# "Patient's Satisfaction toward Medical Centers with health care services as an indicator of quality of care."

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**Abstract:** Although measures of consumer satisfaction are increasingly used to supplement administrative measures in assessing quality of health care, little is known about measuring patient's satisfaction in Medical Center area, with health care services, in addition to identifying the determinants of satisfaction to detect and report patients' perceived strengths and weaknesses of the health care service provided. This study intends to measure patient's satisfaction at both the physician and the hospital level.

In the current study, a satisfaction questionnaire was distributed to outpatient's clinic at Imam Muhammad Ibn Saud Islamic University Medical Center area. Descriptive analysis was used to measure patient's satisfaction with physicians and hospital services.

At the patient level, results showed that there was satisfaction with several aspects of the health care service delivered. At the hospital level, the results show that the study sample suffering from lack of nurses, unfriendly staff and difficulty of communication with the nurses. Regarding physicians the study sample was satisfied with the doctor's understanding and that patients were more satisfied with physicians than hospital services.

Reviewing the theoretical and empirical work on patient's satisfaction with the health care services provided, indicate that further research is needed to measure specific aspects of medical care and the ways in which patients' reports can complement other sources of information concerning quality. In addition, more research on the determinants of satisfaction and the relationship between quality and satisfaction among hospitalized patients is recommended.

**Key words:** Patient, physician, satisfaction, health care, services, cross-sectional studies, medical care, measure, descriptive statistics, Saudi Arabia, Imam University, center, medical school.

#### I. Introduction

The patients' satisfaction has been recognized extensively in the field of medical care. The level of medical care is now estimated by the degree of patients' utilization and acceptance of the obtained medical services that ultimately improve the health status in Imam Muhammad Ibn Saud Islamic University Medical Center. Satisfied patients are the best measure of hospital quality, according to the study. Therefore, "if you want to figure out if a hospital is providing high-quality care, asking patients if they were satisfied with their care is a better indicator than whether the staff competently performs a battery of tests." (Staelin, 2011)

Because Patients satisfaction is an important component of the health care industry in this competitive modern era, therefore the need arises to investigate this issue in an important and vital center such as Imam Muhammad Ibn Saud Islamic University Medical Center. Therefore, this study examine patient's satisfaction towards health care services at Imam Muhammad Ibn Saud Islamic University Medical Center as will be discussed in the following sections.

#### **Objectives:**

- 1. To measure patient's satisfaction in Imam Muhammad ibn Saud Islamic University Medical Center area, with health care services.
- 2. To identify the determinants of satisfaction, that is the factors affecting the quality and acceptability of health care provided.
- 3. To find out the relationship between quality and satisfaction.
- 4. To determine the most effective strategies for improving the quality of care.
- 5. To Identify and report on the patient perceived strengths and weaknesses of the health care service provided.
- 6. To help individuals to participate in decision making to improve their health.
- 7. To determine the areas and causes of low satisfaction among the patients and suggest methods for improvement.

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#### **Research questions**

- 1. How to measure patient's satisfaction in Imam Muhammad ibn Saud Islamic University Medical Center area, with health care services?
- 2. What are the determinants of satisfaction?
- 3. What is the relationship between the quality of care and patients' satisfaction?
- 4. What are the most effective strategies for improving the quality of care?
- 5. What are the patients perceived strengths and weaknesses of the health care service provided?
- 6. How to help individuals to participate in decision making to improve their health.

#### II. Literature review:

#### 1.1 Introduction

The outcome of any disease is influenced by the decisions to seek care, timely arrival at appropriate diagnostic and treatment services and the receipt of adequate care from service providers. Satisfaction in service provision is increasingly being used as a measure of health system performance. Satisfaction manifests itself in the distribution, access and utilization of health services (Kumari, 2009) ) Therefore, if the level of patient satisfaction is deficient in several areas and is detected through research , then one can work on the needs to improve for the achievement of optimal health of the people.

### 1.2 Studies on the Importance of Patient's satisfactions on patient's health care services 1.2.1 International studies

Patient satisfaction is frequently used to evaluate the quality of medical care and to guide the development of health care services. Improved satisfaction is a goal recommended by the Ministry of health in the Kingdom of Saudi Arabia for health care reform. Many studies discussed patient satisfaction. Satisfaction, is defined as a psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with consumer's prior feelings about the consumption experience (Oliver, 1981). Patient satisfaction has become an important indicator of quality of primary care and health care performance(clear, 1988; Vuori, 1988). Patient satisfaction with health care is important for several reasons. Firstly, satisfied patients are more likely to maintain consistent relationships with their care provider. Secondly, by identifying source of dissatisfaction, the primary care administration can address system weakness, thus improving their services (Dansky & Miles, 1997). Thirdly, satisfied patients are more likely to develop a deeper and longer lasting relationship with their medical provider leading to improved compliance, continuity of care and ultimately better health outcomes (Pascoe, 1983)

It is reported that low patients' satisfaction is associated with lower trust in health care caregivers and greater chance of physician changes resulting in less continuity of care, (Keating, 2002) while, high patient involvement in care has been associated with higher trust and satisfaction (Hickson et al., 1994; Stelfox, 2005) Patients' satisfaction surveys have a long history in the assessment of consultation and patters of communication (Davis, 1988; Fitzpatrik, 1991) and are amongst the best means of assessing the interpersonal aspect of care (Donabedian, 1988). Many studies measuring patient satisfaction with primary health care services have been conducted in many countries with a wide range of methods used; questionnaire with Likert scale has been accepted as the simplest method (Willaims, 1991; Aleisa 2005). Britton (2012) study reviews the measurement of satisfaction with care, together with factors that may influence satisfaction and its measurement. Recommendations are also provided for further research and development of satisfaction instruments and potential interventions to improve satisfaction. Shahian, DM, et al (2012) discussed patient's satisfaction of health care services.

#### 1.2.2 Studies on patient's satisfaction in the Arab World and the KSA

There are many studies that discussed patient satisfaction in the KSA's hospital.

One study about patient satisfaction with primary health care services in Saudi Arabia- found that 16.7% lost confidence in the primary health care center. These people prefer to go to hospital directly, to specialist or to a private practitioner. The cause of loss of confidence is multifactorial, some of which are inherent in the personality of the patient, or genuine deficiencies of the centers.

In previous study we found a large proportion of patients identified the ideal health center as one which is not crowded, has a sufficient stock of drugs, provides free service, is accessible and has friendly staff who can communicate in Arabic (Eiad 1996).

Alzolibani, A. (2010) discussed Patient satisfaction as the major indicator of quality of care provided by a health facility. To determine the level of patient satisfaction with medical care at the Dermatology Clinics affiliated to Qassim University, and to identify the socio-demographic characteristics of patients that might influence the level of satisfaction. The study revealed that patients coming on their first visits were significantly more satisfied than those on follow up visits. Majority of patients were satisfied with overall care. However,

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specific questioning exposed certain areas that need to be improved such as reducing waiting period for appointments, providing more information about the disease and by ensuring that patients have the opportunity to ask questions. (Alzolibani, 2010)

Saeed et al (2001) in a study to estimate quantitatively consumers' satisfaction and correlates of satisfaction with physicians' services provided by Ministry of Health Primary Health Care Centers in attending consumers revealed that Physicians' communication skills were more satisfactory to patients than their professional skills and satisfying patients' wishes scored the lowest satisfaction-Unskilled laborers, literate patients and patients with higher income showed significantly higher mean satisfaction while students, illiterates, those aged less than 50 years and patients with income less than 6000 Riyals per months scored the lowest satisfaction. The longer the distance travelled the lower the satisfaction scores but having a file or not was not related to satisfaction. (Alsaeed, 2001)

#### Research Methodology: cross sectional study

Cross-sectional studies are observational in nature and are known as descriptive research which seeks to depict what already exists in a group or population. Cross-sectional study is form a class of research methods that involve observation of all of a population, or a representative subset, at one specific point in time. Researchers record the information that is present in a population, thus this type of research can be used to describe characteristics that exist in a population, but not to determine cause-and-effect relationships between different variables. These methods are often used to make inferences about possible relationships or to gather preliminary data to support further research and experimentation.

In medicine Cross-sectional studies involve data collected at a defined time. They are often used to assess the prevalence of acute or chronic conditions, or to answer questions about the causes of disease or the results of medical intervention. They may also be described as censuses. Cross-sectional studies may involve special data collection, including questions about the past, but they often rely on data originally collected for other purposes. They are moderately expensive, and are not suitable for the study of rare diseases. Difficulty in recalling past events may also contribute bias. The current study is a cross- sectional study.

#### Study design

#### Sample

The study will include both male and female adult patients (18+ year old) attending the University Medical Center from all nationalities.

#### **Research Tool:**

Patients will be selected randomly. Questionnaires were used to collect information. They will be distributed and collected through social-workers. They were analyzed using SPSS version 17.

#### **Data Collection Tool**

A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. They are often designed for statistical analysis of the responses.

Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that make it simple to compile data. However, such standardized answers may frustrate users. Questionnaires are also sharply limited by the fact that respondents must be able to read the questions and respond to them. Thus, for some demographic groups conducting a survey by questionnaire may not be practical

#### **Study Results**

In this chapter of the current study, the results obtained through data analysis will be presented. The first part of this chapter provides background information. The second part will try to answer the research questions using descriptive statistics and inferential analysis.

#### **Background information results:**

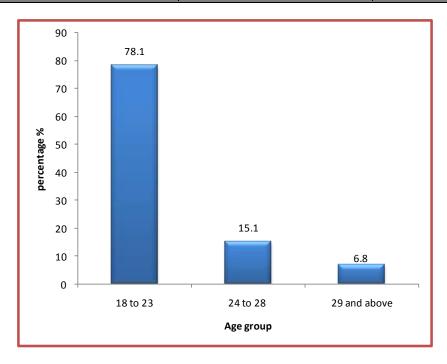
In this study, majority of the study sample aged 19 to 23 years (78.1%), while 15.1% aged 24 to 28 years and 6.8% aged 29 years and above.

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#### 1. Age:

**Table (1):** frequency distribution of the study sample according to age group

	<u> </u>	
Age group (years)	Frequency	Percent
18-23	57	78.1
24-28	11	15.1
29+	5	6.8
Total	73	100.0

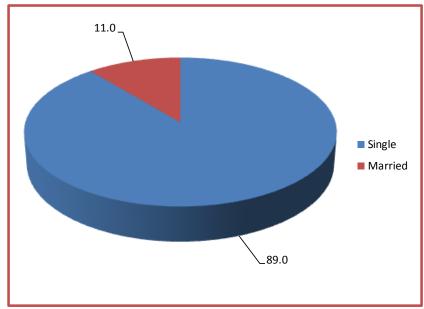


#### 2. Marital status:

Table (2): frequency distribution of the study sample according to the marital status

	Frequency	Percent						
Single	65	89.0						
Married	8	11.0						
Total	73	100.0						

Table (2) revealed that most of the patients in the study sample (89%) were single, whereas 11.0% were married.



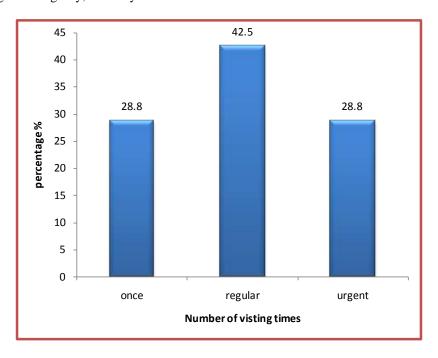
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#### 3. Number of times the patient visited the center:

**Table (3):** Frequency distribution of the study sample according to the number of patients' visits to the center

	Frequency	Percent
once	21	28.8
regular	31	42.5
urgent	21	28.8
Total	73	100.0

Table (2) revealed that (42.8%) of the study sample visited the center regularly, while 28.8% of the visits to the Center were urgent/emergency, similarly 28.8% visited the center at least once.



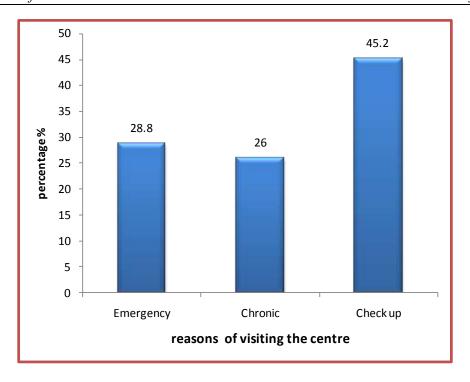
#### 4. Reasons for visiting the center:

Table (4): Frequency distribution of the study sample according to reasons for visiting the center

	Frequency	Percent
Emergency	21	28.8
Chronic	19	26.0
Check up	33	45.2
Total	73	100.0

Table (2) shows that 45.2% of the study sample visited the center for regular checkups, while 28.8% for emergency, but 26.0% of the study sample visited the center because of chronic diseases.

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#### **Research questions:**

#### Research question No. (1):

- 1. How to measure patient's satisfaction in Imam Muhammad Ibn Saud Islamic University Medical Center area, with health care services?
  - Patient satisfaction can be measured through:
- 1. Patient satisfaction with hospital services.
- 2. Patient satisfaction with physicians.

In order to answer this question, frequency, percentages, means, standard deviations and ranking of the items related to patient satisfaction with hospital services were produced as follows:

#### Satisfaction with Health care services/ hospital services,

Table (5): Descriptive Statistics and ranking for the study sample satisfaction towards hospital services

Statements		Agree		Don't know		Disagree		S.D	Rank	Degree of satisfaction
Statements	No	%	No	%	No	%	Mean	3.D	Kalik	
I am total satisfied with hospital services	26	35.6	25	34.2	22	30.1	2.05	0.81	7	Don't know
Hospital is not clean	39	53.4	17	23.3	17	23.3	2.30	0.83	1	Don't know
Not enough seats in waiting area	30	41.1	18	24.7	25	34.2	2.07	0.87	5	Don't know
Staff is not friendly	26	35.6	29	39.7	18	24.7	2.11	0.77	3	Don't know
Not enough nurses	25	34.2	36	49.3	12	16.4	2.18	0.69	2	Don't know
Nurses do not understand me	21	28.8	29	39.7	23	31.5	1.97	0.78	8	Don't know
Getting an appointment is difficult	24	32.9	29	39.7	20	27.4	2.05	0.78	6	Don't know
Waiting time is too long	27	37.0	24	32.9	22	30.1	2.07	0.82	4	Don't know
Total mean (satisfaction)			•	•		•	2.11	0.44		Don't know

For interpreting the results of this scale, the following criterion was used:

For each of the scale items, a transmutation equivalent was designed, with an equal interval of 0.67, such that the resultant means of the items may fall under the following categories:

1-<1.67 – Disagree;

1.67-<2.33 -Don't know

2.33-3.00 -Agree.

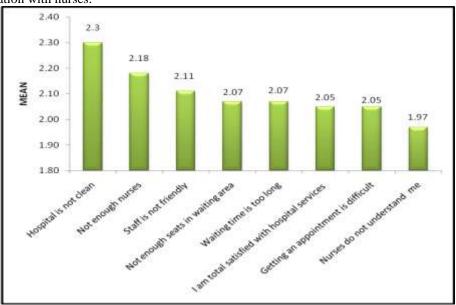
Table (5) revealed that the total mean of the scale of patient's satisfaction with hospital services reach (2.11) with standard deviation of (0.44), this mean lie in the range of (1.67-<2.33) which represents (don't know). Therefore, we can say that the patients cannot decide if they were satisfied with hospital services or not or they were neutral towards the health care services provided.

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The means of the items of the scale show that the patients do not know if they were satisfied with health care services or not, but we can sort the items according to the mean as follows:

- 1. Not enough seats in waiting area.
- 2. Nurses do not understand me.
- 3. Not enough nurses.
- 4. Staff is not friendly.
- 5. Waiting time is too long.
- 6. Hospital (Health care center) is not clean.
- 7. Getting an appointment is difficult

The above results show that the study sample suffering from lack of nurses, the staff is not friendly and difficult of communication with nurses.



#### Satisfaction with physicians,

Frequency, percentages, means standard deviations and rank of the items related to patient satisfaction with physicians was produced as follows:

Table (6): Descriptive Statistics and ranking for the study sample satisfaction with physicians

Statements		Agree		Don't know		Disagree		S.D	Rank	Degree of satisfaction
Statements	No	%	No	%	No	%	Mean	3.D	Kalik	
The doctor is very understanding	38	52.1	24	32.9	11	15.1	2.37	0.74	1	Agree
The doctors examined me well.	35	47.9	22	30.1	16	21.9	2.26	0.80	3	Don't know
The doctor shows interest in my problems	38	52.1	18	24.7	17	23.3	2.29	0.82	2	Don't know
The doctor explains my problem before treatment	36	49.3	18	24.7	19	26.0	2.23	0.84	4	Don't know
The doctor feels to understand my complaints	31	42.5	27	37.0	15	20.5	2.22	0.77	5	Don't know
Total mean (satisfaction)							2.11	0.49		Don't know

For interpreting the results of this scale, the following criterion was used:

For each of the scale items, a transmutation equivalent was designed, with an equal interval of 0.67, such that the resultant means of the items may fall under the following categories:

1-<1.67 - Disagree;

1.67-<2.33 -Don't know

2.33-3.00 -Agree;

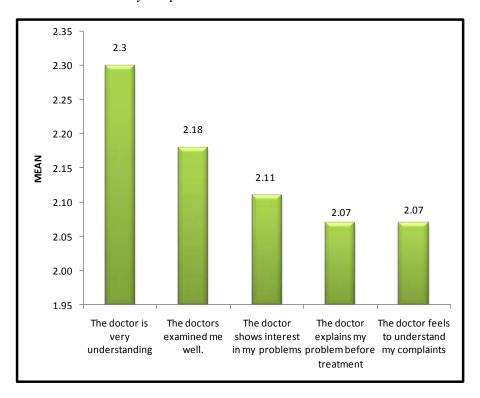
Table (6) revealed that the total mean of the scale of patient's satisfaction with hospital services reach (2.11) with standard deviation of (0.49), this mean lie in the range of (1.67-<2.33) which represent (don't know). Therefore, we can say that the patients cannot decide if they were satisfied with physicians services or not or they were neutral towards their satisfaction with physicians.

From the results of table (6) we notice that the study sample were satisfied with the physcians' understanding and that they did not suffer with doctors.

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But they cannot decide about the following items which represent their satisfaction with physicians in the center, the items were sorted according to its mean as follows:

- 1. The doctor shows interest in my problems.
- 2. The doctors examined me well.
- 3. The doctor explains my problem before treatment.
- 4. The doctor fails to understand my complaints.



#### **Research question No. (4):**

#### 3. What are the patients's perceived strengths and weaknesses of the health care service provided?

The patient's perceived strengths about the hospital as mentioned in table (5) were that the hospital is clean, and weaknesses of the health care service included lack of nurses and that the staff were not pleasant. I addition, the miss-communication with nurses who do not understand the patients very well and the difficulty of getting an appointment.

The patient's perceived strengths about the physicians as mentioned in table (6) that the doctor fails to understand patients' complaints and the weaknesses of the health provider (physicians), that physcians were not very understanding.

But in conclusion, the patients included in this study were satisfied with physicians more than the health care services. Patients' views about quality of care can differ vastly. The personal Perspective of patients with the health care services provided shows that they believe that a good physician was perceived as a person who respected them, treated them as an intelligent adult, smiled often, and talked with them friendly. The bad physician was perceived as business-like, didactic, insensitive in using clinical materials, and inflexible in treatment method.

Patients' perceptions about quality cannot be ignored. Superior technical care may not be effective in the absence of a good interpersonal relationship. Poor interpersonal skills often involve poor communication with the patients, which can lead to client dissatisfaction.

#### **III.** Discussion and conclusion:

This study is the first that we are aware of to examine the indicator most commonly used in health performance-monitoring systems, patient satisfaction. At the level of the individual patient, a number of measures of satisfaction with outpatient care.

Health care services and physicians are increasingly taking an interest in what patients have to say about the quality of their care. As a result, patients' satisfaction is gaining recognition as a legitimate indicator of treatment outcomes (Nelson, Hays, Larson, & Batalden, 1989). An expert panel convened by the federal Office of Technology Assessment (1988) recently defined quality clinical outcomes to include measures of

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changes in patient health status and satisfaction, a patients oriented approach to health care delivery is becoming a trend. So a comprehensive care plan must be prepared by hospital team, that happy patients leads to an increased business and response to patients' views will have the benefit of not only healthier and more satisfied patients, but a more positive position in today's aggressive health care marketplace.

We hope that this study will contribute to the health care services' standards provided by Imam Muhammad bn Saud Islamic University Medical Center area and other health care facilities. Moreover, this study will be a contributing factor to more future studies in the same field.

#### IV. Recommendations

According to the results of this study we recommend the following:

- 1. Make the patients comfortable.
- 2. To treat patients as a mature individual.
- 3. Make the patients feel safe and secure towards the health care services provided.
- 4. Trained staff must be available to listen to the patients.
- 5. Based on this study, more research needs to be done that involves qualitative methods to determine more issues concerning quality.
- 6. Also comparative studies that involves patient's satisfaction towards health care services in other advanced countries should be considered.

#### **Research limitations**

- The study is restricted to Imam Muhammad Ibn Saud Islamic University Medical Center area.
- Patients are adults, ages 18 and above.
- Nationality include Saudis.
- The research dealt only with patients' satisfaction.

Despite these limitations, this is still one of the first studies to examine patient's satisfaction performed mainly on this center and done in a Saudi setting. Our findings provide much-needed information to fill the knowledge gap in health care services patients' satisfaction. This information is needed for appropriate training and future studies examining the impact of this on health care services. In the future, more studies are recommended to cover other quality issues concerning health care services.

#### Acknowledgments

We gratefully acknowledge the efforts of Dr. Alrabeah whose help, stimulating suggestions and encouragement helped us in the writing of this research.

We would like to thank all those who have helped in carrying out the research, the patients and our colleagues, medical students.

Appendix: Questionnaire:

Age: 18-28 29-39 40-50 above 50

**Gender : Male - Female** 

Items	3	2	1
	Agree	Do not know	disagree
Patients' satisfaction with hospital services			
Hospital is not clean			
Not enough seats in waiting area			
Staff is not friendly			
Not enough nurses			
Nurses do not understand me			
Getting an appointment is difficult			
Waiting time is too long			
Patient satisfaction with the physician			
The doctor is very understanding			
The doctors examined me well.			
The doctor shows interest in my problems			
The doctor explains my problem before treatment			
The doctor feels to understand my complaints			

Thank you for completing our Survey!

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#### **Demo Table:**

mo Table:	. 1 .				
Patients' satisfaction with hospi		C 1 0	NT.	D (	Tract
Items	Evaluation	Gender & age	No	Percentage	Total
Hospital is not clean	1	Male			No
	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
Not enough seats in waiting	1	Male			No
area	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
_	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
Staff is not friendly	1	Male			No
	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
Not enough nurses	1	Male Male	110	1 Cloumage	No
Tvot enough harses	1	Female			Per.
	2	Male			No
					Per.
	2	Female			
	3	Male			No
	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
Nurses do not understand me	1	Male			No
	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
Getting an appointment is	1	Male Male	110	Tercentage	No
difficult	1	Female			Per.
	2	Male			No Por
	2	Female			Per.
	3	Male			No
	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
Waiting time is too long	1	Male			No
_	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
	3	Female			Per.
Dationt actiofs at it t		гешате			101.
Patient satisfaction with the phy		Cando: 0	NI-	Domaniti	To4-1
	Evaluation	Gender & age	No	Percentage	Total
The doctor is very		Male			No D- "
understanding	-	Female			Per.
	2	Male		+	No
	2	Female			Per.
	3	Male		+	No No
	3	Female		-	Per.
Items	Evaluation	Gender & age	No	Percentage	Total

The doctors examined me	1	Male			No
well.	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
	3	Female			Per.
Items	Evaluation	Gender & age	No	Percentage	Total
The doctor shows interest	1	Male			No
in my problems	1	Female			Per.
	2	Male			No
	2	Female			Per.
	3	Male			No
	3	Female			Per.

Patient satisfaction with the physician								
Items	Evaluation	Gender & age	No	Percentage	Total			
The doctor explains	1	Male			No			
my problem before	1	Female			Per.			
treatment	2	Male			No			
	2	Female			Per.			
	3	Male			No			
	3	Female			Per.			

Patient satisfaction with the physician								
Items	Evaluation	Gender & age	No	Percentage	Total			
The doctor feels to	1	Male			No			
understand my	1	Female			Per.			
complaints	2	Male			No			
	2	Female			Per.			
	3	Male			No			
	3	Female			Per.			

#### References

- [1]. Alemadi, N. et al (2009) World Family Medicine Journal "Patients' Satisfaction with Primary Health Care Services in Qatar"
- [2]. Al-Khafi, S. et al (2006) "Patient Satisfaction of Primary Health Care Service ." ksa.
- [3]. Dansky KH, Miles J.Patient satisfaction with ambulatory health care services: waiting time and filling time. Hosp health serv admin 1997: 42(2):165-77.
- [4]. Alzolibani, A. (2011) "Patient satisfaction and expectations of the quality of service of University affiliated dermatology clinics." Journal of Public Health and Epidemiology Vol. 3(2), pp. 61-67.
- [5]. Britton, JR (2012) "The Assessement of Satisfaction with care in the perinatal period." <u>Journal of Psychosom Obstet Gynaecol.</u> USA: Denever. Jun, 33(2):37-44.
- [6]. Eiad A.AL Faris, Etall (1996) patient satisfaction with accessibility and services offered in Riyadh health centers. Saudi medical journal 1996:17(1): 11-17.
- [7]. Cleary PD, McNeil BJ. Patient satisfaction as an indicator of quality care. Inquiry. 1988 spring, 25(1) 25-36.
- [8]. Vuori H. Patient satisfaction-an attribute or indicator of the quality of care? QRB Qual Rev Bull. 1987, 13(3) 106-8.
- [9]. Shahian, DM, et al (2012). "Contemporary Performance of U.S. Teaching and Nonteaching Hospitals." Aca Med. USA, Apr 24.
- [10]. Kumari, R. et al (2009) "Study on patient satisfaction in the government allopathic health facilities of luck now district, India." Indian Journal of Community Med.
- [11]. Saeed, Abdullah et al (2002) Saudi Medical Journal "Satisfaction and correlates of patients' satisfaction with physicians'services in primary health care centers." vol. 22, n°3, pp262-267
- [12]. Oliver RL. Measurement and evaluation of satisfaction process in retail settings. Journal of Retailing. 1981, 57(3):25-48.
- [13]. Pascoe GC. Patient satisfaction in primary health care a literature review and analysis Evaluation and program planning. 1983, 6(3/4):185-97.
- [14]. Keating NL, Green DC, Koa AC, Gazmararian JA, Wu VY, Cleary PD. How are patients' specific ambulatory care experiences related to trust, satisfaction, and considering changing physicians Gen Intern Med. 2002,17(1): 29-39.
- [15]. Hickson GB, Clayton EW, Entman SS, Miller CS, Githens PB, Whetten-Goldstein K, Sloan FA. Obstetricians' poor malpractice experience and patients' satisfaction with care. JAMA 1994, 272(20):1583-7.
- [16]. Stelfox HT, Ghandhi TK, Orav EJ, Gustafson ML. The relation of patient satisfaction with complaints against physicians and malpractice law suits. Am J Med 2005, 118(10):1126-33.
- [17]. Davis AR, Ware JE. Involving consumers in quality of care assessment. Health Affairs 1988; spring 33-48.
- [18]. Fitzpatrick R. Surveys of patient satisfaction: Important general considerations Br Med J 1991; 302:88-9.
- [19]. Donabedian A. The quality of care: how can it be assessed? J Am Med Assoc 1988; 260:1743-8.
- [20]. Williams SJ, Calnan M. Key determinants of consumer satisfaction with general practice. Fam pract 1991; 8:237-242.
- [21]. Available at:
- [22]. <a href="http://psychology.about.com/od/cindex/g/cross-sectional.htm">http://psychology.about.com/od/cindex/g/cross-sectional.htm</a>.
- [23]. Accessed on 3/4/2012.
- [24]. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763650/
- [25]. <a href="http://www.ncbi.nlm.nih.gov/pubmed/18327374">http://www.ncbi.nlm.nih.gov/pubmed/18327374</a>
- [26]. Staelin, Richard (2011), AJMC, Duke University: The Fuqua School of Business.