

# Oncology Patients' Satisfaction Towards Quality Health Care Services at Accredited University Hospital

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**Abstract:** Background: Patients' satisfaction has become an important tool to assess the quality health care services, which is progressively required by accreditation agencies in the checking of quality of hospital care. Aim: evaluate oncology patient satisfaction towards health care services at University Hospital after accreditation. Methods: Quantitative, descriptive study was used. This study was conducted in five units as the medical; surgical (male and female) and gynecology wards at King Abdulaziz University Hospital. It is one of the first Hospitals in the eastern Mediterranean region implement health care accreditation standards. Sample: Total number of non-randomized convenience sample was 123 oncology patients who admitted to the above-mentioned setting. Patients were selected for their oncology diagnosis from each department and who is oriented and conscious included in the study. Data was collected by structured interview questionnaire for measuring patient satisfaction level towards health care services. Results: Studied sample was satisfied by the knowledge and an experience they give about illness; information about medical tests; and information is given about treatment at (mean = 4.67); highly statistically, significant difference's relationship was observed in the total level of patient's satisfaction, and care received from nurses to the oncology patient during his hospital staying and regarding to services care organization at  $p = .000$ . Conclusion: there was satisfaction with the information provided by the medical staff about the patient's illness and the course of treatment. This is followed by the time spent with the physician and the interpersonal skills of the physician and nurses. The implication of study: develop the training program for health care providers about effective documentation; guidelines for providers in care for similar patients, and different formal monitoring systems are used by health care providers or regulators.

**Keywords:** Patient Satisfaction, Patient-Centered Care, Quality of Patient Care, Oncology Nurse

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## 1. Introduction

"Appraisal of the quality *health care* system is an internationally required by accreditation agencies, so the patients' satisfaction come to be a serious parameter in the evaluation of the quality. Furthermore, an influence on illness outcome may be overwhelmed by satisfaction with care and patient agreement to treatment and subsequently [1]".

The characteristics of the quality of care must be "safe, effective, patient-centered, timely, efficient, and equitable. While patient satisfaction did not take account as one of the characteristics of quality and specifically observed that the

judgment to neglect satisfaction ratings was determined as they did not reflect it as suitable measure [2]".

Patients' satisfaction is considered as an indicator of providers' performance which examine for understanding improvements in the quality. This indicator is challenged by lack of evidence about how major illnesses are treated in most health care systems; disorganized outcome assessment; deficiency of evaluation tools related to quality of specific diseases; unexpected fluctuations among providers in care for similar patients; and the lack of documentation of monitoring systems are handouts by health care providers or regulators [3].

"Patients' satisfaction is the degree to which general health

care needs and condition-specific needs are met". Moreover, it is a very complicated principle, which is usually affected by some significant factors that can be categorized as internal such as (structure, process, and outcome of care) or external as (patients' satisfaction) [4, 5].

Other factors may effect on patients' satisfaction such as advice provided by health care providers in relation to diagnosis of the disease; follow up plan of treatment; time spent with the physician and the interpersonal skills of the physician. Added other factors are waiting time on the clinic to take an appointment; an identification of staff; the continuity of care provided; and gratification with the nursing staff [6]". Also, [7]" recommended other serious factors affecting as; the attitudes of nurses toward patients, effectiveness in delivering service, and the ability to communicate what patients need to know as well as the availability of up-to-date technology.

A high-risk group of patients can be identified based on an assessment of their expectations with the most common symptoms associated with cancer such as pain, fatigue, sleep disturbance and depression and its treatment as concluded by [8].

In Australia as mentioned by [9] it looks to be vital that the health service environment is superficial to the needs of patients with low health literacy. In additionally, there was association between worse physical health for little health knowledge patients in the cross-sectional study with the lower level of education or unemployment. Schedules need to be taken to reduce the low satisfaction is suffered by the lower level of education and unemployed due to lack health information.

In Jordan, study was conducted to "identify turn into between the characteristics of quality of health service in public sector hospitals colleague to private hospitals and their stress on patient satisfaction", the researcher recommended continuing to utility firm by those accountable for public sector hospitals in upgrading the quality of health service and continue the manner of development and modernization, especially in the area training of human resources and upgrading of staff [10]".

In Iranian health care organizations, study was done by [11] found that "Quality in health care is a production of cooperation between the patient and the health care provider in a supportive environment. Added that most common factors effect on the quality of health care services as; personal factors of the care provider and the patient; factors related to the health care organization; health care system; and the broader environment. Quality of health care system can be improved by transformation's leadership, effective strategic planning, staff development, sufficient resources, managing resources, employees and processes, and collaboration and cooperation among providers".

In a Saudi Arabia, study was conducted to measure an inpatient care experience and satisfaction. It was implemented in tertiary hospital revealed that the patients rated of communication between patients and nurses was slightly better than their communication with physicians [12]".

## 2. Significant of the Problem

Kingdom of Saudi Arabia has witnessed successfully ahead of socioeconomic development over the last 30 years. The country has committed vast resources to improving medical care for its citizens, and it earned 26th place according to ranking of the world's health care systems [12]". Additionally, Patients satisfaction is reflected in a good simulator to criticize the quality of health services and can predict both of compliance and application of accreditation standards. Accreditation is considered international evaluation process used to assess the effectiveness and efficiency of patient care. This study aimed to evaluate oncology patients' satisfaction level towards health care services at King Abdulaziz University Hospital. This hospital is one of accredited hospital in eastern Mediterranean region in 2012.

### 2.1. Aim of the Study

Evaluate oncology patients' satisfaction towards healthcare services at University Hospital.

### 2.2. Study Method

*Research design:* Quantitative descriptive study was utilized.

*Setting.* This study was conducted in five units as medical, surgical (male and female) and gynecology wards at King Abdulaziz University Hospital. This hospital affiliated to King Abdulaziz University which located in Jeddah region at Saudi Arabia. It is the first governmental university hospital in eastern Mediterranean region implement health care accreditation standards.

*Subject.* The target population consisted of selected number of oncology patients who, were admitted to above-mentioned setting. Sample size of oncology patients was nonrandomized convenience sample 123 oncology patients. Patients were selected for their oncological diagnosis from each department and who, is oriented and conscious included in the study. The researchers calculated the sample size from the whole target population based on the equation used by [13]". Equation:  $n = Z^2 \times pq / d^2$ .

### 2.3. Data Collection Tool

Structured interview questionnaire was used for data collection, this questionnaire to measure patients' appraisal of hospital doctors and nurses, as well as aspects of care organization and services. It was adopted from [14]". An international prospective study of the EORTC cancer in-patient satisfaction with care measure (EORTC IN-PATSAT32). It consisted of two parts: Part I: Demographic data: It includes information about the oncology patient such as age, gender. Part II: It consisted of 32 items satisfaction with care questionnaire to measure patients' appraisal of hospital doctors and nurses, as well as aspects of care organization and services. This part divided into three sections; 11 questions for first section which named as

“Patient’s satisfaction levels regarding the care received from the doctors”. 11 questions for second section which is “Patient’s satisfaction levels toward the care received from the nurses among the oncology patients”. 10 questions for third section is namely as “Levels of patient’s satisfaction toward the services & care organization received”.

Questionnaire items need to answer on four points Likert scale. It is ranged from one to four scores. (1=Poor 2=Fair 3=Good 4=Very good. For each area, the scores of the items were summed and the total was divided by the number of the items, giving a mean score. These scores were then converted into % score.

#### 2.4. Validity and Reliability Test

Face and content validity of the instrument has been taken into account. The tool was used from published research for [14] with title “An International prospective study of the EORTC cancer in-patient satisfaction with care measure (EORTC IN-PATSAT32)”. The content validity of EORTC tool was done by three of professionals who are specialized in nursing management and leadership for testing the content clarity and sentences understanding. The reliability of our study questionnaire was Cronbach’s alpha equal 0.75.

#### 2.5. Pilot Study

A pilot study was carried out to assess the tool clarity and applicability. It applied to ten % of studied sample from the selected departments. The sample which shared in piloting stage was excluded from the main subjects of the studied sample. Data was collected from the pilot study was analyzed and necessary modifications were done prior to the final application of the study tools.

#### 2.6. Field Work

The present study was carried out within two months started from the 1<sup>st</sup> of Mayo to the 30 of Jun 2015. The data was collected by the researchers themselves through interviewing patients and their families for the collection of

demographic data, and completion of structured interview questionnaire sheet. The time required to complete the questionnaire was about 30-45 minutes.

#### 2.7. Administrative and Ethical Consideration

Before we collected the data, the necessary approval obtained from the ethics committee King Abdulaziz University Hospital. Subjects were given both a written and verbal explanation of the research study. A verbal agreement to participate in the research was taken.

#### 2.8. Statistical Analysis

Data was collected and entered into a database file. Statistical analysis was performed by using the SPSS 20 computer software statistical package. Data was described by summary tables. Differences in categorical variables between more than two groups (e.g., Correlation between sociodemographic characteristics and the levels of patients’ satisfaction) were assessed using ANOVA. The alpha error level was set at 0.05, with  $p < 0.05$  being considered statistically significant.

### 3. Results

Oncology patients were included in this study 123 patients from medical; surgical (male & female wards) and gynecology units at King Abdulaziz University Hospital. Table 1 illustrated that the most common patient’s age among studied sample was ranged from 41 to 50 years. 57.7% were females while approximately 40% had the secondary school, followed by 36.6 had Bachelor’s degree and only one had Master’s degrees whereas the majority of studied oncology patients 85.4% of all studied sample were married; about one-third (37%) studied sample works as the housewife, whereas 30.9 had the private job. Two-Quarter (41.5%) of studied sample complaints of leukemia while only five had cancers in lungs. About 47% treated with chemotherapy followed by surgery. Few of them were treated by radiotherapy.

**Table 1.** Sociodemographic characteristics of studied sample. N=123 patients.

	Frequency	percentage
<b>Age</b>		
< 20-30	19	15.4
31-40	18	14.6
41-50	33	26.8
51-60	29	23.6
61-70	15	12.2
>71	9	7.3
<b>Gender</b>		
male	52	42.3
Female	71	57.7
<b>Level of education</b>		
diploma	6	4.9
master	1	0.8
Bachelor	45	36.6
Secondary	49	39.8
Preparatory or less	22	17.9
<b>Marital status</b>		
single	18	14.6
married	105	85.4

	Frequency	percentage
<b>Job</b>		
government	19	15.4
private	38	30.9
house wife	46	37.4
other	20	16.3
<b>Diagnosis</b>		
leukemia	51	41.5
un known	13	10.6
cancer in breast	24	19.5
cancer in bladder	9	7.3
cancer in lungs	5	4.1
cancer in colon	17	13.8
other	4	3.3
<b>treatment</b>		
chemotherapy	57	46.3
radiotherapy	10	8.1
surgery	39	31.7
other	17	13.8

Table 2 tabulated that there was highly statistically significant relationship observed in the total level of patient's satisfaction, and care received from the physicians to the patient at  $p=.000$ . Also, the studied sample satisfied from the their knowledge and experience which was given about the illness; Information about medical tests; and the information is given about treatment at (mean= 4.67, 4.60). Moreover, the attention paid to the interest of the patient personally was also the highly significant difference at  $p=0.000$  with the level of satisfaction at mean = 4.12.

**Table 2.** Patients' satisfaction levels regarding the care received from the doctors.  $N=123$  patients.

		Mean	Std. Deviation	t	df	Sig. (2-tailed)
1	1 Their knowledge and experience of your illness?	4.67	.623	83.091	122	.000
2	2 The treatment and medical follow-up they provided?	4.59	.638	79.838	122	.000
3	3 The attention they paid to your physical problems?	4.56	.655	77.263	122	.000
4	4 Their willingness to listen to all of your concerns?	4.26	.676	69.941	122	.000
5	5 The interest they showed in you personally?	4.14	.739	62.093	122	.000
6	6 The comfort and support they gave you?	4.20	.720	64.583	122	.000
7	7 The information they gave you about your illness?	4.60	.721	70.750	122	.000
8	8 The information they gave you about your medical tests?	4.60	.674	75.679	122	.000
9	9 The information they gave you about your treatment?	4.61	.697	73.350	122	.000
10	10 The frequency of their visits/consultations?	4.50	.853	58.568	122	.000
11	11 The time they devoted to you during visits/consultations?	4.45	.870	56.671	122	.000
	total	4.471	.56761	87.355	122	.000

Regarding the level of satisfaction towards the care received from the nurses. The finding stated that the total highly statistically significant differences' relationship was observed in the table 3 at  $p=.000$ . Furthermore, the way of the nurses carried out the physical examination (took temperature, felt pulse); The way of handled nursing care (during giving the medicines, performed injections, and human qualities (politeness, respect, sensitivity, kindness, patience,) were scored high as satisfying factors at mean = 4.4715. However, the interest they showed to patient personally was low satisfaction at mean=3.90.

**Table 3.** Patients' satisfaction levels toward the care received from the nurses among the oncology patients.  $n=123$  patients.

II.	II. The way they carried out your physical examination.	Mean	Std. Deviation	t	df	Sig. (2-tailed)
12	The way they carried out your physical examination (took your temperature, felt your pulse...)?"	4.41	.868	56.426	122	.000
13	The way they handled your care (gave your medicines, performed injections,)?	4.44	.841	58.537	122	.000
14	14 The attention they paid to your physical comfort?	4.30	.888	53.435	121	.000
15	The interest they showed in you personally?	3.90	.794	54.539	122	.000
16	16 The comfort and support they gave you?	4.04	.834	53.752	122	.000
	III. During your hospital stay, how would you rate nurses, in terms of					
17	Their human qualities (politeness, respect, sensitivity, kindness, patience,)?	4.4715	.89007	55.717	122	.000
18	The information they gave you about your medical tests?	4.20	1.063	43.844	122	.000
19	The information they gave you about your care?	4.25	.929	50.786	122	.000
20	The information they gave you about your treatment?	4.22	.966	48.243	121	.000
21	Their promptness in answering your buzzer calls?	4.04	.824	54.397	122	.000
22	The time they devoted to you?	4.03	.799	55.979	122	.000
	total	4.2103	.73040	63.930	122	.000

In relation to services and care organization received during a hospital staying, the finding indicated that total highly statistically significant differences' relationship were cleared at the table 4. Regarding services& care organization at  $p=.000$ . the exchange of information between caregivers; the kindness and helpfulness of the technical, reception, laboratory staff? And the information provided on your admission to the hospital, were scored high as satisfying factors at mean = 4.24.

**Table 4.** Patients' satisfaction levels towards the services& care organization received. N=123 patients.

	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
23	The exchange of information between caregivers?	4.15	.993	46.13	121	.000
24	The kindness and helpfulness of the technical, reception, laboratory personnel?	4.17	.989	46.75	122	.000
25	The information provided on your admission to the hospital?	4.24	1.003	46.94	122	.000
26	The information provided on your discharge from the hospital?	3.91	.967	44.86	122	.000
27	The waiting time for obtaining results of medical tests?	4.02	1.048	42.51	122	.000
28	The speed of implementing medical tests and/or treatments?	4.04	.987	45.41	122	.000
29	The ease of access (parking, means of transport...)?	3.98	1.116	39.59	122	.000
30	The ease of finding one's way to the different departments?	3.85	1.061	40.28	122	.000
31	The environment of the building (Cleanliness, spaciousness, calmness...)?	3.77	1.144	36.58	122	.000
total	Total	4.02	.88062	50.58	122	.000

Table 5 stated that the correlation between sociodemographic characteristics and level of oncology patients' satisfaction as perceived by them. The results showed that there was highly statistically mean significant differences relationship between the mean of the level of education and patient satisfaction as well as the type of unit at  $p=.000$ . While there were no statistically mean significant differences relationship between patient satisfaction and socio -demographic characteristics as age, gender and marital status at  $p>.000$ .

**Table 5.** Correlation between sociodemographic characteristics and the levels of oncology patients' satisfaction. n=123 oncology patients.

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Age					
Between Groups	3.838	7	.548	1.271	.271
Within Groups	49.596	115	.431		
Total	53.434	122			
Units					
Between Groups	10.909	2	5.454	15.392	.000
Within Groups	42.525	120	.354		
Total	53.434	122			
Gender					
Between Groups	.391	1	.391	.893	.347
Within Groups	53.043	121	.438		
Total	53.434	122			
Marital status					
Between Groups	.348	1	.348	.793	.375
Within Groups	53.086	121	.439		
Total	53.434	122			
Level of education					
Between Groups	9.305	4	2.326	6.221	.000
Within Groups	44.129	118	.374		
Total	53.434	122			

## 4. Discussion

Patients' satisfaction with services quality is becoming a critical assessment instrument for providers to make important decisions regarding operational and treatment plans [15]". Equally, data about the quality of care can be used by patients or relatives who want to make a well-founded choice of a health care provider. Moreover, external parties such as governments and health care inspectorates attach great importance data about the quality of care from individual health care providers [16]"

This study aimed to evaluate oncology patient satisfaction level towards health care services. The projecting findings that distributed with patient satisfaction level showed that the

most common sociodemographic data such as patient age among studied sample was ranged from 41 to 50 years. Little above fifty percent were female, while about third studied sample had secondary school, followed by the Bachelor's degree and only one had Master's degrees whereas most of them were married; nearly 31% of all studied sample works as housewife, approximately 42% of all studied sample complaints of leukemia while only five had cancers in lungs. With reference to chemotherapy 50%of the studied patients were treated with it followed by surgery. While Radiotherapy was recorded minority. This finding respected by [14] Considered that the characteristics associated quality of life may help clinicians to identify patients at risk for poor quality of life, as well as to plan medical, psychological or

social interventions to improve patient's well-being. Gender, age, income, education level, and social network have been identified as general determinants of quality of life in colorectal cancer survivors.

Highly statistically significant differences relationship was observed in the total levels of patients' satisfaction, and care received from the physicians to the patient during his staying in the hospital at  $p=.000$ . Also, the studied sample satisfied from the knowledge and experience they give about the illness; Information about medical tests; and information given about treatment at (mean= 4.67, 4.60). This finding validated by both [18], [19] stated that the highest level of satisfaction was reported by studied sample with quality of the services provided by the doctors and staff nurses as well as was generally satisfied regarding the care provided. Conversely, a study was conducted to estimate the patients' satisfaction levels regarding the Primary Health Care services in Riyadh, Kingdom of Saudi Arabia found that the level of satisfaction was relatively low and results identified areas in which quality improvement is required, mainly accessibility and continuity of care [14].

The finding also revealed that the attention paid to the interest of the patient personally was also a highly statistically significant difference at  $p=0.000$  with relatively low-level of satisfaction at mean= 4.12. This finding inconsistency with [20] concluded that the quality aspects relatives considered most important were dying peacefully, getting help in good time in acute situations, and personal attention. Aftercare was the aspect with the highest priority for quality improvement. Also, these results asserted by [9] turned out that aftercare had the highest 'need for improvement' as reflected in the scores for the aspects 'being informed about the possibilities of aftercare' and 'final conversation or discussion in which the care and treatment were evaluated.

Regarding the level of satisfaction with the care received from the nurses as perceived by the patients, findings illustrated that highly statistically significant differences' relationship were observed in the total level of patient's satisfaction, at  $p=.000$ . Furthermore, there were some factors reported highly satisfied to patients such as the way of the nurses carried out the physical examination; handled nursing care, and Their human qualities (politeness, respect, sensitivity, kindness, patience,) at mean = 4.4715. However, the interest they showed to patient personally was low satisfied to them. Those results matching [18], [19] as well as asserted by [16] indicated that almost half of patients answered that they 'never' or 'sometimes' received support from care providers when they were feeling depressed. At the same time, the other 'need for improvement' scores in the same way as 'Politeness of the caregivers', 'respect for the patient's life stance' and 'receiving medical aids soon enough' are examples of care aspects with a relatively low priority for quality improvement. This finding asserted by [9] concluded that response to their needs and provide the service to him rapidly, as well as permanent desire among staff in providing service to the patient has received the lowest arithmetic mean

between dimensions of quality of service in public sector hospitals, it might cause by the lack training and experience of hospital staff in dealing with the requirements of patients where this reflects the capacity of staff to apply the principle of orientation towards the client (Customer oriented).

Regards, the services& care organization received during a hospital staying, the finding indicated that highly statistically significant differences were cleared in the total level of satisfaction at  $p=.000$ . The exchange of information between caregivers; the kindness and helpfulness of the technical, reception, laboratory staff? And the information provided on your admission to the hospital, were scored high as the satisfying factor at mean = 4.24. This finding congruent with [9] showed that there were statistically significant differences in the impact of health service quality on patient satisfaction in private sector hospitals against public sector hospitals in favor of private sector hospitals as shown through the results that averages of the five quality dimensions in private hospitals is higher than the average dimensions of quality in public sector hospitals.

In relation to correlation of mean significant differences between socio-demographic characteristics and level of patient satisfaction. Highly mean statically significant differences relationship between levels of education; type of unit and patients satisfaction as expressed by patients. On other hand, no mean statistically significant differences' relationship between level satisfaction and age, gender as well as marital status. This supported by [21] reported that a lower satisfaction level was systematically noted for younger patients, those with higher education, those having experienced problems of communication in the announcement of the diagnosis and those who reported poor health status. While [18] emphasized that there was a significant relationship between the level of satisfaction and gender ( $P<0.05$ ), the females showed the highest satisfaction level (94.3%), while only (54.4%) of the males were satisfied. Also, there was a significant relationship between the level of satisfaction and occupation where the students showed the highest satisfaction (100%) followed by the workers (75%).

## 5. Conclusion

The current study concluded that there was statistically significant difference for all scale of patient satisfaction while patients were reported satisfied with over all care provided with these items "exchange of information between caregivers; the kindness and helpfulness of the technical, reception, laboratory staff? And the information provided on your admission to the hospital. On the other hand, a low-level of patient satisfaction was found among oncology patients with item "attention paid to the interest of the patient personally". Based on the findings of the study, it is recommended that to develop training program for health care providers about effective documentation. The development and optimization of data collection and reporting systems and developing evidence-based programs for improving quality of care in hospitals. Enhance the

different resource of evaluation related to quality for specific diseases; Develop guidelines for providers in care for similar patients; and develop a different formal monitoring systems are used by health care providers or regulators.

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