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## Patients' Satisfaction with the Quality of Health Services Provided at the Outpatient Department at Al-Shifa Hospital

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**Abstract:** This study aims to assess the patient's level of satisfaction with health services provided at Outpatients' Department at Al-Shifa Hospital. The design of this study is quantitative, descriptive, analytical, cross-sectional one. Interviewed questionnaire was developed and focused on patient's satisfaction. Probability systematic random sample was used in this study and 450 participants were interviewed with a response rate of 90%. Validity and reliability of the instrument were tested and the total instrument reliability test (Cronbach's Alpha) was 0.91. Five dimensions of patients' satisfaction were considered in this study; namely, access to care, physical environment, patients' expectations, waiting time in addition to information and interaction. The overall patients' level of satisfaction was 63.9%. The patients' expectation dimension reported the highest level of satisfaction (68.1%), while, the waiting time dimension reported the lowest level of satisfaction (58.5%). The study revealed that, there were statistically significant differences in the overall satisfaction with old patients, females, low educated, patients with low income and patients with chronic diseases are more satisfied than their counterparts (P value equal or less than 0.05). In contrast, residency place, marital status, number of visits, presence of disability, the recipient outpatient clinic, and the place that consumed most of the visit time did not show statistically significant difference on patients' level of satisfaction. The study recommended that reduced the patients' time in the outpatient clinic, introducing improvement on existing physical environment of the department and improving the way of communication and interaction between health care providers and patients are important factors for improving the patients' level of satisfaction.

**Key words:** Patients' satisfaction, outpatient department, quality, health services, Gaza.

### رضا المرضى عن جودة الخدمات الصحية المقدمة في قسم العيادة الخارجية التابع لمستشفى الشفاء

**ملخص:** تهدف هذه الدراسة إلى تقييم مستوى رضا المرضى عن جودة الخدمات الصحية المقدمة في قسم العيادة الخارجية التابع لمستشفى الشفاء. وقد صممت الدراسة كدراسة تحليلية مقطعية، واستخدم الباحث مقياساً مصمماً ومركزاً لمقابلة المرضى بطريقة منتقاة، وقد اختار الباحثون عينة الدراسة وعددها 450 مريضاً بطريقة منتظمة، حيث بلغت نسبة تجاوب المرضى مع الدراسة 90%. ولقد تمتع مقياس الدراسة بدرجة ثبات عالية بلغت 0.91 حسب مقياس (Cronbach's Alpha). وقد اشتمل مقياس الدراسة على خمسة أبعاد للخدمة الصحية وهي:

الوصول والاستفادة من الخدمة، والبيئة الطبيعية، وتوقعات المريض، ووقت الانتظار بالإضافة إلي التواصل والتفاعل مع المريض. وقد بلغ مستوى الرضا العام عن الخدمات 63.9%. وسجل بُعد توقعات المريض أعلى معدلات الرضا % 68.8. بينما سجل بُعد الوصول والاستفادة من الخدمة أقل معدلات الرضا وبلغ % 58.5. ولقد أظهرت الدراسة أن المرضى الإناث، وكبار السن، وذوي التعليم الإعدادي، وذوي الدخل الشهري لأقل من 1000 شيكل، وأصحاب الأمراض المزمنة، والذين مكثوا أقل من ساعة في العيادة، قد سجلوا فروق ذات دلالة إحصائية في معدل الرضا عن الخدمات الصحية أعلى من باقي فئات المرضى. بالمقابل أظهرت الدراسة أنه لا يوجد دلالة إحصائية بين المرضى في مكان السكن، و الحالة الاجتماعية، أو عدد الزيارات للعيادة، وفي وجود إعاقة أو عدم وجود إعاقة، وفي نوع العيادة المقصودة وأخيراً في المكان الذي استغرق فيه المريض أكثر الوقت في أثناء زيارته للعيادة.

وقد أوصت الدراسة أن تقليل وقت انتظار المرضى في العيادة، وإدخال بعض التحسينات على تركيبة العيادة الطبيعية، وكذلك تحسين طريقة التواصل والتفاعل مع المرضى، تعتبر عوامل مهمة لتحسين معدل رضا المرضى عن جودة الخدمات الصحية المقدمة لهم في قسم العيادة الخارجية التابع لمستشفى الشفاء.

## Introduction

It was decided early that the people have the right and sense of duty to participate individually and collectively in the planning and implementation of their health care [1]. Gathering the views and perceptions of patient is key of features of recent developments in society, and the health care systems have identified methods for assessing the views of patients, especially in the last decade [2]. In fact, a key lesson is that in many cases quality can be enhanced by making changes to healthcare systems without necessarily increasing resources. Interestingly, improving the processes of healthcare not only creates better outcomes, but also reduces the cost of delivering healthcare: it eliminates waste, unnecessary work, and rework [3]. The patient expects safety, security, support, competence, physical comfort and psychological comfort in the health care service environment [4]. The physical environment of a hospital should be created to be healing in manner and the facilities designed to support its patients in coping with stress and promoting wellness [5]. According to Al-Shifa Hospital (ASH) record the average numbers served at Outpatients' department (OPsD) were 90,000 patients per year, 7,500 patients per month, and 341 patients per day. It's very important to evaluate the quality of health services provided to this number of citizens and to explore their opinions regarding these services to be included in future health planning. Researchers in the quality of health services field used various measures of outcomes to develop better ways to monitor and improve the quality of care [6]. One of the major problems in

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Palestinian health care system is lack of consideration of clients' satisfaction [7]. This study is the first study that assessed five dimensions of patients' satisfaction from patient's perspective with the current health services provided at the OPsD at ASH. These dimensions included access to care, physical environment, patients' expectations, waiting time in addition to information and interaction.

### **Methodology**

#### **Place of the study**

The place of the study is the Outpatients' department of Al-Shifa hospital in Gaza strip. The Outpatients' department includes medical archive, x-ray room, laboratory room, minor operations room, and two main sections, which are the medical and the surgical sections. Surgical section includes all the clinics that follow up all types of surgical intervention and receives patients who need surgical intervention such as [Ear, Nose and Throat (ENT), Pediatric surgery, cardiac, neurology, orthopedic and so on]

Medical section includes all the clinics that follow up all types of diseases that not need surgical intervention such as (diabetes, hypertension, dermatology, GIT diseases, pulmonary, UTI and so on)

#### **Sample and sampling method:**

The study population is 90,000 patients per year, 7,500 patients per month and 341 patients per day. The sample size was calculated by statistical equation  $[n = N / [(0.05)^2(N)] + 1]$  [8]. Therefore, the sample size is 398 patients. However, the researchers increased the sample size to be 450 instead of 398 in order to increase the representative rate of the study. The data was collected over four weeks, in an average of 20 to 25 patients daily. Systematic random sample was used to determine the sample interval ( $k = 341/25 = 13$ ) (every thirteen patient). The researchers used a dice to determine the first interviewee patient, and then they chose every thirteen patient from the patients' reports of the specified days.

#### **Method of the study**

The study is quantitative, descriptive, analytical, cross-sectional one. The study population is all the patients who arrived and received health care at OPsD of ASH at the time of the study.

#### **Instrument of the study**

Interview questionnaire was used in this study, it has been developed into two parts. The first part includes information about patient's demographic, socio-economic, health status characteristics, the visit's aim and name of target clinic. The second part includes scale of five points to explore the outpatients' level of satisfaction with health services provided at OPsD at ASH. Items in this part reflect the five study's aspects of patient's

satisfaction. The researchers designed the questionnaire to express the patients' level of satisfaction by rating five points Likert scale (1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree).

The researchers used the Correlation Coefficient test (Person Correlation test) to evaluate the construct validity of each domain of the study and total degree of the instrument. All the coefficients were positive and significant at the 0.05 level, and all correlation coefficients ranged between (0.543 - 0.828), that means a content validity for what it is supposed to be measured. While Cronbachs' Alpha Coefficient test was used to measure the reliability of the instrument between each domain and the whole of the instrument. In this study the Cronbachs' Alpha value of the instrument was 0.912 that is very high and reflects a higher degree of reliability of the instrument (Table: 1).

**Table 1: Construct validity and reliability of the study instrument**

No.	Dimension	No. of items	Pearson correlation	Significant level	Cronbachs' alpha
1-	Access to care	9	0.543**	0.01	0.634
2-	Physical environment	11	0.828**	0.01	0.699
3-	Patients' expectations	13	0.808**	0.01	0.836
4-	Waiting time	12	0.794**	0.01	0.699
5-	communication and Interaction	13	0.802**	0.01	0.869

**(\*\*) Correlation is significant at level less than 0.05.**

The questionnaire has been prepared in suitable papers, pointed, cleared statements and proper arranged of ideas to make fullness of the questionnaire easy and simple. The content validity ratio was conducted by helping of experts to ensure relevance, clarity and completeness. Recommendations of the experts for changing were taken into consideration.

**Eligibility criteria**

The study included all the patients who arrived to the OPsD at ASH at the time of data collection (July and August, 2009), were received health care, able and accept participation, conscious and oriented to time, place and persons. Patients who weren't meeting these criteria were excluded.

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### **Ethical consideration and procedures**

Agreement from the Helsinki Committee (branch of Helsinki Committee in Switzerland). Ethical approval from the responsible person in MOH and administrative approval from the General Directorate of ASH were available. Every participant invited to give verbal consent to participate in the study. An explanatory form about the study attached to the questionnaire. It includes statement about patients' right to participate or to refuse participation in the study. Ethical concepts, anonymity, right of withdraw at any time, and respects for truth and for people were considered in this study.

### **Collection of data**

Interviewed questionnaire was used in this study. Each selected and eligible patient received full information about the study and its purposes and encouraged to participate in the study. A small colored card provided to these patients at the registration office to return back after receiving his/her care. Then, the patients were interviewed inside the OPsD after receiving their care, and asked to fill the questionnaire with assistance of the researchers. Collection of data continued over four weeks (20 days). Interviewed questionnaire method was used to ensure highest possible response rate, and to encompass difficulties that may arise in completing or understanding the questionnaire.

### **Data analysis**

Data analysis was done by the researchers. Means have been computed for the continuous numeric variables. To illustrate the main characteristics of the respondents, frequency tables have been used. Advanced statistical analysis was conducted to explore potential relationships between variables, student t-test and one way ANOVA test to examine potential relationships between the continuous variables. *P* value less than or equal 0.05 was considered statistically significant.

### **Result**

The results of the study illustrated description of the study respondents by socio-economic, health status and organizational characteristics that may affect patient's level of satisfaction. Also, it presents the study domains and its satisfaction level. In addition, it illustrated the differences between patients' characteristics and level of satisfaction.

Table (2) illustrated the study population characteristics that may affect the level of satisfaction as the following:

**Table 2: Description of the study population characteristics**

<b>Variables</b>	<b>Age group</b>	<b>Frequency</b>	<b>Percent</b>
Age	Up to 24	106	26.2
	From 25-34 years	99	24.4
	From 35-46 years	99	24.4
	More than 46years	101	24.9
Gender	Male	208	51.4
	Female	197	48.6
Residency place	Gaza Governorate.	62	15.3
	North Governorate	292	72.1
	Others Governorate	51	12.6
Marital status	Married	274	67.7
	Unmarried	108	26.7
	Divorced	3	0.7
	widow	20	4.9
Educational level	Elementary	90	22.2
	Preparatory	105	25.9
	Secondary	130	32.1
	University and more	80	19.8
Monthly income	Less than 1000 NIS	278	68.6
	From 1000-2000 NIS	84	20.7
	More than 2000 NIS	43	10.6
Number of visits (since two month)	The first visit	133	32.8
	More than one visit	272	67.2
Type of the disease	Chronic	119	29.4
	Acute	219	54.1
	Casualty	67	16.5
Disability	present	54	13.3
	Not present	351	86.7
Types of the clinic	Surgical clinics	129	31.9
	Medical clinics	241	59.5
	Others	35	8.6
Time consumed in the clinic	Less than 60 min	194	47.9
	From 60-120 min	127	31.4
	More than 120 min	84	20.7
Area that consumed more time	At registration office	20	4.9
	At Doctors room	328	81
	At X-ray room	42	10.4
	At Lab room	15	3.7
<b>Total number of the study respondents</b>		<b>405</b>	<b>%100</b>

The age group up to 24 years were (26.2%), and 67.7% were married, males represented 51.4%, 32.1% were secondary educated, and the patients who

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have had income less than 1000 NIS consisted 68.6% of the respondents. The result showed that 29.4% of the respondents have had one visit, patients with acute diseases consisted 54.1, patients with disability consisted 13.3% and patients who consume more than two hours represented 20.7% of the study respondents.

**Table 3: Means and percentage of satisfaction dimension's**

<b>Dimension</b>	<b>Mean</b>	<b>%</b>
Access to care	3.37	67.3
Physical environment	3.06	61.3
Patients' expectations	3.41	68.1
Waiting time	2.93	58.5
Information & Interaction	3.24	64.7
Overall satisfaction	3.19	63.9

Table (3): illustrated that the overall satisfaction was 63.9%. Also, it illustrated that the highest level of satisfaction was by the patients' expectations domain and the lowest level of satisfaction was by the waiting time domain.

**Table 4: Relationship between population characteristics and the study dimensions**

Study dimensions	Characteristic	Variables	Variable groups	Mean	Statistic test	Overall satisfaction "P value"
1- Access to care	Socio-economic characteristics	Age group	Up to 24 years	184.5189	F: 4.721	0.003*
			From 25-34 years	185.3737		
			From 35-46 years	187.9293		
<b>More than 46*years</b>			195.7624			
2- Physical environment		Residency place	North Governorate	190.0806	F: 0.208	0.812
			Gaza Governorate	187.9384		
			Others Governorate	188.7255		
3- Patients' expectations		Marital status	Married	187.6752	F: 2.274	0.079
			Unmarried	187.5000		
			Divorced	192.3333		
			widow	201.9000		
4- Waiting time		Gender	Male	184.5721	T: -3.295	0.001*
			<b>Female*</b>	192.3706		
5- Information & Interaction	Education level	Elementary	191.8222	F: 3.561	0.014*	
		<b>Preparatory*</b>	192.0190			
		Secondary	187.0154			
		University and more	181.8750			
	Monthly income	<b>Less than 1000 NIS*</b>	190.7770	F: 4.582	0.011*	
		From 1000-2000 NIS	183.6190			
		More than 2000 NIS	182.0465			
Patients' health status characteristics	Number of visits	The first visit	187.5789	T: -0.459	0.647	
		More than one visit	188.7500			
	Type of the disease	<b>Chronic*</b>	194.094	F: 5.978	0.003*	
		Acute	187.130			
		Casualty	182.200			
	Disability	present	187.4074	T: -0.314	0.754	
Not present		188.512				
Organizational characteristics	Types of the clinic	Surgical clinics	186.3178	F: 0.789	0.455	
		Medical clinics	189.5768			
		Others	187.5714			
	Consumed time in the clinic	<b>Less than 60 min*</b>	193.1443	F: 9.938	0.001*	
		From 60-120 min	186.7953			
		More than 120 min	179.7024			
	Area that consumed more time	At registration office	192.8500	F: 0.345	0.793	
		At Doctors room	188.2805			
		At X-ray room	188.1905			
At Lab room		184.7333				

\* Statistically significant at level less than 0.05



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Table (4): illustrated the difference between patients' characteristics (Socio-economic, Patients' health status and Organizational characteristics)

Which have significant level as age, gender, education level, monthly income, type of disease and the time consumed in the clinic. Also it illustrated patients' characteristics which were not significant level as residency place, marital status, number of visits, disability, type of the clinic and area that consumed more time.

### **Discussion**

The study showed that patients who were more than 46 years reported highest scores of satisfaction. This result is consistent with a study who found that patients between the ages of 18 to 34 gave the lowest rating of satisfaction level and patients aged between 50 to 64 years and more than 65 gave the highest rating. Also, it revealed that females elicited higher scores of satisfaction than males [9]. This result was approved with other study who assessed patients' satisfaction with primary health care centers services in Kuwait city, the results indicated that females are usually more satisfied than males [10]. In addition, the patients who were attained to preparatory education have had higher scores of satisfaction. This result was consistent with a study that evaluated patients' level of satisfaction with nursing care in selected hospitals in south of Gaza Strip who found that there are significant differences within educational level regarding satisfaction level, the client' who had lower educational level were more satisfied with nursing care than the clients' who had higher educational level [7]. Moreover, the patients who have income less than 1000 NIS were more satisfied. The researcher attributed this result to the low expectation level of the group with income less than 1000 NIS. Also, it may attribute to the ability of the high income group to compare between health services they received in different health centers. this result was inconsistent with a study who revealed that the high income patients were more satisfied than low income patients [11]. Furthermore, the patients who have chronic disease have highest satisfaction scores. This result could be attributed to the high expectations level, the less experience, the adaptation process with the disease and to misunderstanding of the health staff by the casualty patients. The differences between patients health status reach the significant level, that means there is a real relationship between the chronic patients and satisfaction level. Patients with chronic illness were more satisfied. This result was consistent with a study who showed that chronic illness were more satisfied [12]. In addition, it revealed that patients who spent time less than 60 minutes were more satisfied. . This result was approved by a study who found that the patients who waited shorter waiting time reported a higher satisfaction score than the

patients who waited longer waiting time [13]. Other study, found that the mixed results of the relationship between waiting time and patient satisfaction is unclear manner [14]. The mean of spent time in the clinic was 92 min and standard deviation was 66.36 min. there is an urged appeared that long waiting time is major item of patients' dissatisfaction [15]. Also, the result showed that the differences between other variables were not reached the significant level of satisfaction. These variables are residency place, marital status, number of visits since two month, present of disability, type of the clinic and the area that consumed more time.

### **Conclusion**

This study concluded that the OPsD at ASH in Gaza strip needs some changes in its structure and initiate new facilities in the health care system to improve the patients' level of satisfaction with the quality of health services.

### **Recommendations**

We recommend that the administration should pay more attention to the aspects of health care in this study and spend more efforts to improve the patients' level of satisfaction. Other study should be done by using qualitative design to collect data more deeply and help the patient to express his feeling about the level of satisfaction.

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