve community care:** by putting resources into long term care, home care and home support, we can keep people healthier and out of hospital and relieve the pressure on hospital beds.

• **Improve access to family health care:** when patients can get timely access to family health care teams, through community clinics and urgent care centers, the wait time in ERs drops dramatically (*Postl, 2009*).

The health care system is increasingly recognizing the importance of improving patient access to care and is embracing the principles of advanced access, or “same-day scheduling.” Access improvement depends on correctly matching patient demand with appointment supply without a delay (*Murray and Berwick, 2003*) and without harming continuity of care (*Christakis et al., 2001*). In other words, it means seeing patients when their needs arise, not bumping them to another day or to another provider.

The relationship between patients and their primary care providers is so importance which it defined as a “sustained partnership” (*Smith and Dooley, 2004*). For this sustained partnership to become actualized, practices need to recognize that there are limits to the number of services each provider can deliver and the number of patients each provider can be accountable for and these limits must be defined (*Hall, 2007*).

**Definition of panel size:**
Panel size is simply the number of individual patients under the care of a specific provider. Panel size is easiest to determine in practices that can use enrollment data to link patients to individual providers and capture that linkage in their information system. This is most feasible in “closed” systems, such as some HMOs. In other environments, where panel size can shift rapidly or where it is not determined by enrollment or not permanently codified in the information system, other methods are required to link patients with providers and establish the panel size (*Randolph GD, 2004*).
**Definition of the practice panel:**
The panel for an entire practice can be defined as the unique patients who have seen any provider (physician, NP or PA) in the last 18 months. Some practices may prefer to use data for the last 12 months; however, this method tends to underestimate the panel size, as many patients do not visit the practice within a year (*Murray M., 2007*).

**The importance of panel**

Wright J.G and Menaker RJ (2011) referred to the importance of panel:

1. **It makes patients happy:** Patient surveys clearly demonstrate that patients want the opportunity to choose a provider; they want access to that provider when they choose; and they want a quality health care experience. Establishing a panel links each patient with a provider with whom they have a health care relationship.

2. **It defines the workload:** Establishing a panel helps divide and define workload within a practice and helps ensure that each provider is carrying his or her fair share.

3. **It predicts patient demand:** Panels are the source of demand not only for visits but also for non-visit work (paperwork, e-mail, etc.), tests, procedures and hospitalizations. Understanding the panel helps a practice anticipate that demand both.

4. **It reveals provider performance issues:** Understanding the panel allows groups to see the effects of provider variability. For example, if two providers have the same panel size but one provider has more demand than the other, then the practice can explore why this difference exists (e.g., one physician uses shorter return-visit intervals) and whether it is justified.

5. **It helps improve outcomes:** Identifying individual panels enables providers to make a commitment to continuity (that is, to taking care of their own patients for all their visits), which results in improved clinical outcomes, reduced costs and enhanced revenue per visit (*O’Hare and Corlett, 2004*).

**Determining the individual provider panel:**
Each patient on the practice's panel should then be placed on the panel of only one provider. Because patients may have seen multiple providers in a practice, this requires deciding which patients “belong” to which provider.
(Postl, 2009) explained the following “four-cut” method:

1. Patients who have seen only one provider for all visits are assigned to that provider.
2. Patients who have seen more than one provider are assigned to the provider they have seen most often.
3. The remaining patients who have seen multiple providers the same number of times are assigned to the provider who performed their most recent physical or health check.
4. The remaining patients who have seen multiple providers the same number of times but have not had a sentinel exam are assigned to the provider they saw last.

This four-cut method may not be 100-percent accurate (some patients will be assigned to the incorrect provider and some patients will ultimately choose a different provider than the one they were initially assigned to); however, it's a good start. Panel assignments can be refined by asking and confirming at every opportunity the patient's choice of provider (Postl, 2009).

**Determining the “target” panel:** The target panel is the practice panel (defined earlier) divided by the number of full-time-equivalent (FTE) clinical providers. To determine the number of FTE clinical providers, take the total FTE providers and subtract the portion of each provider's time spent on no appointment or no clinical duties such as hospital rounds, operating room duties, procedures, management duties and meeting time (Postl, 2009). These calculations relate to the current panel size. But the current panel size is not always the right size.

Practices and individual providers should not take on more work than they can manage. If a panel is too large, the excess demand results in a never-ending and ever-expanding delay in services in addition to constant deflections to other providers, resulting in discontinuity. On the other hand, if a panel is too small, demand may not be adequate to support the practice. The demand for appointments must equal the supply of appointments if timely service is desired. A simple equation can be used to express this: \( \text{Panel size} \times \text{visits per patient per year (demand)} = \text{provider visits per day} \times \text{provider days per year (supply)}. \)  

(Murray et al., 2007)

This equation reveals each provider's ideal panel size based on his or her historical level of productivity. Often a provider will want to increase the ideal panel size (e.g., to retain current
patients or to expand access to the community), which requires making adjustments to the following variables:

- **Visits per patient per year**: practices should calculate this figure for themselves by dividing the number of unique patients seen in the last 12 or 18 months into the number of visits to the practice that these patients generated within the same period. To increase the size of the panel that a provider can successfully care for, the number of visits per patient per year can be decreased by improving continuity (when patients see their own provider they require fewer visits), lowering the visit return rate (i.e., the percentage of visits for which the provider requests a follow-up visit) ([Schectman et al., 2005](#)) providing more service at each visit, increasing teamwork ([Grumbach and Bodenheimer, 2004](#)) and using alternatives to traditional visits such as e-mail, telephone care and group visits ([Bodenheimer, 2003](#)).

- **Provider visits per day**: This variable is determined by looking at historical data regarding the number of visits provided per day; it is not simply the number of appointment slots available per day. This variable can be increased by optimizing care delivery models, decreasing the no-show rate, offering more appropriate help so that providers can reduce individual visit length, ([Grumbach and Bodenheimer, 2004](#)) improving the workflow by reducing bottlenecks and providing more “just in time” support, increasing the number of exam rooms, ([Smith and Dooley, 2004](#)) and removing unnecessary work from the providers to allow them to maximize appointment supply ([Grumbach and Bodenheimer, 2004](#)).

- **Provider days per year**: This variable is determined by looking at the number of days a provider's schedule was booked for patient visits per year. It can be influenced by changing expectations about the number of days that should be booked with appointments and making critical decisions about how provider time is distributed (e.g., shifting providers away from no clinical duties in favor of clinical duties). When doing this exercise, practices are sometimes surprised by the relatively small amount of provider time they have devoted to appointment work ([Bodenheimer, 2003](#)).
The bottom line

There is a limit to the number of patients each provider can effectively care for. That limit depends on the system in which the provider practices. Having an appropriate panel size is a key for managing clinical workloads and optimizing patient access to care *(Murray et al., 2007).*

Variables that affect panel size

Panel size can be influenced by the number of patients seen per day, the number of days the provider is available per year and the average number of visits per patient per year. For example, a provider who sees 20 patients per day, 210 days per year, with an average of three visits per patient per year, could manage a panel of 1,400 patients. By increasing capacity to 25 patients per day, the provider could manage a panel of 1,750 patients.

*Figure (A): panel size*

*(Murray et al., 2007)*

What this demonstrates is that panel size is an outcome of the system in which providers operate. The ideal panel can be determined, but its size will necessarily differ in different environments depending on all the provider and system factors noted above.
Limits to panel size

There is a limit to practice and individual panel sizes. If a practice or individual provider keeps saying “yes” to new patients and exceeds the limit, the overage can initially be absorbed into a waiting time. However, patients' willingness to wait has a limit. At some point, patients quit. Thus, despite saying “yes” to an endless stream of new patients with our words, we say “no” with our actions because these patients won't have access to care. Those providers who insist, “I have to say ‘yes’ to new work. I have no choice,” are simply deceiving themselves. This is an irrefutable act of denial (Hudon E B and Roberge D, 2004).

In addition, the increasing wait time for an appointment leads to escalating chaos within the practice as evidenced by an increased number of phone calls to the practice; longer handling time for those calls; more patient complaints; increasing no-show, cancel and reschedule rates; greater numbers of “walk-ins” to the practice due to patients getting impatient; greater use of triage resources to determine who has to wait and who cannot wait; and an increased level of discontinuity, which worsens patient outcomes and satisfaction and increases the return visit rate and visit length, which in turn lowers productivity (Lewandowski et al., 2006). The main point is that if the panel is too big, the provider creates “overwork” (can't get the work done), “overtime” (needs consistent overtime support) and “over there” (sends the work away). If the panel is too small, the provider will not generate enough revenue to cover expenses (O'Hare and Corlett, 2004).

Over-paneled provider

Once a provider's individual panel has been identified and all strategies for adjusting the panel have been dutifully applied, it might be found that the provider is indeed “over-paneled.” If a provider is over-paneled, these strategies will reduce his or her panel:

1. Let attrition take its course. Every year in a typical practice, patients move away, die or change insurance.
2. Close the over-paneled doctor to new patients, at least temporarily, and excuse him or her from seeing the patients of absent providers.
3. Shift more resources to support that provider. This may take the form of additional nursing or clerical staff, or possibly additional exam rooms.

4. Move patients away from that panel. In this situation, providers will need to inform their patients directly, for example, by sending a letter to patients informing them that they are being moved to another provider's panel.

(Haggerty JL et al. 2008)

Adjusting for practice style

Some providers claim that their practice style warrants a smaller panel size. For example, a provider with a highly personable style of practice may feel more effective conducting longer office visits. In a practice where physicians' salaries are fixed, decreasing the panel size for one provider can be controversial because it increases the size of others' panels. One possible solution is to provide a salary adjustment that corresponds to the panel adjustment. For example, a physician whose practice style involves lengthy office visits, resulting in a panel size that is 80 percent the size of the typical panel in the practice, might need to be paid 80 percent of what a fully paneled provider receives. In productivity models, some degree of practice style adjustment can be accommodated; however, if the smaller panel size pulls revenue down below daily expenses, then accommodation makes no business sense (Carlson B, 2002).

Adjusting for age and gender

Providers sometimes claim that their patients are older and sicker than those on the panels of other providers, which justifies a smaller panel. Sometimes these arguments can become self-fulfilling prophecies, as providers can “prove” that their patients have higher acuity by creating more return visits (which increases demand) or longer visits (which limits supply). Still, it's true that panels equal in number are not necessarily equal in acuity at any single point in time. In some practices, panel acuity tends to balance out over time. In others, due to many factors such as patient mix and provider interests, permanent acuity differences exist. Patients' age and gender can predict visit utilization and reflect acuity. For example the average visit rate for all patients was approximately 3.19 visits per patient per year. The number of visits in each age and gender subset was divided by the average visit rate to determine the likelihood of a visit within the subset. For example, a 0- to
11-month-old male is 5.02 times more likely to visit than a 55- to 59-year-old male, whereas a 35- to 39-year-old female is half as likely to visit as a 75- to 79-year-old female (Murray et al., 2007).

Practices with sophisticated information systems could use this data to adjust provider panels. However, the process is complicated and requires caution. If one panel is adjusted down due to higher acuity, this needs to be a parallel adjustment up in panels with lower acuity. In addition, practices should consider whether many of the acuity factors could be managed more effectively by providing focused team support than by adjusting panels (Bundy DG et al., 2005).

**Important points**

- The number of patients a physician can effectively care for is not unlimited. Having a panel of manageable size promotes higher quality care by enabling physicians to see their patients in a timely manner without inevitably off-loading them to other providers, which can reduce satisfaction, increase costs, reduce revenues and adversely affect clinical care (Murray et al., 2007).

- The number of visits a physician can provide in a day is variable and influenced by several factors, particularly the visit length. Visit length can be optimized by having patients see their own doctor. When patients see their own doctor, the physician doesn't have to spend time establishing credibility, building rapport and gathering an entire history, since much of that work has already been done. As a result, the visit tends to be shorter, and the physician can increase the number of visits in a day (Murray M, 2005).

- Visit length can also be optimized by eliminating interruptions during patient visits. Interruptions can be eliminated by making sure before the visit that all equipment and information will be available when you need it. If all of the exam tools are accessible and in the same place, and if test results and other clinical data are in the chart, the time spent looking for these items is eliminated.

- Some physicians may need a refresher on how to focus on the visit. This can significantly improve the effectiveness of the visit and shorten the visit length.

- Visits per day can also be increased through better and more focused teamwork supporting the clinician before, during and after the visit. In addition, visits can be increased if no appointment work (e.g., telephone calls, refill requests and staff management) can be reduced.
for the clinician. This requires an extensive review of all the no appointment processes that occur in the practice and a meticulous study of the tasks involved and who should be doing them (Francis et al. 2009).

- Fixed-salary environment can be challenging. If each doctor has a fixed salary, then, to be equitable and fair, the panel size has to be fixed as well. However, because of differences in patient acuity, there may be various times of the year when one physician's panel will generate more demand and the physician will feel that his or her salary is unfair (Blendon R.J. et al. 2002).

- Practice style also plays a huge role in salaried environments. Doctors may claim that their personal style or their patients' style requires longer visits, which translate to fewer visits per day, which translate to a smaller panel. The risk is that the physician's personal style will begin to dictate the panel size, and then panel size becomes a subjective exercise based on preference, not based on equitable workload. Some organizations that reimburse physicians with a fixed salary may adjust panel expectations based on the number of exam rooms available, the number of support staff and the acuity of the panel. In our experience, the best environments do not rely on fixed salaries, and they allow physicians to choose their own panel size. This choice, of course, comes with two requirements: Providers have to see their own patients, and their patients cannot wait. Continuity and a no-wait culture are built into the system and are immutable. So, physicians in these environments who choose a large panel size and commit to seeing those patients as their needs arise can obtain higher reimbursement. Escalating reimbursement thresholds can be set for patient satisfaction and for selected clinical outcome measures to ensure they are not adversely affected. In such environments, physicians whose style is conducive to a small panel size are free to practice in that way but receive less reimbursement (Ferrante JM et al., 2010).

- For the new physician, there are three obstacles to growing the panel: 1) the physician needs time to get used to the system; 2) all patients are new, so they require more time; 3) new patients generate more return visits than established patients. Filling every other appointment slot in the new physician's schedule for the first two to three weeks. The result is that each new patient gets an appointment that is twice as long as the standard. Then, gradually release the in-between slots so they can be booked with return patients (Blendon RJ et al., 2002).
Service agreements between primary care physicians and other specialists can have a huge effect on visits per patient per year in specialty care because they help ensure appropriate, complete handoffs between physicians. Patients who do not show up for scheduled appointments affect the supply side of the equation (specifically, the provider visits per day). Since no-show visits are scheduled but do not materialize, they waste visit capacity. As a consequence, some groups will measure the no-show rate and adjust expected provider visits per day downward. The risk, of course, is that this method provides no incentive to eliminate the no-shows. If no-shows are high, practices should take steps to reduce them or schedule more visits than they have room for with the expectation that a certain percentage of patients will not show up (Russell GM et al., 2009).

Every organization has to make a fundamental decision about the expected workload of midlevel providers. Some practices treat midlevel providers the same as physicians and expect them to carry the same panel size. Other practices expect fewer visits per day from midlevel, so the panel size expectation is also lower. For example, a full-time midlevel might be expected to carry half of a physician-sized panel. The best option will depend on your individual practice's circumstances (Katz A et al., 2010).

The extensive time required for obstetrics care will reduce the ideal panel size, so we recommend removing this work from the demand-supply equation. If the obstetrics work is separate from the primary care work (for example, each physician devotes one day a week to OB call), then you can simply subtract that time from the supply side of the equation and subtract those patients from the demand side of the equation. If the obstetrics work interrupts the office practice, then you'll need to estimate the time spent and subtract it from regular office time. Because of constant turnover in practices, panel size should be determined monthly. If a practice uses the four-cut method to determine panel size and tracks this information via a monthly panel report, then it can determine net panel gain or loss per month (Mayo-Smith MF, 2004).

New patients should be assigned to physicians whose panels are below the group's target or below the ideal panel number determined by the equation. This makes the assignment more
objective. An easy way to do this is to create a “new patient” appointment type in your scheduling system, with only eligible providers having that appointment type. Alternatively, you can give your scheduler a list of eligible providers. In some practices, there are popular and unpopular physicians. Should we allow patient choice, or should we assign patients to panels so they will be relatively even? While patient choice is critical, it will result in some panels exceeding the ideal panel size. Once the limit is exceeded, it would be unwise to allow a patient to select an over paneled physician. In practices that have a high rate of patient turnover, we measure panel size based on the unique patients seen in the last 12 months. Using more than 12 months will overestimate the panel, and using less than 12 months will underestimate the panel. The visits per patient per year may be lower than in practices with normal turnover, which would make the ideal panel size higher (Carlson B, 2002).

On the other hand, practices with high patient turnover will also have to deal with more new patient visits, which require more time and effort. This reduces the number of visits per provider per day, which affects the demand side of the equation. To counter this, we would suggest that you mitigate the physician work associated with new patient visits as much as possible by delegating tasks to nurses or medical assistants. In certain academic environments, panel size can be calculated for a team of linked providers. In this situation, the team's supply is simply the sum of each individual supply (Bodenheimer T, 2003).
Subjects and Methods

Rational of the study
The current study focused on measuring the patient as well as the health care providers satisfaction with all aspects of services offered at Internal Medicine and General Surgery out patient clinics in Fayoum University Hospital supported by observing the performance of health care providers (doctors and nurses) at out-patient clinics. So the study was planned to detect the defect in the services provided at out-patient clinics in Fayoum university hospital.

Subjects& Methods

A. Study design
The study was an operational health service research (Time bound study)
The study design was an exploratory cross sectional one
The design depended on measuring the observations at the time of study, through the following:

1. The observations: assessment of patient and health care provider satisfaction of health services at outpatient clinics of Internal Medicine and General Surgery using structured English questionnaire for health care providers(doctors and nurses), structured Arabic questionnaire for patient and observational checklist for the work area. In addition to observational checklist to assess provider performance and service delivery at Internal Medicine and General Surgery outpatient clinics also measuring the time consumed by the patient, in the patient flow cycle to detect which part of the cycle let the patient spending a long time.

2. The implementation: information derived from the collected data was analyzed and used to formulate a policy brief to present the situation analysis at the clinics of Internal Medicine and General Surgery. And set a plan as hardcopy (Arabic and English) to be presented to the stakeholders to take action in order to change and correct the defects in the offered service.
B. **Study settings:**

The study conducted at Fayoum University Hospital in the following areas:

1) The outpatient clinic of General Surgery.
2) The outpatient clinic of Internal Medicine.

Due to:

- The level of illiteracy in the society is high, most patients are unaware about the types of specialties and subspecialties so both clinics (the outpatient clinic of general surgery and the outpatient clinic of internal medicine) represent the first choice for patients before deciding the specialty they will need.
- High patient flow clinics.
- Regular work cover the whole week.

C. **Time Frame**

The study was conducted during a period of 31 months (January, 2011 till July, 2013).

D. **Study population**

The study populations were divided into 2 categories:

- First: Patients attending Internal Medicine and General Surgery outpatient clinics in Fayoum University hospital.
- Second: Health care provider actually working in the clinics (physicians and nurses).

E. **Study hypothesis:**

The study hypothesis is that: empowering the staff members and patients about the quality of health services. They will become inspired to make changes to improve the quality of services provided at outpatient clinics. This will improve the level of satisfaction of both internal customers (providers) and external customers (patients).

F. **Description of the study intervention**

The intervention was conducted by the investigator is composed of three phases:

- Quantitative and Qualitative data collection
- Both data were analyzed to present system analysis (table 18, 19, 20)
• A plan had been presented as a solution to solve the root causes of the problem in form of short term strategic plan and long term strategic plan
• A project was formulated to set up a communication and health education unit at the hospital to empower the internal and external customers in order to improve quality of service. The plan was presented in Arabic and English to the stakeholders (Annex 7)

G. Operational variables:

i. Independent variables
   1. Assessment of patients and providers satisfaction
   2. Observing service delivery at the clinic

ii. Intermediate variables
   1. System analysis through conducting patient and provider satisfaction survey and observation the service delivery at the clinic
   2. Developing a plan that depends on findings derived from the current study to improve quality of service.

iii. Dependent variables
   1. Decision making and action taken by the stakeholders guided by the items mentioned in the policy.
   2. Increase the level of patient satisfaction.

G. Sample size
   1. A pilot study was done on (50 patients- 2 physicians – 2 nurses) for testing the questionnaire prior to the actual implementation of work. The result of pilot study was used to modify and correct the questionnaire. It was excluded from the final results of this study. Finally the questions developed through in-depth discussion with the supervisors to reach the final form.

   2. Patients: The total number of interviewed patients was 495 (207 patients from clinic of General Surgery and 288 patients from clinic of Internal Medicine) this was based on:
• The period selected for data collection from (September, 2011 to March, 2012), 6 months.
• The number of the clients that accepted to be interviewed by the researcher. The response rate was (92.9%).

3. **Health care providers:** The total number of interviewed health care providers was 39 (19 health care providers from clinic of general surgery and 19 health care providers from clinic of internal medicine). The investigator selected all medical personnel that actually attending the clinic (physicians and nurses):
   • At the outpatient clinic of internal medicine it was (1 assistant professor, 1 lecturer, 2 lecturer assistants, 2 residents, 11 house officers and 2 nurses).
   • At the outpatient clinic of general surgery it was (3 lecturers, 2 lecturer assistants, 2 residents, 10 house officers and 2 nurses).
This was done taking in consideration their different characteristics and work experience that may have an impact on the quality of service delivery at out patient clinic of general surgery and internal medicine.
   • The response rate for health care providers at the outpatient clinic of internal medicine was (68.96%).
   • The response rate for health care providers at the outpatient clinic of general surgery was (51.4%).
Subjects & Methods

Table (B): Number of staff of internal medicine and general surgery departments (2010)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Internal medicine (N:18)</th>
<th>General surgery (N:27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Lecturers</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Assistant Lecturers</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Residents</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Nurses</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>27</td>
</tr>
</tbody>
</table>

➢ Sampling Procedures:

♦ Patient exit Interviews:

✔ The investigator attended the clinics for 22 weeks using the following schedule: In the odd weeks (1st, 3rd, 5th, 7th …… weeks) of the study; the first three days of the weeks were allocated for internal medicine clinic and the 2nd three days were allocated for general surgery clinic. The days were alternated in the even weeks (2nd, 4th, 6th, 8th,……) of the study and so on till the end of the period of study (as in flow chart).

✔ The whole day was covered (from start till end of the clinic) in different seasons to cover the seasonal variation and to ensure diversity and representation of the sample.

✔ The sample was self-selected and was distributed across the two clinics at the waiting area as they had the same waiting area.

✔ The interview was done with patients who approved to participate and had the following inclusion criteria:
  - Seeking medical care at outpatient clinics of general surgery and internal medicine in Fayoum University Hospital.
  - Exit patients after receiving the service and before going out.
Subjects & Methods

- Acceptance of the patient to be interviewed.
- Age above 20.
- Able to answer the questions.
- Both genders.
- The investigator interviewed the patients and completes the questionnaire by himself to ensure enrollment of all categories of patients (educated and non educated).

- Service providers interview

- The interview started after finishing the allocated time for patients exit interviews.
- The (21ˢᵗ, 22ⁿᵈ week) of the study were allocated for interviewing the medical health care providers of Internal Medicine and observing their performance. The (23ⁿᵈ week) was allocated for interviewing the medical health care providers of General Surgery and observing their performance (as in flow chart).
- The service providers of General Surgery were easier to reach them than the service providers of Internal Medicine as they attend the clinic regularly according to their timetable.
- The investigator try to reach the physicians through the timetable of attendance at the clinic.
- The health care providers (physicians) interviews consisted of two parts:
  1. 1ˢᵗ part is a structured English questionnaire
  2. 2ⁿᵈ part is in-depth personal interview with guided discussions.
- The nurses interview was done by self administered English questionnaire.
- Some physicians refused the interview.
- Some health care providers had completed the questionnaire form others the investigator had forced to do the interview by himself. Each interview took about 10-20 minutes according to the acceptance of the health care provider to continue the interview.
- The interviewer tried to obtain full responses.
Subjects & Methods

- **Service delivery**
  - Observation was done using observational checklist for both the health care providers and the area of service delivery.
  - Observation was conducted at the out patient clinics of General Surgery and Internal Medicine and the waiting area.
  - Observation of health care providers was done on alternative days for two weeks and for all providers actually attending the clinics at the time of the study (2 residents at out patient clinic of Internal Medicine; 2 residents and 4 assistant lecturers at outpatient clinic of General Surgery).
  - Observation of health care providers performance was done during examining 100 patients (50 patients at out patient clinic of Internal Medicine and 50 patients at out patient clinic of General Surgery) on alternative days over 10 days in a rate of 10 patients/ day (5 at the beginning of the clinic and 5 at the end of the clinic).

- **Patient Flow cycle chart:** It measured the time spent in each phase of the clinic visit. Ten patients were selected (Annex 5).
Subjects & Methods

Observation of Patient cycle for 10 persons

24th week observing 2 patients/day for 5 days
Subjects & Methods

Health care Service providers

Service provider's observation for 100 patients (50 patients at each clinic) on alternative days over 10 days at a rate of 10 patients/day (5 at the beginning of the clinic and 5 at the end of the clinic in 2nd week and 23rd week)

Internal medicine health care providers
N: 19

- physicians N: 17
- nurses N: 2

21st week

1st day and 2nd day of the 21st week
(one lecturer, one lecturer assistant, one resident and one nurse) in each day

6th day of the 21st week
one professor and one assistant professor

3rd day and 4th day of the 21st week
(one lecturer, one lecturer assistant, one resident and one nurse) in each day

General surgery health care providers
N: 19

- physicians N: 17
- nurses N: 2

22nd week

1st 5 days of the week
two house officers in each day

5th day
one house officer

23rd week

1st day and 2nd day
(one lecturer, one lecturer assistant, one resident and one nurse) in each day

3rd day and 4th day
(one lecturer and four house officers) in each day

5th day and 6th day
three house officers in each day
H. Study phases

The study was divided into the following phases:

a. Preparatory phase

Started from (January, 2011 to August, 2011) and included, preparing the following:

1. Study of hospital Records of a number of patients attending at outpatient clinics in Fayoum University Hospital.
2. Structured Arabic questionnaire for exit patients.
3. Formulate a health service providers questionnaire.
4. Observational checklist.

b. Data collection phase

It was conducted from (September, 2011 to March, 2012) to cover the different seasons & different days that will cover all working days of the week.

Types of data:

i. Quantitative data

- Hospital Records of the year (2010) for the number of patients attending at outpatient clinics in Fayoum University Hospital. (Table:1)
- Structured Arabic questionnaire for exit patients.
- Structured English questionnaire for healthcare providers.
- Patient statistics of (April, August, September and October 2010) for the number of patients attending the Internal Medicine and General Surgery out patient clinics.

ii. Qualitative data

- Interview with physicians (juniors and seniors) and house officers with guided discussions.
- Interview with nurses with structured Arabic questionnaire and guided discussions.
Table (C): Total General internal medicine and General surgery out patient clinic attendants according to hospital statistics in four selected months (2010)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General internal medicine</td>
<td>1318</td>
<td>1067</td>
<td>814</td>
<td>1223</td>
<td>13266</td>
</tr>
<tr>
<td>General surgery</td>
<td>1142</td>
<td>1015</td>
<td>901</td>
<td>1228</td>
<td>12858</td>
</tr>
</tbody>
</table>

Data collection Tools

To collect data on the following:

- General physical layout of the health facility
- Time taken by the patient in the patient flow cycle.
- The number of patients attending the clinics were obtained from the statistical office at the hospital and compared with that at the clinic record.

The tools were:

1) Reviewing the medical records statistics of four months. (table B)
2) Structured interview with exit patients

   - Arabic questionnaire form was used covering the various aspects of patient satisfaction.
   - Arabic questionnaire form was developed with reference to scientific articles (Gadallah et al 2003; Saadoun F. Al-azmi etal 2006)
   - The choice of questions for this research was based on the analysis of the results of interviews that were conducted before the study with patients to explain their experiences about their health care at Fayoum University hospital. An exit interview questionnaire was administered to the patients in the selected hospital. The questionnaire was given to patient attending the Internal Medicine and General Surgery outpatient clinics in Fayoum University Hospital
• The questionnaire consisted of 60 close-ended questions tapping 6 aspects of satisfaction with care:
  ✓ Access to care, continuity and choice of care had been covered by (15 questions; for example: The physician assigns appointment to the patient for follow up visit ),
  ✓ The communication and patient rights maintenance had been covered by (15 questions; for example: the physician ask you about your name before examination),
  ✓ The technical quality and physician performance was covered by (8 questions; for example: the physician can diagnose correctly),
  ✓ The financial aspects were covered by (4 questions; for example: price of tickets), the time management was covered by (4 questions; for example: examination time)
  ✓ The outcome and over all satisfaction was covered by (11 questions; for example: Planning to come in the future).
• Responses were given 4 –point scale ranging from always agree, sometimes agree, uncertain and not agree. (Annex1)
• The instrument contained both positively word and negatively word items.

3) Interview with the health care providers
• Physician and nurses were interviewed within the following items:
  o Attending training courses
  o Working hours at the clinic
  o Monitoring of work by senior staff
  o Work environment and infrastructure
  o The main problems facing them.
  o Their suggestions to solve the problem
• The health care providers (physicians) interviews consisted of two parts:
  First part was a structured English questionnaire developed to assess the health care providers' satisfaction of health services provided at General Surgery and Internal Medicine outpatient clinics and was covered by 27 close-ended questions (23 questions for doctor and 5 questions for nurse; for example: Attending training programs) taping the following aspects of satisfaction:
  - General physical layout of the clinic
Subjects & Methods

- The applied polices in the clinics
- The system and load of work at the clinic
- Load of work

(Annex 2)

Second part was in-depth personal interview that was covered by 16 open-ended questions (7 questions for doctor and 9 questions for nurses).

- Few of the health care providers completed the questionnaire form by them selves. But with some of the health care providers, the researcher had to complete the questionnaire by himself after getting the responses of the questions from them.
- Each interview took about 10 - 20 minutes according to the acceptance of the health care provider to continue in the interview.
- Responses were given 3 – point scale ranging from yes always, yes sometimes, no.

(Annex 2)

4) Field observation & situation analysis

- Observational check list for provider's performance
It was done at Internal Medicine and General Surgery out-patient clinics. The performance was assessed by observing the health providers while dealing with the patients at clinic. It was covered by (30 close-ended questions for observing the physician and 5 close-ended questions for observing the nurse) taping the following aspects:
  ✓ Observing communication between the patients and healthcare providers.
  ✓ Observing the patient rights maintenance.
  ✓ Observing the technical quality of healthcare providers.
  ✓ Observing the cooperation between the physician and the nurse at the clinic.
Responses were given 4 – point scale ranging from yes always, yes sometimes, no, not applicable (Annex 3).
Subjects & Methods

- **Observational check list for work area at the clinic**
  It was done for 3 areas and was covered by 71 questions (61 close-ended questions and 9 open-ended questions) as follow:
  ✓ Observing clinics of Internal Medicine and General Surgery was covered by 30 close-ended questions and 6 open-ended questions.
  ✓ Observing the waiting area of both clinics was covered by 7 close-ended questions and 3 open-ended questions.
  ✓ Observing the reports & records of both clinics was covered by 5 close-ended questions.
  ✓ And finally 9 close-ended questions were added in general.
  Responses to the close-ended questions were given 4 – point scale ranging from yes always, yes sometimes, no, not applicable (**Annex 4**). and 9 open-ended items)

5) **Patient flow cycle chart**
   It measures time consumed in registration and examination (**Annex 5**).

c. **Data management and analysis phase**

   Started from (April, 2012 to July, 2013) and it included:

   - **Qualitative data management**
     Qualitative data was collected and analyzed day by day. A written report of each interview was prepared.

   - **Quantitative data management**
     The collected interview questionnaires were revised for completeness and logical consistency. Recoded data was entered on computer using Microsoft excel software program for windows 2003 after being translated to English to facilitate data manipulation. Data was then transferred to the Statistical Package for Social Science (SPSS) version 20 to be statistically analyzed by the following levels of analysis:
     - Simple frequency distribution analysis to help in writing the plan.
• The questions of health care providers questionnaire were answered using three points scale “yes always” "yes sometimes" "no".
• Three points scale "yes " " no" "non applicable" was used in answering the questions of the observational checklist.
• The questions of patient satisfaction survey were answered using Likert scale (e.g., four points scale ranging from “always agree” to “disagree. The researcher used the same scale on all questions to facilitate comparing the results.”
• Analysis using Chi square to identify the effect of sociodemographic characteristics on the level of satisfaction.
• A scoring method was used to assess the patient satisfaction level as follow:
  ✓ For positive responses (3=always agree, 2=sometimes agree, 1=disagree, 0= not applicable or uncertain). (e.g.: The physician greet the patient).
  ✓ For negative responses (0=always agree, 1=sometimes agree, 2=disagree, 3= non applicable or uncertain). (e.g.: The physician may not come and the patient leave without an examination).
• The responses were grouped and presented in three categories as follow:
  ✓ High satisfaction including the patients who always agree to the quality of service.
  ✓ Moderate satisfaction including the patients who sometimes agree to the quality of service.
  ✓ Grouping the patients who disagree and uncertain/not applicable to the quality of service together to represent the dissatisfaction.

The scale ratings converted into the following scores: (100, 50, 0).
(table C)
Table (D): Scale and score distribution

<table>
<thead>
<tr>
<th>Scale</th>
<th>High satisfaction (always agree)</th>
<th>Moderate satisfaction (sometimes agree)</th>
<th>Dissatisfaction (disagree, non applicable/uncertain)</th>
<th>High satisfaction (always agree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive responses (e.g.: The physician greet the patient)</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Negative responses (e.g.: The physician may not come and the patient leave without an examination)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>Positive responses 100 50 0</td>
<td>Negative responses 0 50 100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average of these scores were calculated. Each patient had a score for every question that was answered. For each patient, a section score was calculated as the mean (average) of all the question scores in that particular section.

*Press Ganey, 2012*
Table (E): Sample data for five Patients for two aspects of satisfaction (Time management and Financial aspect)

<table>
<thead>
<tr>
<th>Patient</th>
<th>Time management (Section A)</th>
<th>Financial aspect (Section B)</th>
<th>Section A</th>
<th>Section B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
<td>Q5</td>
</tr>
<tr>
<td>1</td>
<td>50</td>
<td>0</td>
<td>50</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Mean:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section A = (Q1 + Q2 + Q3 + Q4 + Q5) / 5 = 40
Section B = (Q1 + Q2 + Q3 + Q4) / 4 = 25
Total = (Section A + Section B) / 2 = 32.5

The mean of all patients’ overall scores, rounded to one decimal place =
(32.5+ 35+66.3+28.8+62.5) / 5 = 45.02

Ethical considerations:

- The study protocol was discussed by selected staff members of Public Health Department, Faculty of Medicine, from both Cairo and Fayoum Universities and the research ethical committee.
- The official approval was obtained from: Council of faculty departments and Council of Faculty of medicine.
- Both the researcher and study individuals were acceptable to each other especially culturally.
- A written consent was obtained from the director of the hospital and another one from the director of the outpatient clinics before application of the study.
Subjects & Methods

- A written consent was obtained from the head of both Internal Medicine and General Surgery departments.
- The study protocol was revised and approved by the supervisors.
- An approval was taken from Medical Ethical Committee.
- Verbal consent was taken from all the participants.
- The procedures of the study were conducted after explaining the aim of the study to the participants and the stalk holders (the director of the hospital, the director of the outpatient clinics and the head of both Internal Medicine and General Surgery departments).
- Confidentiality was expressed to the participants.

Study limitations:

- Preparing the tools took a lot of time, to be matched and suitable to our Egyptian population.
- Difficulty in obtaining documented data on patient numbers at outpatients for the year (2010-2011).
- Difficulty in reaching the staff members of Internal Medicine for doing the interview due to absence of most of them from attending the clinic.
- Permissions were difficult to be obtained from Internal Medicine department.
- Poor cooperation of some included staff members.
- Some staff members didn’t accept the presence of the investigator at the clinic.
- Most of the medical health care providers were very conservative in speaking about the work problems at the clinic.
- Most of the staff members of Internal Medicine were absent from the clinic during the period allocated for observation of the clinic.
- The medical health care providers interviews were completed at the time of the clinic. Other interviews of some medical health care providers were completed at different places in the hospital where the investigator could reach them.
Results

The results of the study will be displayed in the following sequence according to the findings derived from the survey as follow:

I. Results of patient satisfaction survey
II. Time of patient flow cycle
III. Results from interviewing the health care providers at the clinic
IV. SWOC analysis of the system of work at the clinic
V. System analysis of outpatients clinic according the researcher observations

Part I

Results of patient satisfaction survey
The current study considers the following parameters affecting the patient satisfaction from services offered at internal medicine and general surgery outpatient clinics:

1. Socio-demographic background
2. Communication
3. Access and Continuity of care
4. Technical quality and Health care providers performance
5. Financial aspects
6. Time management
7. Overall satisfaction and outcome of care
Table (1): Distribution of studied patients by background characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N (495)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>71</td>
<td>14.3</td>
</tr>
<tr>
<td>Married</td>
<td>397</td>
<td>80.2</td>
</tr>
<tr>
<td>Divorced</td>
<td>17</td>
<td>3.4</td>
</tr>
<tr>
<td>Widow</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time work</td>
<td>58</td>
<td>11.7</td>
</tr>
<tr>
<td>Part time work</td>
<td>233</td>
<td>47.1</td>
</tr>
<tr>
<td>Not work</td>
<td>155</td>
<td>31.3</td>
</tr>
<tr>
<td>Student</td>
<td>45</td>
<td>9.1</td>
</tr>
<tr>
<td>Retired</td>
<td>4</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Clinic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>288</td>
<td>58.2</td>
</tr>
<tr>
<td>General Surgery</td>
<td>207</td>
<td>41.8</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;150 Egyptian pound</td>
<td>208</td>
<td>42</td>
</tr>
<tr>
<td>&gt;150 Egyptian pound</td>
<td>287</td>
<td>58</td>
</tr>
<tr>
<td><strong>Visit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st</td>
<td>122</td>
<td>24.6</td>
</tr>
<tr>
<td>Follow up</td>
<td>373</td>
<td>75.4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>67</td>
<td>13.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>237</td>
<td>47.9</td>
</tr>
<tr>
<td>Can read &amp; write</td>
<td>83</td>
<td>16.8</td>
</tr>
<tr>
<td>Illiterate</td>
<td>108</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Table (1): this table demonstrated the demographic characteristics of the studied group (495) patients from the outpatient clinics of internal medicine (58.2%) and general surgery. Most of them (75.4%) came for follow up visits.
Table (2): Distribution of patients according to communication and their rights with the healthcare providers (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Always agree</th>
<th>Sometimes agree</th>
<th>Non applicable\Uncertain</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>The physician greet the patient</td>
<td>156</td>
<td>31.5</td>
<td>36</td>
<td>7.3</td>
</tr>
<tr>
<td>The physician asked the patient about his name before examination</td>
<td>186</td>
<td>37.6</td>
<td>18</td>
<td>3.6</td>
</tr>
<tr>
<td>The physician apologized on coming late and give a reason</td>
<td>68</td>
<td>13.7</td>
<td>57</td>
<td>11.5</td>
</tr>
<tr>
<td>The physician listen to patient explanation of his complain</td>
<td>223</td>
<td>45.1</td>
<td>144</td>
<td>29.1</td>
</tr>
<tr>
<td>The physician explained condition to the patient</td>
<td>205</td>
<td>41.4</td>
<td>145</td>
<td>29.3</td>
</tr>
<tr>
<td>The physician examine more than one patient at the clinic</td>
<td>340</td>
<td>68.7</td>
<td>26</td>
<td>5.3</td>
</tr>
<tr>
<td>The physician close the door of the examine room during examination</td>
<td>341</td>
<td>68.9</td>
<td>47</td>
<td>9.5</td>
</tr>
<tr>
<td>The physician talk to the staff neglecting the patient presence</td>
<td>104</td>
<td>21.0</td>
<td>193</td>
<td>39.0</td>
</tr>
<tr>
<td>The physician respect to the patient</td>
<td>301</td>
<td>60.8</td>
<td>151</td>
<td>30.5</td>
</tr>
<tr>
<td>The nurse deal with the patient in a good way</td>
<td>198</td>
<td>40.0</td>
<td>78</td>
<td>15.8</td>
</tr>
<tr>
<td>The nurse answered the patient questions</td>
<td>74</td>
<td>14.9</td>
<td>163</td>
<td>32.9</td>
</tr>
<tr>
<td>The security men deal with the patient in a good way</td>
<td>163</td>
<td>32.9</td>
<td>80</td>
<td>16.2</td>
</tr>
<tr>
<td>The physician explain how to take the medicine</td>
<td>182</td>
<td>36.8</td>
<td>28</td>
<td>5.7</td>
</tr>
<tr>
<td>The physician gives choices in your treatment (clinical or surgical)</td>
<td>94</td>
<td>19.0</td>
<td>46</td>
<td>9.3</td>
</tr>
<tr>
<td>The physician gives choices in your medications (syrup or tablets or injection)</td>
<td>50</td>
<td>10.1</td>
<td>21</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Table (2): regarding communication of patient with their physician (45.1%) of the patients were satisfied by being listening for their complain by doctor and (41.4%) of them express their pleasant by explaining the physician their condition. As regards the patient right of being examined in close
examining room (68.9%) approved it and (60.8%) revealed that their physicians were respecting them while dealing.

On the other side (57.2%) of the patients were unsatisfied from communicating with their health care providers as not being greeted from the physician. Also (57.8%) were not asking about their names before examination. Regarding maintaining the patient rights; (68.7%) of the patients was unsatisfied from examining more than one patient at the clinic; nearly half of the patients (49.3%) expressed dissatisfaction from not explaining how to take the medicine. As well as (49.5%) of the patients expressed dissatisfaction from not answering their questions by the nurse and (45.9%) said that the security men not dealing with them well.
### Table 3: Distribution of patients regarding access, continuity and choice of care (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Always agree</th>
<th>Sometimes agree</th>
<th>Non applicable/ Uncertain</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>The physician gave the referred patient a referral paper</td>
<td>241</td>
<td>48.7</td>
<td>159</td>
<td>32.1</td>
</tr>
<tr>
<td>The physician assigns appointment to the patient for follow up visit</td>
<td>259</td>
<td>52.3</td>
<td>252</td>
<td>30.7</td>
</tr>
<tr>
<td>The physician is always present in follow up visit</td>
<td>155</td>
<td>31.3</td>
<td>170</td>
<td>34.3</td>
</tr>
<tr>
<td>The security men take the patient to any place at hospital</td>
<td>109</td>
<td>22.0</td>
<td>116</td>
<td>23.4</td>
</tr>
<tr>
<td>The place of the hospital is in a good location</td>
<td>293</td>
<td>59.2</td>
<td>149</td>
<td>30.1</td>
</tr>
<tr>
<td>Hospital is easy accessible.</td>
<td>299</td>
<td>60.4</td>
<td>149</td>
<td>30.1</td>
</tr>
<tr>
<td>The transports to the hospital are comfortable</td>
<td>281</td>
<td>56.8</td>
<td>34</td>
<td>6.9</td>
</tr>
<tr>
<td>All imaging investigations are in the hospital</td>
<td>167</td>
<td>33.7</td>
<td>145</td>
<td>29.3</td>
</tr>
<tr>
<td>All laboratory investigations are in the hospital</td>
<td>255</td>
<td>51.5</td>
<td>27</td>
<td>5.5</td>
</tr>
<tr>
<td>Taking tickets occurs in an organized manner</td>
<td>293</td>
<td>59.2</td>
<td>156</td>
<td>31.5</td>
</tr>
<tr>
<td>Entry for examination is organized</td>
<td>280</td>
<td>56.6</td>
<td>33</td>
<td>6.7</td>
</tr>
<tr>
<td>Entry for imaging investigation occurs in an organized manner</td>
<td>266</td>
<td>53.7</td>
<td>138</td>
<td>27.9</td>
</tr>
<tr>
<td>Entry for laboratory investigation occurs in an organized manner</td>
<td>255</td>
<td>51.5</td>
<td>147</td>
<td>29.7</td>
</tr>
<tr>
<td>Taking medication occurs in an organized manner</td>
<td>77</td>
<td>15.6</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td>Choosing your physician</td>
<td>259</td>
<td>10.3</td>
<td>31</td>
<td>6.3</td>
</tr>
</tbody>
</table>
Table (3): The above table showed that patients were satisfied for the following points as: (59.2%) were satisfied from the hospital location; (59.2%) from organization in taking tickets; and (53.7%) (56.6%) of patients were satisfied from entry in an organized manner for imaging investigation and examination respectively. Accessibility of transport to the hospital was agreed by (60.4%) of patients. (48.7%) of the patients were satisfied from giving the referral paper and (52.3%) assignment an appointment by the physician for follow up visit.

Other patients (79.8%) expressed dissatisfaction from not choosing physician and nearly half of the patients (49.7%) expressed dissatisfaction from not directed by the security.
Table (4): Perception of studied patients regarding technical quality and physician performance (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Always agree</th>
<th>Sometimes agree</th>
<th>Non applicable/ Uncertain</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>The physician examine all body</td>
<td>114</td>
<td>23.0</td>
<td>44</td>
<td>8.9</td>
</tr>
<tr>
<td>The physician gives many drugs</td>
<td>61</td>
<td>12.3</td>
<td>206</td>
<td>41.6</td>
</tr>
<tr>
<td>The physician ask for many laboratory tests</td>
<td>93</td>
<td>18.8</td>
<td>86</td>
<td>17.4</td>
</tr>
<tr>
<td>the physician can diagnose correctly</td>
<td>190</td>
<td>38.4</td>
<td>158</td>
<td>31.9</td>
</tr>
<tr>
<td>The physician may not come and the patient leave without an examination</td>
<td>71</td>
<td>14.3</td>
<td>172</td>
<td>34.7</td>
</tr>
<tr>
<td>If another physician comes, he knows well about the patient health condition</td>
<td>84</td>
<td>17.0</td>
<td>51</td>
<td>10.3</td>
</tr>
<tr>
<td>The physician informed the patient about how to change the unhealthy habits and the healthy lifestyle according their conditions.</td>
<td>38</td>
<td>7.7</td>
<td>4</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Table (4): Regarding the technical quality the above table revealed that (59.2%) of patients expressed dissatisfaction from not examining their whole body. More than half of the patients (51.9%) said that if another physician comes, he doesn't know about their health condition; (80.4%) of patient claimed that the physician didn’t inform them about how to change the unhealthy habits and the healthy lifestyle.
Figure (1): Patients dissatisfaction related to financial aspects

Figure (1): remarks that (54.1%) expressed dissatisfaction from high price of the medications; (51.7%) expressed dissatisfaction from high price of the imaging investigation; (82.8 %) expressed dissatisfaction from high price of the laboratory investigations.
Figure (2): Distribution of patients according to the time management

Figure (2): remarks that (55.8%) expressed dissatisfaction from long waiting time for taking a ticket and (93.3%) claimed that the physician didn’t stay with them enough time
The time taken for registration is too long as (58.6%) of patients said that they took more than 30 minutes for registration.
Figure (4): Distribution of patients according to the time spent for examination

Figure (4): Patients were dissatisfied about time taken for examination as (38.8%) said that they took less than 5 minutes for examination
Figure (5): Distribution of patients regarding the time spent for laboratory investigations

Figure (5): The patients were distributed regarding the time taken for laboratory investigation as (43.6%) said that they took three days for the results of the investigation to appear.
### Table (5): Distribution of patients according to the overall satisfaction and outcome of care (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Always agree</th>
<th>Sometimes agree</th>
<th>Non applicable\Uncertain</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Satisfaction with care</td>
<td>20</td>
<td>47</td>
<td>4</td>
<td>424</td>
</tr>
<tr>
<td>Expectation to find a better care in the hospital</td>
<td>408</td>
<td>1</td>
<td>1</td>
<td>85</td>
</tr>
<tr>
<td>The way that people dealing with you here is good</td>
<td>158</td>
<td>121</td>
<td>-</td>
<td>203</td>
</tr>
<tr>
<td>Expectation to find a better dealing in the hospital</td>
<td>216</td>
<td>56</td>
<td>34</td>
<td>189</td>
</tr>
<tr>
<td>Planning to come in the future</td>
<td>245</td>
<td>165</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>Advise the relatives to come here in future</td>
<td>258</td>
<td>153</td>
<td>33</td>
<td>51</td>
</tr>
<tr>
<td>The hospital is clean</td>
<td>425</td>
<td>55</td>
<td>10</td>
<td>5</td>
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<tr>
<td>The number of waiting chairs are suitable</td>
<td>51</td>
<td>36</td>
<td>30</td>
<td>378</td>
</tr>
<tr>
<td>The light in the waiting area is good</td>
<td>320</td>
<td>61</td>
<td>27</td>
<td>87</td>
</tr>
<tr>
<td>All what patient needs are at hospital</td>
<td>100</td>
<td>39</td>
<td>66</td>
<td>290</td>
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<tr>
<td>Physicians performance</td>
<td>242</td>
<td>175</td>
<td>45</td>
<td>33</td>
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</table>

**Table (5):** Regarding the overall satisfaction and outcome of care at the hospital the above table revealed that (85.7%); expressed dissatisfaction with care; (82.4%) of patients were expected to find a better care in the hospital; (43.6%) of patients were expected to find a better dealing in the hospital; (76.4%) said that the number of chairs at the waiting area are few; (58.6%) said that all what patient needs are not at hospital; (48.9%) are satisfied with physician performance; (43%) were not satisfied with the way that people dealing with them at the hospital.
Table (6): Distribution of patients according to their communication satisfaction level score by background characteristics (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
<th>High level of satisfaction</th>
<th>Moderate level of satisfaction</th>
<th>Dissatisfaction</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Sex</td>
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<td></td>
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<td></td>
</tr>
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<td>1.21</td>
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<td>-</td>
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</table>

* Statistical significant difference (P< 0.05)

Table (6): The above table showed that the patients were more satisfied in communication with health care providers in internal medicine clinic than general surgery clinic and there was a significant difference in level of satisfaction between patients regarding to communication in sex, marital status, occupation, income, visit and education.
Table (7): Distribution of patients according to their access satisfaction level score by background characteristics (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
<th>High level of satisfaction</th>
<th>Moderate level of satisfaction</th>
<th>Dissatisfaction</th>
<th>P value</th>
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<td>N</td>
<td>%</td>
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**Table (7):** The above table showed that there was a significant difference in level of satisfaction between patients regarding to access to service in sex, marital status, occupation, clinic, income, visit and education.
Table (8): Distribution of patients according to their technical quality satisfaction level score by background characteristics (N=495)

<table>
<thead>
<tr>
<th>Variable</th>
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<th>Moderate level of satisfaction</th>
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<th>P value</th>
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Table (8): The above table showed that there was a significant difference in level of satisfaction between patients regarding to the technical quality in marital status, occupation, income and education.
Table (9): Distribution of patients according to financial aspects satisfaction level score by background characteristic (N=495)

<table>
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<tr>
<th>Variable</th>
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<th>Dissatisfaction</th>
<th>P value</th>
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<td>%</td>
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<td>Student</td>
<td>14</td>
<td>2.83</td>
<td>25</td>
<td>5.05</td>
</tr>
<tr>
<td>Retired</td>
<td>2</td>
<td>0.40</td>
<td>2</td>
<td>0.40</td>
</tr>
<tr>
<td><strong>Clinic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal medicine</td>
<td>98</td>
<td>19.80</td>
<td>179</td>
<td>36.16</td>
</tr>
<tr>
<td>General surgery</td>
<td>50</td>
<td>10.10</td>
<td>152</td>
<td>30.71</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;150 Egyptian pound</td>
<td>80</td>
<td>16.16</td>
<td>118</td>
<td>23.84</td>
</tr>
<tr>
<td>&gt;150 Egyptian pound</td>
<td>68</td>
<td>13.74</td>
<td>213</td>
<td>43.03</td>
</tr>
<tr>
<td><strong>Visit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First visit</td>
<td>47</td>
<td>9.49</td>
<td>63</td>
<td>12.73</td>
</tr>
<tr>
<td>Follow up</td>
<td>101</td>
<td>20.40</td>
<td>268</td>
<td>54.14</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>18</td>
<td>3.64</td>
<td>45</td>
<td>9.09</td>
</tr>
<tr>
<td>Secondary</td>
<td>46</td>
<td>9.29</td>
<td>187</td>
<td>37.78</td>
</tr>
<tr>
<td>Can read &amp; write</td>
<td>40</td>
<td>8.08</td>
<td>39</td>
<td>7.88</td>
</tr>
<tr>
<td>Illiterate</td>
<td>44</td>
<td>8.89</td>
<td>60</td>
<td>12.12</td>
</tr>
</tbody>
</table>

Table (9): The above table showed that there was a significant difference in level of satisfaction between patients regarding to the financial aspects satisfaction in Marital Status, Occupation, Clinic, Income, Visit and Education satisfaction level there’s a significant difference.
### Table (10): Distribution of patients according to their perception to the provided Services (N=495)

<table>
<thead>
<tr>
<th>Variable score</th>
<th>Satisfaction scores</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Satisfaction</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Communication score</td>
<td>143 28.9</td>
<td>323 65.3</td>
<td>29 5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access and continuity of care score</td>
<td>207 41.8</td>
<td>280 56.6</td>
<td>8 1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical quality and Health care providers performance score</td>
<td>364 73.5</td>
<td>76 15.4</td>
<td>54 10.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial aspects score</td>
<td>435 87.9</td>
<td>55 11.1</td>
<td>3 .6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management score</td>
<td>42 8.5</td>
<td>80 16.2</td>
<td>371 74.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over all satisfaction and outcome of care score</td>
<td>148 29.9</td>
<td>331 66.9</td>
<td>10 2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table (10):** This table revealed that (65.3%) and (56.6%) of patients showed moderate degree of satisfaction in communication aspects and in access and continuity of care respectively. While (73.5%) and (87.9%) of patients were highly satisfied in technical quality and financial aspects respectively. The over all satisfaction and outcome of care score (66.9%).

111
Table (11): Mean satisfaction score of patients according to their perception to the provided Services (N=495)

<table>
<thead>
<tr>
<th>Variable score</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication score</td>
<td>50.5</td>
<td>14.9</td>
</tr>
<tr>
<td>Access and continuity of care score</td>
<td>44.4</td>
<td>14.5</td>
</tr>
<tr>
<td>Technical quality and Health care providers performance score</td>
<td>70.8</td>
<td>15.6</td>
</tr>
<tr>
<td>Financial aspects score</td>
<td>39.7</td>
<td>18.4</td>
</tr>
<tr>
<td>Time management score</td>
<td>64.8</td>
<td>15.9</td>
</tr>
<tr>
<td>Over all satisfaction and outcome of care score</td>
<td>51.9</td>
<td>16.3</td>
</tr>
<tr>
<td>Total satisfaction score</td>
<td>54.5</td>
<td>6.99</td>
</tr>
</tbody>
</table>

Table (11): The mean satisfaction score is calculated for the studied patients to consider the responses of each individual in the sample. This table revealed that the mean satisfaction score for communication aspect was (50.5), the mean satisfaction score for Access and continuity of care was (44.4), the mean satisfaction score for technical quality and health care providers performance was (70.8), the mean satisfaction score for financial aspects was (39.7), the mean satisfaction score for time management was (64.8), the mean satisfaction score for over all satisfaction and outcome of care was (51.9), comparing to the mean of total satisfaction score that was (54.5).
Part II: Time of Patient Flow Cycle

Figure (6): Distribution of observed patients according to the booking time in minutes

(10 patients)

Figure (6): showed that two out of ten observed patients spent more than 45 minutes and five out of ten observed patients spent about 25 minutes in registration and booking a ticket.
Figure (7): Distribution of observed patients regarding waiting time after registration and before consultation in minutes (10 patients)

Figure (7): remarks six out of ten observed patients spent more than 3 hours waiting for examination
Figure (8): Distribution of observed patients according to the time spent in consultation in minutes (10 patients)

Figure (8): referred that seven out of ten observed patients spent less than 12 minutes in examination.
Part III:

Health care providers satisfaction survey findings:
In-depth interviews with staff members from both outpatient clinics of Internal medicine and General surgery. It took about "10" to "20" minutes with each staff member to answer the mentioned questions in (annex ). The participants explored the problems faced during work at the clinic and suggestions for its improvement.

Table (12): Distribution of the health care providers participated in the study and their categories

<table>
<thead>
<tr>
<th>Job Category</th>
<th>N. of Participants</th>
<th>Years of work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal medicine</td>
<td>General surgery</td>
</tr>
<tr>
<td>Assistant professor</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lecturer assistant</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Resident</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>House officer</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Nurse</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Interview with health care providers at outpatient clinic of general surgery. the physicians had expressed the following:

- The majority of health care providers expressed dissatisfaction from the following:
  1. Shortage in the number of staff members with high caseload up to 60 patients/day.
  2. Long exhausting working hours/day up to 6 hours then we continue working in the department.
  3. The clinic has a narrow space.

Lighting at the clinic is insufficient and it needs reparation. For example: we need a searchlight for examination.

The majority of health care providers expressed dissatisfaction from the following:
1. Shortage in the number of staff members with high caseload up to 60 patients/day.
2. Long exhausting working hours/day up to 6 hours then we continue working in the department.
3. The clinic has a narrow space.
a. Most of the house officers and some residents expressed dissatisfaction from unorganized patient flow (case mix) the new mixed with the follow up cases with the employees and the referral cases.

• All Health care providers suggested the following:
  1. Increase the number of physicians at the clinic
  2. Decrease the number of examined patients per day
  3. Obligate the senior staff to attend the clinic

• One of Health care providers suggested the following:
  Organize the patient flow by using numbers on the ticket

• One of Health care providers suggested the following:
  - Supply the deficient in supply and equipment
  - Putting the sterile dressing that is used for a single patient in a single package instead of putting more than one dressing for more than one patient in a single package

II. Interview with health care providers at outpatient clinic of internal medicine. The physicians had expressed the following:

• The majority of Health care providers expressed dissatisfaction from the following:
  1. Shortage in sphygmomanometers and thermometers.
  2. Shortage in the number of staff members.
  3. High number of patients affect the physician concentration leading to missing important points in diagnosis.
  4. Long exhausting working hours/day up to 6 hours then we continue working in the department
  5. Shortage in number of nurses and their dependence on patients' registration. They don't share in preparing the patients for examination.
Results

- The majority of house officers expressed dissatisfaction from the following:
  - Most of the residents in the clinic are juniors with few experiences. Many cases escape from diagnosis and come after that with complications. The majority of health care providers suggested the following:
    1. Setting up an electronic file system inside the clinic.
    2. Decrease the number of examined patients per day.
    3. Organize the patient flow using numbers on the tickets.
    4. Supply the deficient in supply and equipment's.
    5. Respect the timetable.

- The work in the clinic was carried out mostly of the week by the residents.
- The ultrasoundography not work at the clinic.
- Lack of a well recording system. The staff should be from Fayoum.

- Most of the doctors at the clinic prescribe high price medications. Although there are cheaper medications make the same effect. The people are of low socioeconomic class.

- Cases recommended from private clinics of the teaching staff take the upper hand in care.

- The majority of health care providers suggested the following:
  - The majority of the residents in the clinic are juniors with few experiences. Many cases escape from diagnosis and come after that with complications.
  - Most of the doctors at the clinic prescribe high price medications. Although there are cheaper medications make the same effect. The people are of low socioeconomic class.
  - The work in the clinic was carried mostly of the week by the residents.
  - The ultrasoundography not work at the clinic.
  - Lack of a well recording system. The staff should be from Fayoum.

- The majority of health care providers suggested the following:
  - The majority of the residents in the clinic are juniors with few experiences. Many cases escape from diagnosis and come after that with complications.
  - Most of the doctors at the clinic prescribe high price medications. Although there are cheaper medications make the same effect. The people are of low socioeconomic class.
  - The work in the clinic was carried mostly of the week by the residents.
  - The ultrasoundography not work at the clinic.
  - Lack of a well recording system. The staff should be from Fayoum.

- The majority of health care providers suggested the following:
  - The majority of the residents in the clinic are juniors with few experiences. Many cases escape from diagnosis and come after that with complications.
  - Most of the doctors at the clinic prescribe high price medications. Although there are cheaper medications make the same effect. The people are of low socioeconomic class.
  - The work in the clinic was carried mostly of the week by the residents.
  - The ultrasoundography not work at the clinic.
  - Lack of a well recording system. The staff should be from Fayoum.
Results

- Setting up a separate clinics for each speciality in internal medicine and identify certain days in the week for each speciality.

عمل عيادات مستقلة لكل تخصص في الباطنة وتحديد أيام معينة في الأسبوع لكل تخصص

Interview with nurses at outpatient clinic of general surgery and internal medicine.

- All nurses expressed dissatisfaction from the following:
  1. Shortage in numbers of Staff Members comparing to the number of patients.

نقص عدد الأطباء بالنسبة لعدد المرضى

  2. High work pressure due to large number of patient.

ضغط العمل الكبير لأن عدد المرضى كبير

- All nurses suggested the following

  Increase the number of physicians.

نرود عدد الدكاترة
### Table (13): Perception of the nurses to the work system at the clinic

<table>
<thead>
<tr>
<th>Variables</th>
<th>always</th>
<th>sometimes</th>
<th>No</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision by head nurse</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Working hours/day to manage the load of the patients are sufficient</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Attend training programs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4 100</td>
</tr>
<tr>
<td>The number of doctors/day are sufficient</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4 100</td>
</tr>
</tbody>
</table>

Table (13): showed that all interviewed nurses were not attend any training courses.
Table (14): Perception of the physician to the work system at the clinic

<table>
<thead>
<tr>
<th>Variables</th>
<th>always</th>
<th></th>
<th></th>
<th>sometimes</th>
<th></th>
<th></th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision by senior staff</td>
<td>16</td>
<td>47.1</td>
<td>6</td>
<td>17.6</td>
<td>12</td>
<td>35.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting of the clinic is adequate</td>
<td>19</td>
<td>55.9</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>44.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilation is good</td>
<td>19</td>
<td>55.9</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>44.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space of the clinic is adequate</td>
<td>19</td>
<td>55.9</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>44.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job description is present and applied</td>
<td>12</td>
<td>35.3</td>
<td>9</td>
<td>26.5</td>
<td>11</td>
<td>32.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working hours/day to manage the load of the patients are sufficient</td>
<td>19</td>
<td>55.9</td>
<td>3</td>
<td>8.8</td>
<td>12</td>
<td>35.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend training programs</td>
<td>10</td>
<td>29.4</td>
<td>24</td>
<td>70.6</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral policies are present and used</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The number of nurses are sufficient</td>
<td>29</td>
<td>85.3</td>
<td>3</td>
<td>8.8</td>
<td>2</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses are cooperative</td>
<td>32</td>
<td>94.1</td>
<td>2</td>
<td>5.9</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses are well trained</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>44.1</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The patient sheet contain complete data</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There's feedback for referral cases between departments of the hospital</td>
<td>21</td>
<td>61.8</td>
<td>3</td>
<td>8.8</td>
<td>10</td>
<td>29.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There's feedback for referral cases between other hospitals</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>8.8</td>
<td>31</td>
<td>91.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There's continuous update for knowledge of diagnosis</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>11.8</td>
<td>30</td>
<td>88.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There's continuous update for treatment methods</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>11.8</td>
<td>30</td>
<td>88.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is easy for follow up cases to reach to their physician?</td>
<td>2</td>
<td>5.9</td>
<td>6</td>
<td>17.6</td>
<td>26</td>
<td>76.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The number of doctors working in the clinic are sufficient</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All prescribed drugs at the hospital are available</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All investigations needed for the patient at the hospital are available</td>
<td>5</td>
<td>14.7</td>
<td>-</td>
<td>-</td>
<td>29</td>
<td>85.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (14): The above table could provide an overview about perception of the physician to the system of work at the clinic. They reported that the nurses were sufficient in numbers and they were cooperative. All of them said that there's no referral policy, not all drugs were present at the hospital and the number of doctors were not sufficient at the clinic. (88.2%) said no continuous update for knowledge and treatment methods (76.5%) said that the cases cannot reach their physician easily and (85.3%) said that not all investigations needed for the patient were available at the hospital.
Table (15): Total numbers of Internal Medicine and General Surgery outpatient clinics attendants according to hospital statistics in four selected months (2010)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Medicine</td>
<td>1318</td>
<td>1067</td>
<td>814</td>
<td>1223</td>
<td>13266</td>
</tr>
<tr>
<td>General Surgery</td>
<td>1142</td>
<td>1015</td>
<td>901</td>
<td>1228</td>
<td>12858</td>
</tr>
</tbody>
</table>

Table (15): this table demonstrated the workload for the resident at both clinics, with the total outpatient of Internal Medicine in year (2010) was accounted for (1223) patients in October 2010 / working day.
Table (16): Observation of physicians at outpatient clinic of General Surgery and Internal Medicine regarding doctor / patient communication and patient rights

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>The doctor greets the patient</td>
<td>23</td>
<td>15.4</td>
<td>126</td>
</tr>
<tr>
<td>The doctor show respect to the patient</td>
<td>149</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>The doctor gives patient enough time to describe his/her complain</td>
<td>58</td>
<td>38.9</td>
<td>91</td>
</tr>
<tr>
<td>The doctor gives patient his/her full attention</td>
<td>46</td>
<td>30.9</td>
<td>103</td>
</tr>
<tr>
<td>The doctor sometimes ignore what the patient tells him</td>
<td>33</td>
<td>22.1</td>
<td>116</td>
</tr>
<tr>
<td>The doctor explains to the patient his/her medical problems</td>
<td>63</td>
<td>42.3</td>
<td>15</td>
</tr>
<tr>
<td>The doctor prescribes medications</td>
<td>22</td>
<td>14.8</td>
<td>127</td>
</tr>
<tr>
<td>The doctor gives patient choices when deciding his/her medical care</td>
<td>-</td>
<td>-</td>
<td>36</td>
</tr>
<tr>
<td>The doctor gives the patient choices when deciding his/her treatment</td>
<td>-</td>
<td>-</td>
<td>149</td>
</tr>
<tr>
<td>The doctor explains to the patient the diet his/her should follow</td>
<td>30</td>
<td>20.1</td>
<td>119</td>
</tr>
<tr>
<td>The doctor explains to the patient the investigations his/her should do</td>
<td>15</td>
<td>10.1</td>
<td>97</td>
</tr>
<tr>
<td>The doctor explains the reasons for medical tests</td>
<td>8</td>
<td>5.4</td>
<td>107</td>
</tr>
<tr>
<td>The doctor explains the place of referral if needed</td>
<td>45</td>
<td>30.2</td>
<td>15</td>
</tr>
<tr>
<td>The doctor hurries too much when treat patient (&lt;15 minutes)</td>
<td>127</td>
<td>85.2</td>
<td></td>
</tr>
<tr>
<td>The doctor pays attention to the patient's privacy</td>
<td>-</td>
<td>-</td>
<td>149</td>
</tr>
<tr>
<td>The doctor do his/her best to keep the patient from worrying</td>
<td>52</td>
<td>34.9</td>
<td>97</td>
</tr>
<tr>
<td>The doctor sometimes use medical terms to the patients without explaining</td>
<td>7</td>
<td>4.7</td>
<td>142</td>
</tr>
<tr>
<td>The doctor tells the patient the time of the next visit</td>
<td>92</td>
<td>61.7</td>
<td>57</td>
</tr>
<tr>
<td>The doctor's office has everything needed to provide complete medical care</td>
<td>-</td>
<td>-</td>
<td>149</td>
</tr>
</tbody>
</table>
Table (16): this table revealed that (84.6%) of the patients not welcomed by the physician, and (61.1%) of the physicians didn’t give enough time to of patients to describe their complain. The physician didn’t explain the investigations his/her should do to (71.8%) of the patients, The physician didn’t explain the diet his/her should follow to (79.9%) of the patients, The physician didn’t pay attention to the patient's privacy for all patients, The physician sometimes use medical terms to the patients without explaining with (95.3%)
Table (17): Observation of physicians at outpatient clinic of General Surgery and Internal Medicine regarding technical quality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes</th>
<th></th>
<th>No</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>The doctor asks/or the patient tells about present history</td>
<td>149</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The doctor asks/or the patient tells about past history</td>
<td>85</td>
<td>57</td>
<td>64</td>
<td>52</td>
</tr>
<tr>
<td>The doctor asks/or the patient tells about family history</td>
<td>-</td>
<td>-</td>
<td>149</td>
<td>100</td>
</tr>
<tr>
<td>The doctor asks/or the patient tells about medical history</td>
<td>44</td>
<td>29.5</td>
<td>105</td>
<td>70.5</td>
</tr>
<tr>
<td>The doctor does a general examination</td>
<td>33</td>
<td>22.1</td>
<td>116</td>
<td>77.9</td>
</tr>
<tr>
<td>The doctor does a abdominal examination</td>
<td>115</td>
<td>77.2</td>
<td>34</td>
<td>22.9</td>
</tr>
<tr>
<td>The doctor does a chest examination</td>
<td>79</td>
<td>53.0</td>
<td>70</td>
<td>47</td>
</tr>
<tr>
<td>The doctor or the nurse measures the pulse</td>
<td>25</td>
<td>16.8</td>
<td>124</td>
<td>83.2</td>
</tr>
<tr>
<td>The doctor or the nurse measures the temperature</td>
<td>-</td>
<td>-</td>
<td>149</td>
<td>100</td>
</tr>
<tr>
<td>The doctor uses a stethoscope</td>
<td>100</td>
<td>67.1</td>
<td>49</td>
<td>32.9</td>
</tr>
<tr>
<td>The doctor uses a sphygmomanometer</td>
<td>79</td>
<td>53</td>
<td>70</td>
<td>47</td>
</tr>
</tbody>
</table>

Table (17): The above table showed that the physician didn’t ask the patient about family history for all selected group, the physician didn’t ask the patient about medical history for (70.5%) the physician didn’t do general examination for (77.9%) the physician didn’t measure the pulse for (83.2%) the nurse didn’t measure the temperature for all selected group.
Table (18): Observation of nurses at outpatient clinic of General Surgery and Internal Medicine regarding technical quality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>The nurse greets the patient</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The nurse shows respect the patient</td>
<td>149</td>
<td>100</td>
</tr>
<tr>
<td>The nurse registers the patient</td>
<td>149</td>
<td>100</td>
</tr>
<tr>
<td>The nurse Measures blood pressure</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The nurse helps the doctor during examination</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table (18): The above table showed that the nurse didn’t greet any one of the patients, the nurse didn’t measure blood pressure and the nurse didn’t help the doctor during examination in the all observed patients.
## Part IV:

### Table (19): System Analysis of the input of Internal Medicine and Surgery clinics

<table>
<thead>
<tr>
<th>Input</th>
<th>Internal Medicine</th>
<th>General Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Man power</strong></td>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery serves about more than 1000 patients per month according to the hospital record of outpatient clinics (2010)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The number of health care providers was (2nurses/one physician) examined more than 60 case per day</td>
<td>- The number of health care providers was (1nurse/3 physician) examined more than 60 case per day</td>
</tr>
<tr>
<td></td>
<td>- About 5 house officers /clinic</td>
<td>- 2 house officers /clinic</td>
</tr>
<tr>
<td><strong>Infastructures</strong></td>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery have one table for the nurse to register and 4 chairs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- One sphygmomanometer/one physician and about 5 house officers /clinic</td>
<td>- No direct source of light</td>
</tr>
<tr>
<td></td>
<td>- No sphygmomanometer</td>
<td>- No sphygmomanometer</td>
</tr>
<tr>
<td></td>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery have one Stethoscope and one thermoter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Three Examination beds is present separated by partitions to examine three patients at the same time</td>
<td>- Two Examination beds is present separated by partitions to examine two patients at the same time</td>
</tr>
<tr>
<td><strong>Hand washing facilities</strong></td>
<td>- No hand washing facilities (no disinfection, no tools for hand drying, sink at separate partition of the clinic)</td>
<td>- No hand washing facilities( no disinfection, no tools for hand drying, sink)</td>
</tr>
<tr>
<td><strong>Educational material</strong></td>
<td>- Posters and brochures at clinic for information, education, communication are present in few number</td>
<td>- No Posters or brochures at clinic for information, education, communication</td>
</tr>
</tbody>
</table>
Table (20): System Analysis of the process in Internal Medicine and Surgery clinics

<table>
<thead>
<tr>
<th>Process</th>
<th>Internal Medicine</th>
<th>General Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery were working all the days of the week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had weekly regular staff round for updating the knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had unorganized patient flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had a long waiting time before consultation according to the results of the study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had the medications and investigations are not affordable for the patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had the ticket price is in an affordable price for the patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no referral polices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no organized system for follow up cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no separation between the follow up cases and the new cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no team work coordination between the outpatient doctor and the other health care providers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no collaboration between the nurse and the physician during patient examination (nurse registers the patients only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No health education messages given to targeted patients by the doctors in charge.</td>
<td>- No health education messages given to targeted patients by the doctors in charge.</td>
<td></td>
</tr>
<tr>
<td>- There were some few brochures to raise the awareness and provide simple</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had Poor healthcare providers/patient communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Not all the health care providers attend the clinic as present in the table of attendance (the resident was attended alone at the clinic most of the days) this was observed for two weeks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Most of the health care providers attend the clinic as present in the table of attendance this was observed for two weeks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Absence of supervision by the medical staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Presence of supervision by the medical staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no plan for patient education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Both the outpatient clinic of Internal Medicine and General Surgery had no free medication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table (21): System Analysis of the output of Internal Medicine and General Surgery clinics

<table>
<thead>
<tr>
<th>output</th>
<th>Internal medicine</th>
<th>General surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Increase work load that affected on the patient rights.</td>
<td>- Increase work load that affected on the patient rights.</td>
<td></td>
</tr>
<tr>
<td>- The interviewed patients reported their dissatisfaction from services offered according to the displayed results</td>
<td>- The interviewed patients reported their dissatisfaction from services offered according to the displayed results</td>
<td></td>
</tr>
<tr>
<td>- The health care providers expressed their dissatisfaction with the system at the clinic</td>
<td>- The health care providers expressed their dissatisfaction with the system at the clinic</td>
<td></td>
</tr>
<tr>
<td>- Loss of patient time</td>
<td>- Loss of patient time</td>
<td></td>
</tr>
<tr>
<td>- Loss of resources</td>
<td>- Loss of resources</td>
<td></td>
</tr>
<tr>
<td>- Escaped cases from diagnosis</td>
<td>- Escaped cases from diagnosis</td>
<td></td>
</tr>
</tbody>
</table>
## Part V

Table (22): SWOC Analysis of the work system at both clinics

<table>
<thead>
<tr>
<th>Strengths:</th>
<th>Weakness:</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Serve wide base of population</td>
<td>· Deficient policy for assessing reliability and validity of work system at the clinic in each department and the introduction of new assessment methods.</td>
</tr>
<tr>
<td>· There's statistical office at hospital</td>
<td>· Lack of standard practice guidelines.</td>
</tr>
<tr>
<td>· Group of qualified staff</td>
<td>· Deficient policy for coordination between departments.</td>
</tr>
<tr>
<td>· Equitable access to healthcare for all</td>
<td>· Expected staff resistance to attend the clinic</td>
</tr>
<tr>
<td>· Written policies on patients’ rights are available, disseminated, or</td>
<td>· Lack of experience for providers attending the clinic</td>
</tr>
<tr>
<td>made visible to patients</td>
<td>· Shortage in physicians staff with high patients load</td>
</tr>
<tr>
<td></td>
<td>· Double burden on physicians (inpatient and outpatient)</td>
</tr>
<tr>
<td></td>
<td>· Deficient equipment's</td>
</tr>
<tr>
<td></td>
<td>· Patient privacy not well maintained (no curtains on windows, the clinic divided into three partitions in away doesn't maintain the patient privacy in a complete way also more than one patient at the same clinic</td>
</tr>
<tr>
<td></td>
<td>· No training courses for outpatient physicians and nurses)</td>
</tr>
<tr>
<td></td>
<td>· The only source for learning is the staff round</td>
</tr>
<tr>
<td></td>
<td>· The job of the nurse at the clinic is task-oriented</td>
</tr>
<tr>
<td></td>
<td>· Patient rights are not well maintained</td>
</tr>
<tr>
<td></td>
<td>· Referral policies are not applied</td>
</tr>
<tr>
<td></td>
<td>· Poor doctor/patient/nurse communication</td>
</tr>
<tr>
<td></td>
<td>· No organized team work at the clinic</td>
</tr>
<tr>
<td></td>
<td>· No periodic supervision on the clinic</td>
</tr>
<tr>
<td></td>
<td>· Job description not applied</td>
</tr>
<tr>
<td></td>
<td>· Deficiency in recording system</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td><strong>Opportunities</strong></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
| • Storage of the medical record is not organized  
• No continuous update of methods of treatment investigations  
• No financial support for medications and investigations  
• Not all medications and investigations are available  
• Long registration time >2 hours  
• Short examination time <10 minutes  
• Lack of signs that refer to the direction of the clinics  
• Lack of posters and brochures for information  
• No hand washing facilities  
• Infection control measures are not applied  
• Waiting area is not suitable to the patient load | • Have a high political and public profile. | • No clear policy for outpatient management  
• No actual support from higher authorities  
• Laws allow physicians and nurses to combine working in both the public and private sector. |
Discussion

The present study aimed to assess the work system at outpatient clinics of General Surgery and Internal Medicine at Fayoum University Hospital and addressed the important issues related to the health care which form the corner stone for achieving the goal of health program. The study is concerned with continuous quality improvement through patient-provider satisfaction surveys (PPSS); direct the attention of policy makers for action taking and adapting alternative strategies to improve efficiency and effectiveness of hospital care and satisfaction of internal and external customers. This was done through assessment the work climate and the work discipline.

The study intervention depends on the collaboration between the Public Health & Community Medicine department and the other clinical departments in setting up a health education and communication unit aim to empower the patient, improve communication skills and raise the satisfaction of both the internal and external customers as a step of quality improvement.

The current study focused on the importance of patient and provider satisfaction survey and based on utilizing the findings of PPSS. The study emphasized an important issues related to the work system at outpatient clinics at Fayoum University Hospital. This was done through four domains: patient satisfaction, health care providers’ satisfaction, observation of health care providers’ performance, observation of the work area and measuring the time taken by the patient to receive the service.

To measure user satisfaction in the health care service is not a simple task. Contrary to what happens in the area of service provision, which takes public opinion into high account, satisfaction expressed by users in the health sector is generally seen with disinterest or even suspicion. Sullivan (2003) insisted on evaluation of quality must be based on both objective and subjective criteria, the latter being those related to the users.
(I )Analysis of the work system

Pitaloka and Rizal, (2006) reported that it is important to evaluate the health care system. There are many reasons for evaluation of care, as to improve accountability, to raise standard and quality of care, to improve responsiveness to patients, to monitor health care seeking behaviour, to improve patients' compliance with care, and to improve outcomes of care.

(A) System input

In the current study analysis of the system of Internal Medicine and Surgery clinics inputs revealed that there was deficient in clinics infrastructures (table 19).

A study was done by (Prahlad Rai Sodani, et al., 2010) revealed that (83%) of the patients chose the public health facilities due to good infrastructure.

The current study showed that both the two departments have no mission, no clear policies regulate the coordination between different hospital departments and deficient policy for assessing reliability and validity of work system at the clinic in each department.

This result was in contrary with Carney (2009) that emphasized the importance of mission statement as a tool to improve organizational performance; also keeps staff focused on professional care delivery.

The two departments also were lack of standard practice guidelines and lack of experience for health care providers attending the clinics.

Moret et al. (2008) explained that one of the raised issues related to technical performance is lack of standard practice guidelines. Physicians are exposed to experiences of the professional staff members that could have different views, and influence strategies for patient management.

The current study declared that Job description was not applied and there was no organized periodic supervision by the staff on the clinic.
Susan, (2010) and Conley, (2010) referred to the importance of job description as communication tools that are significant in organization's success. Poorly written job descriptions, lead to workplace confusion and make people feel as if they don't know what is expected from them. Also Rhode, (2006) reported that supervision improves services by focusing on meeting staff needs for management support, logistics, and training and continuing education.

In the current study analysis of the system of Internal Medicine and Surgery clinics inputs, showed that there were few posters and brochures for information, education, and communication which is very important in initiating patient education (table 19).

This was declared by Conrad, (2010) that using educational posters to educate a group of workers or inform visitors can be a big help.

(A) System process

In the current study analysis of the system of Internal Medicine and General Surgery clinics process showed that there was unorganized patient flow (table 19).

Cote M. (2000) said that understanding patient flow is one of the keys for any health care facility to deliver its services efficiently. It was pointed out by Cote (2000) that one of the major elements in improving efficiency in the delivery of health care services is patient flow.

(Potisek et al (2007) referred to unorganized patient flow processes increase waiting times and decrease patient satisfaction. Decrease in patient satisfaction can affect patient return rates, which is a necessary component of treating patients with chronic conditions. Quality improvement efforts can help to overcome the barriers to effective patient flow by decreasing patient waiting time, thus improving the efficiency of care.

In the current study analysis of the system of Internal Medicine and General Surgery clinics process showed that there were no separation between the follow up cases and the new cases, no team work coordination between the outpatient doctor and the other health
care providers, no collaboration between the nurse and the physician during patient examination (nurse registers the patients only) (table 20).

**Canadian Health Services Foundation Research** (2006) stressed on a healthcare system that supports effective teamwork can improve the quality of patient care, enhance patient safety, and reduce workload issues that cause burnout among healthcare professionals. Teams work most effectively when they have a clear purpose; good communication; co-ordination; protocols and procedures; and effective mechanisms to resolve conflict when it arises. The active participation of all members is another key feature. Successful teams recognize the professional and personal contributions of all members; promote individual development and team interdependence; recognize the benefits of working together; and see accountability as a collective responsibility.

In the current study analysis of the system of Internal Medicine and Surgery clinics process showed that, no referral polices (table 20).

**Cervantes K. et al., (2003) said that** an effective referral system ensures a close relationship between all levels of the health system and helps to ensure people receive the best possible care closest to home. It also assists in making cost-effective use of hospitals and enhance access to better quality care. Clients receive optimal care at the appropriate level and not unnecessarily costly, Hospital facilities are used optimally and cost-effectively and Clients who most need specialist services can accessing them in a timely way.

In the current study analysis of the system of Internal Medicine and Surgery clinics process showed that not all the health care providers attend the clinic as present in the table of attendance and there was absence of supervision by the medical staff (table 19).

**Bush RW. (2010)** referred that supervision is important in allowing residents to receive guidance for giving and coordinating care, even as they progress toward independent practice. residents who were more closely supervised through direct observation acquired primary-care skills more rapidly than those who were supervised after the fact.
A classic study was done by (Boor K. et al., 2008) showed that when faculty physicians personally examined patients cared for by residents, they reached different conclusions about the severity of patients’ illness, diagnosis, treatment and required follow-up and were more critical of the residents’ assessment and care plan than when they provided remote supervision.

(II) Patient satisfaction survey (PSS):

The tool used in patient survey is a structured questionnaire form, where data were collected through interviews. The researcher had designated the questionnaire form with consideration to: 1- accessibility of the healthcare, 2- quality of care, 3- patient rights. So the questionnaire covered four areas (Is the patient satisfied with the medical care?), (Is the patient satisfied with accessibility of medical service?), (Is the patient satisfied with the interpersonal issues?), (Is the patient satisfied with the financial aspect of care?).

The current study included measurement of patient satisfaction from communication with health care providers and reported that more than half of the patients expressed dissatisfaction from not being greeted from physician; and not being asked about their names before examination (table 2). Regarding the communication score (65.3%) of patients showed moderate degree of satisfaction (table 10). And the the mean satisfaction score for communication aspect was (50.5) (table 11). The researcher observed that (84.6%) of the patients were not welcomed by the doctor, the doctor didn’t give enough time to (61.1%) of patients to describe their complains and the doctor sometimes ignore what the patient told in (77.9%) of patients (table 15).

A study was done by (Yousef Hamoud Aldebsi and Mohamed Issa Ahmed, 2011) in Qassim resulted in (7%) of the patients believed that sometimes the doctors ignored the patients and (36%) of the patients felt that doctors were not providing enough time to the patients to satisfy their queries and the majority of the patients (40%) said that the physicians were working seriously and impartially for the patients.
Rainer SB et al. (2002) declared that The character of doctor-patient interactions influences a variety of patient outcomes, including short-term outcomes such as satisfaction and recall, intermediate outcomes such as adherence, and long-term outcomes such as symptom resolution and quality of life.

A health care provider’s ability to form a therapeutic relationship with patients’ and subsequently influence health outcomes could be strengthened through improving the provision of whole person care. Langen et al. (2006) compare patient’s satisfaction with expectations of the medical staff. The patients generally showed a high degree of satisfaction with communication and support by the health care providers. Patient – centered communication is found to be crucial factor influencing patient satisfaction and likewise compliance. Patients attending each hospital are responsible for spreading the good image of the hospital and therefore satisfaction of patients attending the hospital is equally important for hospital management.

In the current study, The investigator observed that the doctor didn’t prescribe the medications for (85.2%) of patients, The doctor didn’t give choices when deciding the treatment for any of the patients, The doctor didn’t explain the investigations that his/her should do to (71.8%) of the patients, The doctor didn’t explain the diet his/her should follow to (79.9%) of the patients (Table 15).

A study was done by (Saadoun F. Al-azmi, et al. 2006) In Kuwait, Primary Heath Care Centers showed that The majority of interviewees (97%) were satisfied from examination and accuracy of diagnosis and the advices that were given by the physician to follow to avoid illness and the lowest items of satisfaction were those related to explanation of medical procedures and tests (46.5%).

Lehman et al. (2009) insisted on that good doctor-patient communication has a positive impact on patient satisfaction, adherence to treatment, health outcomes and well-being, and it has been linked to reduced anxiety, increased recall and improved understanding. During the diagnostic phase and the course of the illness, patients exhibit a range of mood changes. These include sadness and worry, frustration and anger, uncertainty, fear of disease recurrence,
difficulties in inter-personal relationships, changing roles, and concerns about body image. Medical consultations can be influenced by different expectations concerning the doctor-patient interaction, by individual roles and beliefs and by a different understanding of health and well-being, influenced by cultural and other factors not necessarily associated with the medical situation.

**Fornazari et al. (2006)** directed attention to the fact that most of the physicians do not introduce themselves to the patients during the visit or ask about their names. Maybe concerned with the medical task about to be performed, resident physicians, who most of the time establishes the first medical contact with the patient, overlook creating that link. In addition, at each return visit, service may be provided by a different professional, according to a scheduling. In public health services, doctor patient relationships tend to be impersonal, a link being formed with the service itself, but not between people. The link established in a doctor-patient relationship is one of the essential elements for the creation of a quality practice, allowing for the increase in efficiency of health actions.

In the current study the investigator observed that the doctor didn’t pay attention to the patient's privacy for all patients (table 15) and more than half of the patients (68.7%) were unsatisfied from examining more than one patient at the clinic (table 2).

This disagree with a study was done by (Gadallah M. et al.,2003) to measure patient satisfaction in upper and lower Egypt showed that level of privacy in the consultation room was described as unsatisfactory by (33%) of the patients.

This also disagree with a study was done by (Jawahar SK. 2007) on Out Patient Satisfaction at a Super Specialty Hospital in India showed that With regard to the privacy in consultation (97.5%) of the patients were satisfied.

A study was done by (Zewdie Birhanu,Tsion Assefa, et al. 2010) in central Ethiopia declared that (22.9%) of the respondents claimed that their privacy was not respected during
consultation and (19.9%) of the respondents felt that the consultation rooms did not provide adequate privacy.

This can be explained that there was a shortage in the physicians with increase number of patients per physician and the physician wants to finish in the allocated time for the clinic. This will lead to poor patient doctor communication, the patient becomes uncomfortable and this lead to he will not tell the doctors points that may be important in diagnosis. The patient will not respond to the treatment and this lead to increase the unnecessary return visits and increase number of patients attending the clinic that lead to increase case load and so on.

The current study included measurement of patient satisfaction from the degree to which the patient rights is maintained and reported that nearly half of the patients (49.3%) expressed dissatisfaction from not explaining how to take the medicine. More than half of the patients (60.2%) expressed dissatisfaction from not giving them choices in treatment (clinical or surgical) and more than half of the patients (52.1%) expressed dissatisfaction from not giving them choices in medications (syrup or tablets or injection) (Table 2). The investigator observed that that seven out of ten observed patients spent less than 12 minutes in examination (figure 8).

This agree with a study was done by (Md. Ziaul Islam and Md. Abdul Jabba,2008) to measure the patient satisfaction at Dhaka outpatient revealed that half of the patients (47.9%) were dissatisfied because the treatment was not explained and/or enough information was not given.

This disagree with a study was done by (Yousef Hamoud Aldebasi and Mohamed Issa Ahmed, 2011) revealed that only (27%) of the patients believed that sometimes the doctors ignored the patients complain and (36%) of the patients felt that doctors were not providing enough time to the patients to satisfy their queries. A study was done by (Saadoun F. Al-azmi, et al.,2006) in Kuwait, Primary Heath Care Centers showed that the lowest items of satisfaction were those related to explanation of medical procedures and tests (46.5%).
Lis et al. (2009) declared that patients are usually not in a position to reliably judge the accuracy of a diagnosis or treatment plan, but they can judge whether they have been provided with sufficient information, and they can judge the demeanor and attitudes of their physicians. Reassuringly, these latter factors are under the direct control of medical staff, which makes it possible for patient satisfaction to be improved with appropriate efforts. Informing the patients about different aspects of their health care is an important aspect of management. Also, treating patients as co-participants in the process of decision-making have been repeatedly emphasized as an important patient’s right.

Stewart (1995) said that when patients are well-informed and participate in treatment decisions, their anxiety decreases and their therapeutic adherence improves, thus increasing the chances of getting better health outcomes. Improving the physician's interpersonal skills can increase patient satisfaction, which is likely to have a positive effect on treatment adherence and health outcomes.

This study revealed that (80.4%) of patient claimed that the physician didn’t inform them about how to change the unhealthy habits and the healthy lifestyle and the investigator observe that The doctor didn’t explain the diet his/her should follow to (79.9%) of the patients and that doctor sometimes use medical terms to the patients without explaining with (95.3%) of the patients (table 4).

This agree with a study was done by (Zewdie Birhanu et al. 2010) showed that only (33.3%) of the respondents were given advices on how to prevent the reoccurrence of their current illness and other similar conditions in the future. Only (45.2%) of the patients were told to return if their symptoms get worse.

This disagree with a study was done by (Saadoun F. Al-azmi et al.,2006) In Kuwait, Primary Heath Care Centers showed that The majority of interviewees (96%) were satisfied the advices that were given by the physician to follow to avoid illness.
Fornazari (2006) referred to that post-visit quality is one of the factors that may affect service satisfaction and efficiency. The continuity established by post-visit informative and educative actions is part of service quality. Lack of this information by the health team about the treatment to be given may cause unnecessary returns. Would an efficient health education program exist, with participation of physicians and health care professionals, many patients would be able to adjust their social needs to their health conditions, thus resulting in the decrease of unnecessary visits that burden the institution and society.

Explanations given by doctors are frequently forgotten or not understood and as a result of this poor communication, recommendations are frequently not followed. In spite of stating that he/she understood the explanation, the patients may have felt ashamed to declare having difficulties in understanding the medical jargon. All service providers in the current study find striving to fulfill his item due to high caseload. Also there’s difficulty to communicate with non-educated patients. The current study intervention focused on how to disseminate this concept.

This study revealed that nearly half of the patients expressed dissatisfaction from not answering their questions by the nurse and said that the security men not dealing with them well (table 2).

This disagree also with a study was done by (Gadallah M. et al.,2003) to measure patient satisfaction in upper and lower Egypt showed that (99.6%) of respondents were satisfied with the performance of nurses. It also inconsistent with the result of a study was done by (Omar Awwab, et al. 2012) showed that patients’ satisfaction with nursing care is high (96.8%).

The study conducted by Matiti and Trorey (2008) emphasized on importance of nursing care in maintaining patient’s dignity. There are six themes related to the maintenance of dignity are: privacy, confidentiality, choice and involvement in care, communication, respect and the need for information. Spetz (2008) said that many health care leaders prefer to conceptualize workload as a nurse-to-patient ratio, such as “one nurse for every five patients.
The study conducted by Olgu et al., (1999) on patient satisfaction in Turkey had shown that satisfaction from physician’s performance achieved the highest score, followed by nurses. Such findings were observed in both the public and private hospitals.

Delman and Beineke, (2005) affirmed that the major reason of patient satisfaction was the believing that the health providers treating them with respect and dignity and that they felt better as a result of the service.

This study revealed that (54.1%) expressed dissatisfaction from high price of the medications; (51.7%) expressed dissatisfaction from high price of the imaging investigation; (82.8%) expressed dissatisfaction from high price of the laboratory investigations (figure 1).

This agrees with a study done by (Gadallah M. et al., 2003) to measure patient satisfaction in upper and lower Egypt declared that most of the respondents expressed dissatisfaction from unavailability of most of medications and laboratory tests at the units with high price of medications and tests.

A study done by Jayasinghe et al., (2008) revealed that worsened functioning has been found to be associated with dissatisfaction with the ease and costs of care because patients with a poor health status have higher expectations. Another study was done by Schmittdiel et al., (2008) illustrated that patients with higher quality of life evaluate chronic care management better while patients with lower physical and mental health status scores were significantly less satisfied with the availability of care.

A Study was done by Dyah and Rizal, (2006) examining the cost of care have found that the higher the cost, the lower the level of patient satisfaction.

Regarding patient satisfaction from access to care, continuity and choice of care revealed that (49.7%) expressed dissatisfaction from not directed by the security (table 3).

This also disagree with a study done by (Jawahar SK, 2007) on Out Patient Satisfaction at a Super Specialty Hospital in India showed that The guidance was provided to 59%
of the patients by the Medico Social Workers and 40% of patients by the security staff and nurses were perceived as friendly by 61%.

The study revealed that nearly half of the patients were satisfied from giving the referred patient a referral paper and assignment an appointment by the physician to the patient for follow up visit (table 3).

Salisbury et al., (2007) said that satisfaction with access could be determined by organizational aspects, such as obtaining referrals, ease of arranging appointments, and the opportunity to be seen on the patient's day of choice.

Regarding patient satisfaction from access to care, continuity and choice of care revealed that (79.8%) expressed dissatisfaction from not choosing physician (table 3).

This study agree with a study was done by (S. Bu-Alayyan, A. Mostafa, et al. 2008) in Kuwait which have shown that continuity and being seen by a particular doctor improve concordance and satisfaction.

A study was done by (Saadoun F. Al-azmi, et al., 2006) in Kuwait, Primary Heath Care Centers showed that the lowest items of satisfaction were ease of seeing physician of choice (61.0%). This finding disagree with a study was done by declared that Patients often request to see particular doctors, but this was not shown to influence their satisfaction.

A study was done by (Zewdie Birhanu, Tzion Assefa, et al. 2010) in central Ethiopia revealed that (64.6%) of the respondents didn’t previously know the health care provider who treated them.

The relation between patient satisfaction and accessibility to care had been studied by De Boer et al., (2010). The study illustrated that patients with better self-reported health status have rated their satisfaction with access to care better than those with poor health.
A study was done by Jayasinghe et al., (2008) showed that Patients' satisfaction with accessibility has been found to be associated with a number of patient characteristics such as age, self-reported health status, and quality of life. In general, patients with better self-reported health status have rated their satisfaction with access to care better than those with poor health. Another study was done by Schmittdiel et al., (2008) has been reported that patients with higher quality of life evaluate chronic care management better while patients with lower physical and mental health status scores were significantly less satisfied with the availability of care.

In this study more than half of the patients (51.9%) said that if another physician comes, he doesn't know about their health condition (table 4).

A study was done by (Saadoun F. Al-azmi, et al., 2006) in Kuwait, Primary Health Care Centers resulted in that (72.4%) of patients were unsatisfied due to inability to see the same physician in every visit.

A study was done by (S. Bu-Alayyan, A. Mostafa, et al., 2008) in Kuwait which have shown that only (30 %) admitted their ability to see their regular physician always and (33. %) sometimes.

Post-visit quality is one of the factors that may affect service satisfaction and efficiency. The continuity established by post-visit informative and educative actions is part of service quality. Lack of this information by the health team about the treatment to be given may cause unnecessary returns. Existence of an efficient health education program, with participation of physicians and health care professionals, many patients would be able to adjust their social needs to their health conditions, thus resulting in the decrease of unnecessary visits that burden the institution and society.

In this study the researcher found that there are some factors affecting patient satisfaction with accessibility of services as there was significant difference in level of satisfaction between patients regarding to access to service in marital status, occupation, clinic, income, visit and education (table 7).
This disagree also with a study was done by (Gadallah M. et al., 2003) to measure patient satisfaction in upper and lower Egypt showed that there was no association between overall patient satisfaction and age, gender, education level or type of service received.

In this study the researcher found that the satisfaction score of access to services was (41.8%) highly satisfied and (56.6%) moderately satisfied (table 10). And the mean satisfaction score for Access and continuity of care was (44.4) (table 11).

This disagree with a study by (Kaja Põlluste, et al., 2012) in Estonian revealed that half of the respondents were either satisfied (14%) or somewhat satisfied (36%) with their access to health services.

Regarding the technical quality, more than half of the patients (59.2%) expressed dissatisfaction from not examining their whole body. This occurred due to shortage in physician numbers and absence staff from attending the clinic most of the days in addition to high patient flow that affect the quality of care (table 4).

Kleeberg et al. (2008) stressed on that it has become increasingly important for health care professionals to systematically measure patients’ satisfaction with their care. Measuring patient satisfaction involves evaluating patient’s perceptions and determining whether they felt that their needs were adequately met.

Tabolli et al. (2003) clarified that Identification of patient requests, needs and judgment on health care received is the starting point of a patient centered approach. Therefore patient satisfaction is considered as an important measure to evaluate the quality of health services and can predict both compliance and utilization that is associated with the continuity of care, the doctor's communication skills and confidence in the medical system. Patients can participate in evaluation of quality of health care in three ways: by defining what is desirable or undesirable (i.e. setting standards of care), by providing information that permits others to evaluate the quality of care; and by expressing satisfaction or dissatisfaction with care.
The study recommendation were directed to involvement of the house-officers in health care through hand on training, following standards of case taking- and patient centered care was necessary. This intervention helps capacity building of the house-officers and organizing them to work as team with other service providers and staff members.

Regarding the financial aspects of care the study revealed that all interviewed patients were satisfied with the price of the ticket; (54.1%) expressed dissatisfaction from high price of the medications (figure 1).

This agree with a study was done by (Gadallah M. et al.,2003) to measure patient satisfaction in upper and lower Egypt referred that (95%) of patients satisfied from the price of the tickets (1 Egyptian pounds).

These findings are inconsistent with the results of a study was done by (Iliyasu Z.et al.,2010) in Nigeria revealed that (27%) of the patients were dissatisfied with cost of treatment. It also inconsistent with the result of a study was done by (Omar Awwab, et al. 2012) showed that The lowest rating was for the cost of medicine at pharmacy 28.2% patients considered medication costly and expensive.

About (51.7%) of the patients expressed dissatisfaction from high price of the imaging investigation; (82.8 %) expressed dissatisfaction from high price of the laboratory investigations (figure 1).

This disagree with a study done by (Omar Awwab et al. 2012) showed that (96.1%) were satisfied with the laboratory services at hospital and (95.3%) rated ultrasound and radiological services as satisfactory.

Bentur et al. (2004) revealed that the cost of care has also been found to be a reason for dissatisfaction with access to care and they found that the higher the cost, the lower the level of patient satisfaction.
Regarding the time management the study revealed that (55.8%) expressed dissatisfaction from long waiting time for taking a ticket (93.3%) claimed that the physician didn’t stay with them enough time (figure 2), the investigator observed that six out of ten observed patients spent more than 3 hours after registration and before examination (figure 7).

This agree with a study was done by (Abdullateef A. Alzolibani 2011) revealed that (48%) felt that the consultation time was inadequate and (36.7%) felt that they were not allowed to express their symptoms in details. He suggested that Informing patients about different aspects of their health care is an important aspect of management. Also, treating patients as co-participants in the process of decision-making have been repeatedly emphasized as an important patient’s right.

Nicholas (2007) Said that the Patient Flow Analysis (PFA) process outlines the care process, and measures time spent in each phase of the clinic visit, a potentially effective and efficient technique to collect data and evaluate the effect of interventions to improve patient visit efficiency by decreasing wait time in clinic. Once PFA is performed in clinic, potential targets for improvement can be identified to reduce bottleneck effects in the patient visit, and provide objective data to improve utilization of existing resources. If measures are not easily obtainable, data collection can be an impediment to successful change. Easily replicated in clinic settings, PFA allows staff to evaluate their services, identify problems, and attempt to develop workable solutions fostering a sense of ownership of both problems and solutions among clinic staff. In an early evaluation of its use in two busy family planning clinics in Kenya, feedback on waiting times at different stages of an office visit were used to re-engineer work flow, resulting in 33 to 50% reductions in total visit length.

In this study about (58.6%) of the patients said that they took >30h for registration ;(38.8%) said that they took<5 minutes for examination and (43.6%) said that they took three days for labs (figure 3, 4, 5).

Abdullateef A. Alzolibani, (2011) stressed on that the examination time could be variable corresponding to the nature of the disease, that is, it can be as short as 10 min or as long as half an
hour and also spending longer time with the patient may pose a problem to treating physicians in busy clinics. These findings are supported by the findings of a study done by (Bamidele AR, 2011) in South Africa revealed that (63.9%) were unsatisfied with the time spent in the facility.

This agree also with a study was done by (Jawahar SK, 2007) on Out Patient Satisfaction at a Super Specialty Hospital in India showed that 57% said that they need to wait occasionally for long hours and the waiting time for consultation seems to be delayed; in some cases it extends to more than three hours. With regard to the time spent by the doctors during consultation 96.5% of the patients were satisfied.

As the waiting time is variable (Fabian Camacho et al. 2006) considered in his study that patients waiting more than 75 minutes was considered too unreliable.

Salisbury et al. (2007) said that the opportunity to choose an appointment time was found to be an essential determinant of satisfaction with access. In order to be satisfied with their access to health services, the ease of arranging appointments and the question of whether the patient could make an appointment on the day of their choice play an important role.

Akinci and Sinay (2003) related the impact that the opportunity to choose the appointment time has on their satisfaction with access might be related to the opportunity costs for the patient. This is primarily important for employed people who may lose some wages because they have to take time to see the doctor during their working hours.

A previous study by Greene et al. (1994) reported that there was positive correlation and significant relationship between level of satisfaction and waiting time whereas patients who wait shorter time were more satisfied compare with patients who wait long time.

This disagrees with result from Thompson et al., (1996) showed that there was no significant relationship between level of satisfaction and waiting time.

It is similar with the result of Dyah and Rizal, (2006) showed that there was no significant relationship between level of satisfaction and waiting time. One of the explanations of
the non-significant finding is that the respondents realized that they received treatment at teaching hospital which also a government hospital. Therefore, they were expected to wait longer time because of too many patients.

Many studies have highlighted the patients’ concern and perception about too little time spent by the physicians during consultations. In fact, the examination time could be variable corresponding to the nature of the disease, that is, it can be as short as 10 min or as long as half an hour and also spending longer time with the patient may pose a problem to treating physicians in busy clinics. Nevertheless, some studies have stressed that ‘more effective and frequent use of written information is clearly indicated as having the potential to address some of the patients’ information needs’ (Waghorn and McKee, 2000; Souter et al. 1998). Improvements may be made by providing patients with more explanation and written information particularly in relation to the causes, investigation, treatment and preventive aspects of the disease.

Regarding the over all satisfaction and outcome of care at the hospital the study revealed that (85.7%); expressed dissatisfaction with care; (82.4%) of patients were expected to find a better care in the hospital ; (43.6%) of patients were expected to find a better dealing in the hospital; (76.4%) said that the number of chairs at the waiting area are few; (58.6%) said that all what patient needs are not at hospital (43%) were not satisfied with the way that people dealing with them at the hospital (table 5). And the mean satisfaction score for overall satisfaction and outcome of care was (51.9) (table 11).

Madan P.D Kumar and Fathima Zahra (2008) explained that The patients often are dissatisfied when their felt needs are not fulfilled. felt need is what the patient feels, wants and thinks need to be done and expectations of patients are based on their experiences, environment, social background and personality.

(Wolosin RJ, 2005) considers that patient satisfaction as an indicator of the quality of care and integrates in its definition the patients’ experiences as a key-element of unsatisfaction. He argues that experiences that exceed expectations lead to satisfied patients, while those that fail to meet
expectations cause dissatisfaction. Patient's satisfaction is the voice of patient that counts since it reflects the response to experienced interactions with the care givers.

**Arries and Newman (2008)** advocate that quality within healthcare service delivery refers to services that meet set standards, implying excellence, and satisfy the needs of both consumers and healthcare practitioners in a way that adds significant meaning to both parties’ healthcare experiences. (Sohail, 2003; Zineldin, 2006; Akter, Hani and Upal, 2008) advocate that quality healthcare should be regarded as the right of all patients and ought to be the responsibility of all the staff within healthcare organizations. Internationally, healthcare quality is still a concern for various healthcare stakeholders (e.g. decision makers and patients). In recent years patients have increasingly been considered as consumers or customers by the health care system (*Kleeberg et al., 2008*).

Regarding the overall satisfaction and outcome of care at the hospital the study revealed that (48.9%) are satisfied with physician performance (table 5).

This study agree with a study was done by (*S. Bu-Alayyan, A. Mostafa, et al. 2008*) in Kuwait which have shown (47%) of respondents rated physicians consultation skills excellent.

This study evaluated the patient satisfaction score concerning the interpersonal skills of the physicians and technical competence and it was addressed that (73.5%) of patients were highly satisfied in technical quality (Table 10). The mean satisfaction score for technical quality and health care providers performance was (70.8) (Table 11).

This disagree with a study was done by (*Zewdie Birhanu, Tsion Assefa, et al. 2010*) revealed that (35%) the respondents strongly disagreed about the technical competency of the providers.

A study was done by (*Yousef Hamoud Aldebasi and Mohamed Issa Ahmed, 2011*) in Qassim showed that the satisfaction score was (45.66%) regarding the technical competency of the providers.
These satisfaction scores are comparable to those of similar studies which were conducted in Kuwait city for the physician services, which scored (44.2%) were unsatisfied (Al-Doghaither et al., 2001) and other studies which were conducted in Riyadh and Jeddah cities Saudi Arabia, which ranged from (61% to 97%) were unsatisfied. Sodani et al. (2010) have shown that the physicians’ communication skills and the length of the time that they spend talking, explaining and responding to their patients’ queries and offering reassurance and support, involving the patients in decision-making, and discussing test results and findings from physical examinations were strong and important correlates of the patients’ satisfaction. This is not the same in this study, as the above factors didn’t play any effect on patient satisfaction as the satisfaction was high regarding the technical aspects although (57.2%) were unsatisfied from communicating with their health care providers regarding not be greeted from the physician; More than half of the patients (57.8%) were unsatisfied from the physician not ask about their names before examination and nearly half of the patients (49.3%) expressed dissatisfaction from not explaining how to take the medicine.

The current study showed that there is significant difference in satisfaction between the patients with higher education and others with increasing satisfaction with decrease the level of education regarding financial aspects of care, technical quality, access to care and communication aspect (table 6,7,8,9). In this study, based on level of education, Chi-square test showed that there was no relationship between level of satisfaction and level of education. The explanation of this finding may be because this study was conducted at non private hospital, so people in whatever level of education may have similar expectation with the care that they will get (table 6, 7, 8, 9).

The findings were similar with study which conducted by Dyah and Rizal (2006). The result of their study showed that there was no relationship between satisfaction and education level.
The current study showed that there was significant difference between male and female regarding the satisfaction from communication and access to care with more satisfaction associated with female gender (table 6).

This agree with a study was done by (Md. Ziaul Islam and Md. Abdul Jabba, 2008) to measure the patient satisfaction at Dhaka outpatient revealed that females being significantly more satisfied than males (p<0.05).

This also agree with a study was done by Alzolibani, (2011) at Outpatient Clinics at Qassim University in Saudi Arabia, have shown that a significantly high level of satisfaction was associated with female gender. These findings are inconsistent with the results of other studies. (Al-Sakkak and Al-Nowaiser, 2008) and (Al-Eisa and Al-Mutar, 2005) found that males were significantly more satisfied than females.

This disagree with a study was done by (S. Bu-Alayyan, A. Mostafa, et al. 2008) in Kuwait which have shown that (60.7%) Females were more satisfied than males.

The current study showed that there was significant difference regarding education level with more satisfaction associated with low educated regarding communication, access to care and financial aspects but become lower with satisfaction in technical aspects (table 6, 7, 8, 9).

This agree with a study was done by Alzolibani, (2011) at outpatient clinics at Qassim University in Saudi Arabia. And disagree with (Al-Sakkak and Al-Nowaiser, 2008) and (Al-Eisa and Al-Mutar, 2005).

This disagree with a study was done by (Muhammad Afzal, Ahmad Khan et al., 2011) showed that the rate of satisfaction increased as the educational level increased.

Al Emadi et al. (2009) said that educational level has a positive and sometimes negative effect on satisfaction. In general, less educated people tend to be more satisfied, as they are less
demanding (Banaszak et al., 2001), while highly educated people may be more critical. These contradictory results provided by different studies indicate that patient satisfaction is a complex phenomenon.

The current study showed that there was significant difference in marital status regarding the different aspects service with more satisfaction was seen in married category (table 6, 7, 8, 9).

This agree with a study was done by (Asma Ibrahim, 2008) showed that the married group had high satisfaction compared to other groups, this can be explained that satisfaction can be affected by frequent exposure to services. As married persons utilize more medical services than the single due to their families from both sides.

This disagree with a study was done by (Muhammad Afzal, Ahmad Khan et al., 2011) declared that The highest satisfaction with respect to marital status was seen in widowed category and minimum satisfaction in single patients.

Margolis et al. (2003) concluded that patient satisfaction is a complex phenomenon. The overall satisfaction was not statistically significantly related to any of the measured demographic characteristics. He ported that socio-demographic characteristics were at best a minor predictor of patient satisfaction. Jenkinson et al., (2002) suggested that the most important determinants of patient satisfaction appear to be physical comfort, emotional support, and respect for patient preferences. Tabolli et al., (2003) emphasized that irrespective of demographic status, health care systems should attempt to achieve a balance in services that offer not only clinically effective care, but are also perceived by the patients as acceptable and beneficial.

Piper, (2010) claimed that patient satisfaction survey scores will become the new mirror and engine in guiding health services. Survey scores will become a major factor in the selection of health care providers. However, depending on patient satisfaction alone to reflect quality is biased. He considered that patients’ predisposition about the hospital will influence their attitude about the care. This attitude will in turn influence a patient’s perception of the healthcare
experience and thus the response on a satisfaction survey. In the cognitive domain, one’s attitude will guide how one thinks, perceives, and responds to his/her perception. If one’s thoughts are irrational, then his/her perception will be irrational. Therefore, studies on patient survey should not be once and it should consider all activities; it should be integral part of the hospital activities.

Although most patients are on return visits, already familiar with the service routine, or who were already aware of the procedures, in the current study there was no significant difference in opinion regarding service quality except regarding the financial aspect of service.

A sample of 495 patients is relatively not large enough to detect any significant association between demographic characteristics and patients’ overall satisfaction. Therefore, in quantitative studies of patient satisfaction a large sample size is required and this fact should be taken into consideration for future studies on the topic.

Many satisfaction studies have tried to relate patients’ demographic characteristics to the level of satisfaction. Most of satisfaction studies showed variable determinants of satisfaction, which revealed that satisfaction is multi-factorial and no one factor could be claimed to be the only contributor to satisfaction or dissatisfaction (Al-Sakkak and Al-Nowaiser, 2008; Zastowny, 1989; Baker, 1993).

III. The Interviews with health care providers at outpatient clinics

In the current study, the majority of Health care providers expressed dissatisfaction from shortage in numbers of staff members with long working hours. And they have suggested increasing the number of physicians at the clinic.

This agree with a study done by (Rosta and Gerber, 2007) in a study based on a national sample of hospital physicians in Germany found that the majority of Health care providers were unsatisfied from long working hours: clinic up to 6 hours then continue the rest of the day at the inpatient. Extended hours and night shifts have also long been customary in other Western countries, as is documented by working weeks of 60 hours in England or 85 hours in the US.
Even the laws of the European Union are consistent with physicians' apparently higher tolerance of working time overload and allow working hours of up to 58 hours a week over a seven-day period, as opposed to the 48 hours per seven-day week that applies to the rest of the working population.

Nylen et al., (2001) in a study based on data from the Swedish twin registry said that the regulation of working hours is required for health and safety reasons. A study was made by Canadian Medical Association, (2003) revealed that the more hours worked per week, excluding on-call, the more likely a physician is to be in advanced stages of burnout. Of importance, over half (53%) of those working 80 and more hours/week considered themselves to be in advanced stages of burnout.

A study was made by Bogue et al., (2006) revealed that physicians who worked a greater number of hours per week reported higher levels of stress. In addition, highly stressed physicians were less satisfied with the quality of their personal time, workload, personal growth and family issues.

Another study was made by Pattani et al., (2006) revealed that Physician stress can lead to career dissatisfaction, disruptive behavior, burnout and career exit, substance abuse, health concerns, personal and family problems and in the worst cases, suicide.

This agrees with another study done by Caruso et al., (2005) showed that Feelings of irritability, uneasiness and brooding were significantly associated with physicians working excessively long hours. In addition to long-term effects of working time overload such as cardiovascular and gastrointestinal disorders.

A study done in Germany by Rosta and Gerber, (2007) examine the impact of excessively long working hours on health, among a representative sample of hospital physicians in Germany. The most significant finding is that a positive correlation exists between excessively long working hours and general health, as well as health complaints including: mental and physical fatigue, gastrointestinal and heart disorders.
Most of the house officers and some residents expressed dissatisfaction from unorganized patient flow (case mix) the new mixed with the follow up cases with the employees and the referral cases and high caseload and they have suggested to decrease the number of examined patients per day organize the patient flow using numbers on the tickets.

Balasubramanian et al. (2010) said that patient categorization according to Age, gender and a chronic condition are the simplest patient classification in absence of other data, yet is generally effective for clinics because they enhance a practice's understanding of its population and disease trends, and allow it to design its care models effectively. There is interrelationship between panel size, case-mix and the individual capacities of physicians. This is done by measuring the overflow frequency of the physicians in relation to each other. The overflow frequency is the probability that the demand from a physician panel will exceed the physician's capacity.

Murray et al. (2007) focused on the importance of appointment scheduling in healthcare to deal with high caseload. Clinical necessities (follow ups for chronic conditions) and patient preferences require practices to allow the future booking of appointments, while at the same time enable same-day access for acute needs. Yet, whatever appointment system or blend a practice may follow, effective access is possible only if the panel sizes of the physicians and their case-mixes are in balance with the available capacity.

Medical Council Ireland (2005) during the first national conference of the health of the doctors said that the stability of the entire health care system stands or falls with the health of its physicians since, for example, healthy physicians have a favorable impact on the quality of health care and the relationship among colleagues.

The majority of Health care providers expressed dissatisfaction that high patient flow lead to lack of time to communicate well with the patient or to do general examination leading to missing important points in diagnosis and they suggested to Decrease the number of examined patients per day.
These agree with observations of the researcher. The researcher observed that the doctor didn’t give enough time to (61.1%) of patients to describe their complaint, the doctor sometimes ignore what the patient told in (77.9%) of patients, The doctor didn’t prescribe medications for (85.2%) of patients, The doctor didn’t give choices when deciding the treatment for any of the patients, The doctor didn’t explain the investigations his/her should do to (71.8%) of the patients, The doctor didn’t explain the diet his/her should follow to (79.9%) of the patients, The doctor didn’t pay attention to the patient's privacy for all patients, The doctor sometimes use medical terms to the patients without explaining with (95.3%) (table 15).

**Platt and Keating (2007)** said that Good doctor-patient communication has the potential to help to regulate patients’ emotions, facilitate comprehension of medical information, and allow for better identification of patients’ needs, perceptions, and expectations.

**Shiu et al. (2007)** said that Patients reporting good communication with their doctor are more likely to be satisfied with their care, and especially to share pertinent information for accurate diagnosis of their problems, follow advice, and adhere to the prescribed treatment. Patients’ agreement with the doctor about the nature of the treatment and need for follow-up is strongly associated with their recovery. And this will lead to decrease in follow up visits → decrease in patient flow → decrease the load on physician → better communication → accurate diagnosis → patient follow advice and adhere to the prescribed treatment → decrease in follow up visits.

**Fong et al. (2010)** said that there are reported observations of doctors avoiding discussion of the emotional and social impact of patients’ problems because it distressed them when they could not handle these issues or they did not have the time to do so adequately. This situation negatively affected doctors emotionally and tended to increase patients’ distress. This avoidance behavioural result in patients being unwilling to disclose problems, which could delay and adversely impact their recovery.

The majority of Health care providers expressed dissatisfaction from shortage of nurses that lead to their absence from patient-centered care.
A study was done by (Emam et al., 2005) showed that the nurses in medical and surgical units had lack of performance management, absence of feeling of responsibility and supportive relationships, quality of communication, morale, organizational clarity and feeling of identity and belongings to the hospital. Nurses are lacking work climate conducive to conflict resolution, participation in decision making, opportunity for training and development, fair rewards and recognition, calculated risks, sufficient resources, effective leadership and team-work.

A study was made by (Richard et al., 2006) revealed that the areas that contributed most to doctors’ happiness with their lives as physicians seem to focus on the people they work with, the people they live with, and most of all, the people for whom they provide medical intelligence and care. The higher the satisfaction rating, the more satisfied physicians were with that factor.

Carney (2009) identified the scope, synergy and distinctive competencies. Scope is determined by the identification of the number and the type of several products and services that is offered by the organization. Synergy refers to the state that is deemed to exist when the organization parts interact in harmony so as to produce an effect that is greater than the sum of its parts acting alone. Distinctive competence is the position that the organization achieves through its scope and synergistic interactions with reference to its competitors in health care.

Ancarani et al. (2009) defined organizational climate as the individual’s perceptions of organizational policies, practices and procedures. Organizational climate is rooted in the organizational’s culture.

The majority of Health care providers expressed dissatisfaction from Difficulty for follow up cases to reach their physicians.

Ouwens et al. (2005) said that having appointments with the same doctor promotes better continuity of care, which is an essential factor in order for people with chronic conditions to be satisfied with access.
Some health care providers expressed dissatisfaction that most patients are of low socioeconomic class so they may not do all investigations or take all prescribed medications as it is paid.

Soumerai et al. (2006) has shown that high financial barriers increase medication nonadherence, including among elderly with chronic conditions. The extent to which low levels of trust in the physician contribute to these lower compliance rates is unknown.

Monheit (2003) has shown that some medically related financial problems are temporary and therefore may not have serious or long-term consequences for patient care. However, some persons experience persistently high medical costs and out-of-pocket expenses, usually because of chronic conditions that require ongoing treatment.

The majority of house officers expressed dissatisfaction that many cases escape from diagnosis and come after that with complications.

Clack et al. (2004) said that doctors with better communication and interpersonal skills are able to detect problems earlier, can prevent medical crises and expensive intervention, and provide better support to their patients. This may lead to higher-quality outcomes and better satisfaction, lower costs of care, greater patient understanding of health issues, and better adherence to the treatment process.

A study done in Europe by (Moonesinghe et al., 2011) to examine the association between reducing working hours and objective measures of outcomes in patients shows that there is no clear signal to indicate either benefit or harm. While it might seem intuitive that doctors working fewer hours (duty hours in accordance with European legislation are below 56 or 48 hours a week) will be less tired, make fewer errors, and that therefore patients’ outcomes should improve.

Moonesinghe et al. (2011) said that The patient outcomes affected by the number and quality of clinical handovers, the level of supervision of doctors in training, the continuity of care
provided by the entire multidisciplinary team, the standard of nursing care, and many other differences within and between institutions in delivery of healthcare.

Staff remuneration is important because heavy workload and low salary will demotivate and decrease staff productivity and satisfaction towards work. Work related to training should be done regularly and supervision from Superiors will also improve staff capability and increase morale among workers. A better working shift schedule should be made to balance workload among staff. There should be at least one staff assign to provide information to patients while others handle new cases. A doctor’s ability to properly handle problems would improve patient care and reduce treatment time. A more reasonable salary and a well-planned schedule would improve the doctors’ performance and effectiveness. Bates (2010) delineated that low salaries is de-motivating to service providers.

Lack of experience of residents that present most of the days alone at the clinic due to irregular attendance of the teaching staff at the clinic. And (88.2%) said no continuous update for knowledge and treatment methods. They suggested to insist on regular attendance of teaching staff at the clinic according to the attendance table.

Incompetent junior doctors who have not had enough hands-on training because of a clampdown on their working hours putting patients at risk. Temple (2010) said that changes in postgraduate medical education and provision of healthcare might influence the quality of training. Concurrently, and consequently, there has been a change in the role of the junior doctor in healthcare service delivery. Use of ancillary staff to provide services previously provided by junior doctors, such as phlebotomy, cannulation, and basic administrative duties, allows more time for useful training activity in a working week limited by duty hour regulations. It is possible that cohorts of doctors whose training outcomes did not change with a reduction in working hours have also seen an alteration in their clinical and administrative responsibilities. The requirement for this sort of change was a key recommendation of the recent inquiry into the implications of the European Working Time Directive on medical training in England: “make every moment count.
A study done by Niteesh et al. (2005) for evaluating the relationship between clinical experience and performance suggested that physicians who have been in practice for more years and older physicians possess less factual knowledge, are less likely to adhere to appropriate standards of care, and may also have poorer patient outcomes. These effects seem to persist in those studies that adjusted for other known predictors of quality, such as patient co morbidity and physician volume or specialization. The results are somewhat paradoxical since it is generally assumed that clinical experience enhances knowledge and skill and, therefore, leads to better patient care. The study explained this finding that physicians' “toolkits” are created during training and may not be updated regularly. Older physicians seem less likely to adopt newly proven therapies and may be less receptive to new standards of care.

Some health care providers referred to cases recommended from private clinics of the teaching staff take the upper hand in care
In Egypt, the national health policy that allow physicians and nurses to combine working in both the public and private sector could lead to draining of governmental resources to serve private able to pay patients, through private-public referral services. This made the physicians abuse the governmental hospitals to serve their benefits and giving the priorities to the patients who come from their private clinic to receive the hospital services before and better than the patients who came directly to the hospitals’ clinic.

In the current study all Health care providers said that there’s no referral policy
Hensher et al. (2006) said that an ideal referral system would ensure that patients can receive appropriate, high-quality care for their condition in the lowest-cost and closest facility possible, given the resources available to the health system, with seamless transfer of information and responsibility as that patient is required to move up or down the referral chain. Although few referral systems anywhere in the world live up to this ideal fully, it does provide a target in relation to improving the current situation. Improving the effective functioning of referral systems broadly requires progress in three areas: referral system design, facilitation of the smooth transfer of patients and information between levels.
Some of Health care providers expressed dissatisfaction from lack of a well recording system and suggested to set up of an electronic file system inside the clinic

The registration system should be improved. For example, unifying assignments based on importance and avoiding work that could lengthen registration time will improve the registration process. Improving the record searching process, displaying information of facilities and improving working environment will also smoothen the registration process. The consultation time should also be stated in the appointment card and the usage of computers will optimize the number of patients per hour.

One of the Health care providers suggested that the staff should be from Fayoum to attend regularly at the clinic and work for the benefit of the people

A study from Canada by (Comeau, 2001) showed that the vast majority of physicians (86%) were satisfied with their relationship with patients and at least three-quarters were satisfied with their relationship with other physician and non-physician providers. Work climate is indicative of how well the organization is realizing its Full potential. An accurate assessment of work climate can identify the unnecessary obstacles to the health care providers interfering with their best performance.

The majority of health care providers express dissatisfaction from not attending regular training courses.

Susan (2002) expressed that increased productivity is often said to be the most important reason for training. But it is only one of the benefits. Training is essential not only to increase productivity but also to motivate and inspire workers by letting them know how important their jobs are and giving them all the information they need to perform those jobs lists the following as general benefits from employee training: increased job satisfaction and morale, increased motivation, increased efficiencies in processes, resulting in financial gain, increased capacity to adopt new technologies and methods, increased innovation in strategies and products and reduced employee turnover. If students and faculty were involved only in district-based services, they would miss many important advances in biomedical science and the care of complex problems. Moreover; doctors need to know enough about what the various tertiary specialties do to be able to refer patients appropriately and to make personal career choices.
The current study delineated that nurses are not the source of information to the patients. The doctor has the major responsibility to communicate information about the disease condition and management strategy with the patient. The nurse didn’t help the doctor during examination in the all observed patients. The patient privacy not well maintained.

A study conducted by (Laurant et al., 2008) showed that patients preferred the doctor for medical aspects of care, whereas for educational and routine aspects of care. Half of the patients preferred the nurse or had no preference for either the nurse or doctor.

Genomics and World Health Report (2002) declared that in North America and Europe there are at least four models which depict this relationship: the paternalistic model, the informative model, the interpretive model, and the deliberative model. Each of these suggests different professional obligations of the physician toward the patient. For instance, in the paternalistic model, the best interests of the patient as judged by the clinical expert are valued above the provision of comprehensive medical information and decision-making power to the patient. The informative model, by contrast, sees the patient as a consumer who is in the best position to judge what is in her own interest, and thus views the doctor as chiefly a provider of information. There continues to be enormous debate about how best to conceive of this relationship, but there is also growing international consensus that all patients have a fundamental right to privacy, to the confidentiality of their medical information, to consent to or to refuse treatment, and to be informed about relevant risk to them of medical procedures.

Despite variations in local legislation and administration of patients' rights, it is important in the case of genomics, as with any other medical intervention that patients receive treatment consistent with the dignity and respect they are owed as human beings. This means providing, at minimum, equitable access to quality medical care, ensuring patients’ privacy and the confidentiality of their medical information, informing patients and obtaining their consent before employing a medical intervention, and providing a safe clinical environment (New England Journal of Medicine, 2003).
Assuring that the rights of patients are protected requires more than educating policy makers and health providers; it requires educating citizens about what they should expect from their governments and their health care providers—about the kind of treatment and respect they are owed.
Conclusion and Recommendations

Conclusion:

The model that was presented in the current study is to help the policy makers in improving the quality of services at the hospital according to accreditation standards. Patient and provider’s satisfaction surveys as well as observation of work system is crucial for continues quality improvement.

The following are the key findings from which recommendations had been derived:

- Observation checklist provided important information that assesses performance of the healthcare providers at the outpatient’s clinics.
- Provider satisfaction survey revealed information about the current clinical practices and suggestions for service improvement.
- SWOT analysis that was presented as “policy Brief” to develop clear guidelines for priority setting, and action taking for service improvement, and providing the deficiency in the infrastructures.
- Service provider-patient communication/interaction is pivotal and integral part of all hospital care services that significantly influence patient satisfaction so the study presented a plan to set up a health education unit.
- The patients were satisfied with the price of the tickets but not with price of laboratory and imaging services.
- The study attract attention to the importance of giving appointment to the patient to reduce the time spent at the hospital by the patients.
- The study highlighted the role of medical students in improving health care services and facing the high case load.
- The national health policy and by laws that allow physicians and nurses to combine working in both the public and private sector could lead to draining of governmental resources to serve private able-to-pay patients, through private public referral services, and absence of most providers from attending the clinics.
- Residents do not have documents that illustrate the standard of practice.
The physicians ignore the importance of health education messages for the patients.

The study stressed on the importance of empowering the patients and involving them in the treatment plan.

The study referred to the importance of collaboration in a systematized way between the different hospital departments and community departments to empower the patients and to improve the communication between them and the health care providers.

The study focused on the importance of regular training courses for all health care providers for continuous updating of knowledge.

Some issues identified during the study are difficult to be improved because they are related to the general governmental polices as for example the needs to increase the number of health care providers.
Recommendations

Short term plan:

- **Political and programmatic support to the outpatient services through development of an updated documents including: policies, strategies and procedures for outpatient services as follow:**
  - Develop goal, mission, and objectives for each clinic.
  - The supervision system and on-the job training.
  - Policies and regulations related to manpower management including clear job description in all health services.
  - Develop the referral policies. A referral sheet containing patient’s clinical information is completed and sent with the Patient when referred to another facility (Annex 10)

1. A copy is retained in the patient’s record
2. The referral sheet contains at least the following:
   a) Reason for referral/transfer
   b) Significant findings, including investigations
   c) Procedures, medications, and/or other treatments
   d) Patient’s condition at time of referral or transfer
   e) Name of the facility the patient is being transferred.

- Develop of monitoring and evaluation indicators.
- The timeframes for emergent and routine test results should be identified on the request paper.
- A time table for staff attendance at the clinic with their signature.
- Follow up patients should be given a number on the follow up form and is registered in the record of the outpatient clinic.

**Improve infrastructure management as follow:**
- Capitalize on house officers to provide patient centered care through:
  1. Survey to identify the impact of involvement of house officers in patient centered care on patient satisfaction.
2. Training the house officers will optimize the benefits of the man power resources and expand the scope of work of house officers through shifting from job oriented tasks to comprehensive services under supervision of professors.

- Capitalize on nurses through shifting from job oriented tasks to comprehensive services.
- Establishment of WITS: Work improvement teams responsible for strict supervision of outpatient clinics and being transparent.
- Supply the clinic with the needed equipment.
- Increase the man power at the out patient clinics.
- Take the results of patient satisfaction survey into consideration in decision making.
- Study deeply the root causes that affect the equity among patients and eliminate it.
- Study deeply the root causes that affect the job satisfaction and eliminate it.
- More attention should be done to the infection control measures at the clinics.
- Patients rights should be included in the medical and nursing curricula.
- Provide strong leadership and support for hand hygiene and other infection prevention and control activities.

❖ Organize the patient flow at the outpatient clinics by:

- Giving numbers at the tickets for each patient.
- Fix the number of patient \day.
- Each house officer will be responsible for a number of patient completing their sheet.
- Separate the new cases from follow up cases.
- Choose the most loaded days with patients at the clinic and fix these day for general internal medicine and general surgery and the other days for other sub specialties.
- Develop the strategies of panel size and use the panel sheet. (Annex 8)
Long term plan:

Patient flow long term plan:

Review of the model of patient care to include specific care plans for all patients. Care plans should then be explicitly communicated to all members of the care team as well as the patient and their families. The care plan may include, but may not be limited to items such as:

- Expected wait times for various services,
- Expected discharge dates and times,
- General expected outcomes of treatment course,
- Options available with regards to each possible outcome,
- The role of each member of the care team

- Collection of patient feedback regarding the care provided which will help guide prioritization of initiatives within the hospitals.
- Revision of team member roles and responsibilities and empowering members of the care team at all levels (Patient care coordinator, physicians, social workers etc.) to expedite patient movement through the system by providing:

  - Adequate communication regarding the importance of patient flow
  - Training to help address areas of concern as identified by staff (e.g. technology, standardization of work practices),
  - Ability and authority to resolve day-to-day situations that impede patient flow (e.g. organizational effectiveness training, team building for all staff, driving ownership of problems, ensuring rewards tied to identifying and resolving flow related challenges).

- Encouraging management presence on clinical units in order to facilitate dialogue regarding day-to-day challenges that may need addressing.

- Ensuring all staff are working to their full capacity and ensure that training and support is provided to encourage this change.

- Ensuring buy-in of all relevant stakeholders prior to roll-out of newer patient management initiatives. For example, involving physicians in the planning of the bed management strategy will ensure its successful uptake in the long run.

- All committees require a greater emphasis on action-oriented planning, based on gaining input and buy-in from all stakeholders rather than policy-making. Upper management should be
involved to remove any road-blocks financial or otherwise. Policies may be subsequently derived from pilot studies that do well.

- Establishing a culture that is grounded in metrics based and data driven decision-making at all levels within the organization by:
  - Automating data collection of key metrics such as wait times, number of patients waiting for certain services etc.,
  - Encouraging staff participation in developing solutions to improve metrics,
  - Making patient care delivery and operational decisions based on data, and,
  - Developing a communications strategy to share the organizations’ successes in process improvement.
- The Electronic Patient Record (EPR) should be developed in partnership with I.T. and should include efficient online documentation, Computerized Physician Order Entry (CPOE), electronic Medication Administration Record (eMAR) along with bar-coding and point-of-care medication check solutions.

Other aspects of long term plan:

- Improve the salary system for the service providers to increase motivation and job performance
- Design of pay-for-performance (P4P) programs. In many P4P programs, financial incentives are used to reward individual providers, typically physicians, for achieving quality-related performance targets.
- Increase expenditure in health services at out patient clinic.
- Develop a strategy to cover the cost of medications and investigations for low socioeconomic patients through collaboration with pharmaceutical companies.
- Establish a medical record system at the outpatient clinics contains data about the diagnosis and treatment and any follow-up steps done for the patient. Each medical record contains sufficient information to perform the following:
  - Identify the patient, including name, address, and date of birth
  - Promote continuity of care
  - Support the diagnosis
  - Justify the treatment
- Document the patient’s course and results of treatment

- Participation of other NGOs in SWOT analysis for building strategies and decisions to improve the service delivery at outpatient clinic.

- Partnership between the community medicine department and other hospital departments is highly recommended for work system surveys and teamwork building inside the outpatient clinics.

- Conduct the same study in other departments.

- Introduction of patient satisfaction survey system in the department through simple patient satisfaction questionnaire.

- Introduction of health care providers survey system in the department through providers satisfaction survey.

- Apply and training of all employees on 5S principles.

- **Establishment of a health education Unit that will be responsible for performing the following: (Annex 7)**
  - Inspire the staff to participate in improving the work area.
  - Encourage involvement of medical students in services directed to the patients.
  - Empower the patient to know his rights and responsibilities by different methods.
  - Information about patient’s rights and responsibilities should be disseminated by different methods.
  - Setting up a team responsible for continuous monitoring of satisfaction of internal and external customer of hospital services.
  - Setting up an information system to help in developing the outpatient clinics and develop indicators to measure the work load on health care providers to rearrange the work schedule (panel sheet).
  - Training the hospital service providers on principles of communication, decision making, strategies to manage the work stress and leadership.
  - Periodic SWOT analysis for the work area to help in building up policies and strategies.
  - Develop a strategy for the internal and external marketing.
  - Educate the health care providers on the infection control standards.
  - House officers management and empowerment through training courses to provide patient centered.
- Sustainable patient satisfaction survey.
- Sustainable healthcare providers satisfaction survey.
Summary

This current study focuses on the study of the patient's as well as health care provider's satisfaction with services offered at Internal Medicine and General Surgery outpatient clinics in Fayoum University Hospital. It explores the factors that may affect the quality of services provided by observing the performance of health care providers (doctors and nurses) at outpatient clinics.

The aim of this study was exploring the factors that may affect the quality of services provided at Internal Medicine and General Surgery outpatient clinics in Fayoum University Hospital to upgrade the quality of the services. The specific objectives included studying the patient satisfaction with services offered at the previous outpatient clinics, understanding the health service providers' satisfaction with the system of work at those outpatient clinics, knowing the service delivery then presenting the findings of the study to both departments' staff as a policy brief for decision making to improve the quality of care and setting up a Health education and communication unit by collaboration between the Community Medicine department and the other hospital departments to improve the doctor-patient relationship, health care providers' communication and empowering the patients and to improve services in Internal Medicine and General Surgery outpatient clinic according to the results of the study.

The study is an operational health service research (Time bound study). The data was both quantitative data (including the hospital records of the number of patients attending the Internal Medicine and General Surgery outpatient clinic in Fayoum University Hospital, structured Arabic questionnaire for exit patients, structured English questionnaire for healthcare providers and Patient statistics of April, August, September and October 2010). Qualitative data (including interview with physicians (juniors and seniors) and house officers with guided discussions and interview with nurses using structured Arabic questionnaire and guided discussions.

The sample size was 495 patients and 35 physicians and 4 nurses. The study was conducted during a period of 31 months (January, 2011 till July, 2013) in three phases: preparatory phase from (January, 2011 to August, 2011) and this included literature revision,
Summary

Hospital records of the numbers of patients attending outpatient clinics, developing the two questionnaires Arabic and English for both patients and health care providers respectively and testing it by doing a pilot study on (50 patients- 2 physicians – 2 nurses) prior to the actual implementation of the work. Data collection phase was 7 months from (September, 2011 to March, 2012) 3 times per week to cover the different seasons & all working days of the week. Data analysis phase from (April, 2012 to July, 2013). Analysis was done using simple frequency distribution, scoring and Chi square.

The current study revealed the following key findings:

- **Results** of the study according to the situation analysis of the outpatient clinics of internal medicine and general surgery indicated that there is loss of patient time, loss of resources, lack of equipments, deficient in heath care providers, lack of hand washing facilities, job description not applied, no clear polices, no plan for supervision of the clinic by staff, training of health care providers, patient health education, follow up of cases, referral of patients and feedback.

- **Results of patient satisfaction survey** indicated that more than half of the patients (57.2%) were unsatisfied from communicating with their health care providers regarding not be greeted from the physician; More than half of the patients (57.8%) were unsatisfied from the physician not asking about their names by the physician before examination; The mean satisfaction score for communication aspect was (50.5); Regarding maintaining the patient rights; More than half of the patients (68.7%) were unsatisfied from examining more than one patient at the clinic. A health care provider’s ability to form a therapeutic relationship with patients’ and subsequently influence health outcomes could be strengthened through improving the provision of whole person care. So good doctor-patient communication has a positive impact on patient satisfaction, adherence to treatment, health outcomes.

- Nearly half of the patients (49.3%) expressed dissatisfaction from not explaining how to take the medicine ; More than half of the patients (60.2%) expressed dissatisfaction from
not giving them choices in treatment (clinical or surgical) we can say that Patients are
usually not in a position to reliably judge the accuracy of a diagnosis or treatment plan, but
they can judge whether they have been provided with sufficient information, and they can
judge the demeanor and attitudes of their physicians. Reassuringly, these latter factors are
under the direct control of medical staff, which makes it possible for patient satisfaction to
be improved with appropriate efforts.

- About (59.2%) were satisfied from the hospital location; (82.4%) of patients were expected
to find a better care in the hospital; (43.6%) of patients were expected to find a better
dealing in the hospital. The mean satisfaction score for over all satisfaction and outcome of
care was (51.9).

- Results of interview with health care providers at outpatient clinic of general surgery
showed that the majority of health care providers expressed dissatisfaction from shortage
in numbers of staff members with high caseload up to 60 patients/day, long working
hours/day up to 6 hours at the clinic. Most of the house officers and some residents
expressed dissatisfaction from unorganized patient flow (case mix) the new mixed with
the follow up cases with the employees and the referral cases. All Health care providers
suggested some suggestions included: increase the number of physicians at the clinic, to
decrease the number of examined patients per day, to obligate the senior staff to attend the
clinic, to supply the deficient in supply and equipment's, putting the sterile dressing that is
used for a single patient in a single package instead of putting more than one dressing for
more than one patient in a single package and to organize the patient flow using numbers
on the tickets.

- Results of interview with health care providers at outpatient clinic of internal
medicine showed that the majority of Health care providers expressed dissatisfaction from
shortage in supply and equipment's, shortage in numbers of staff members with high
caseload up to 70 patient/day, lack of time to communicate well with the patient or to do
general examination leading to missing important points in diagnosis, long working
hour/day up to 6 hours at the clinic, shortage of nurses lead to their absence from patient-
centered care, difficulty for follow up cases to reach their physicians, most patients are of low socioeconomic class so they may not do all investigations as they are paid, lack of a well recording system. The majority of house officers expressed dissatisfaction from many cases escape from diagnosis and come after that with complications, most of the doctors at the clinic prescribe high price medications, lack of experience of residents that present most of the days alone at the clinic due to irregular attendance of the teaching staff at the clinic, cases recommended from private clinics of the teaching staff take the upper hand in care. One of Health care providers suggested setting up of an electronic file system inside the clinic, decreasing the number of examined patients per day, organizing the patient flow using numbers on the tickets, importance of regular attendance of teaching staff at the clinic according to the time table and Setting up a specialized clinics in the Internal Medicine.

- **Results** of observation showed that (84.6%) of the patients not welcomed by the physician, and (61.1%) of the physicians didn’t give enough time to their patients to describe their complain. The physician didn’t explain the investigations his/her should do to (71.8%) of the patients, The physician didn’t pay attention to the patient's privacy for all patients, The physician sometimes use medical terms to the patients without explaining with (95.3%). About (65.3%) and (56.6%) of patients showed moderate degree of satisfaction in communication aspects and in access and continuity of care respectively. And about (73.5%) and (87.9%) of patients were highly satisfied in technical quality and financial aspects respectively. The mean of total satisfaction score that was (54.5).

- **Results of** system Analysis of Internal Medicine and Surgery clinics showed deficient in (man power, infrastructures, hand washing facilities, educational material). Both the outpatient clinic of Internal Medicine and General Surgery had unorganized patient flow, the medications and investigations are not affordable for the patients, had no referral polices, no organized system for follow up cases, no separation between the follow up cases and the new cases, no team work coordination between the outpatient doctor and the other health care providers and had no collaboration between the nurse and the physician during patient examination.
Summary

- **Results of SWOC Analysis** of the work system at both clinics regarding the weakness points: were deficient policy for assessing reliability and validity of work system at the clinic in each department and the introduction of new assessment methods, lack of standard practice guidelines. It also revealed that there was deficient policy for coordination between departments, lack of experience for healthcare providers attending the clinic, shortage in physicians staff with high patients load, double burden on physicians (inpatient and outpatient) **and** deficient equipments. It was observed that patient privacy not well maintained (no curtains on windows, the clinic divided into three partitions in away doesn't maintain the patient privacy in a complete way. The physician examined more than one patient at the same time, no training courses for outpatient clinic physicians and nurses), the only source for learning is the staff’ round, the job of the nurse at the clinic is task-oriented. The challenges' points revealed that there were no clear policy for outpatient management, no actual support from higher authorities, laws allow physicians and nurses to combine working in both the governmental and private sector.

**It has been concluded that:** the observation checklist has provided important information that assesses the performance of the healthcare providers at the outpatient’s clinics, the provider satisfaction survey revealed information about the current clinical practices and suggestions for service improvement, SWOT analysis was presented as “policy Brief” to develop clear guidelines for priority setting, and action taking for service improvement, and providing the deficiency in the infrastructures. Service provider-patient communication/interaction is pivotal and integral part of all hospital care services that significantly influence patient satisfaction so the study presented a plan to set up a health education and communication unit, the importance of giving appointment to the patient to reduce the time spent at the hospital by the patients, the role of medical students in improving the health care services and facing the high case load, the national health policy and by laws that allow physicians and nurses to combine working in both the governmental and private sector could lead to draining of governmental resources to serve private able-to-pay patients, through private - public referral services, the importance of empowering the patients and involving them in the treatment plan, the importance of collaboration in a systematized way between the different hospital departments and community departments to empower the
patients and to improve the communication between them and the health care providers, the importance of regular training courses for all health care providers for continuous updating of knowledge.

**Recommendations:**
Political and programmatic support to the outpatient services through development of an updated documents including policies, strategies and procedures for outpatient services, improving the infrastructure management, organize the patient flow at the outpatient clinics, establishment of a health education and communication unit, setting a patient flow long term plan, improve the salary system for the service providers to increase motivation and job performance, increase expenditure in health services at out patient clinic. Partnership between the community medicine department and other hospital departments is highly recommended for work system surveys and teamwork building inside the outpatient clinics, apply and training of all employees on 5S principles and establish a medical record system at the outpatient clinics contains data about the diagnosis and treatment and any follow-up steps done for the patient.
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