

## Assessment of Health Care Quality through Clients' Perspectives at Outpatient Consultancy Clinics in Al-Hilla City Hospitals

تقييم جودة الرعاية الصحية من خلال وجهات النظر للمراجعين الى العيادات الاستشارية الخارجية في مستشفيات مدينة الحلة

Mahdi Hamzah AL-Tae, MScN.\*

Mahasin Talib Al-Harbawi, PhD\*\*

Academic Nurse Specialist, High Institute of Health Vocational, Ministry of Health. e-mail: mahdimaster923@gmail.com

Assistant Prof., Department of Community Health Nursing, Middle Technical University, Medical Technical Institution /Baghdad , e-mail: mahasintalib@gmail.com

### المستخلص

**أهداف الدراسة:** تقييم جودة الخدمات الصحية من خلال وجهات النظر للمراجعين الى العيادات الاستشارية الخارجية في مستشفيات مدينة الحلة و لإيجاد الفروق المعنوية بين وجهات النظر للمرضى حول أبعاد جودة الرعاية الصحية و معلوماتهم الديموغرافية مثلًا ( السكن والعمر والجنس و المستوى التعليمي و المهنة).

**منهجية الدراسة:** أجريت دراسة وصفية للفترة ما بين 10 نيسان إلى 15 حزيران 2019 في العيادات الاستشارية الخارجية لمستشفى الحلة الجراحي العام ومستشفى الإمام الصادق(ع) العام ، اختيرت عينة غير احتمالية (غرضية) كان قوامها (200) مراجع جاءوا من مركز الرعاية الصحية الأولية إلى العيادات الاستشارية الخارجية للمستشفيات المذكورة أعلاه . تم جمع المعلومات من خلال المقابلة وتقنية أداة التقييم ( الاستمارة الاستبائية) حيث تكونت من (27) فقرة . أجريت دراسة مصغرة لتحديد ثبات أداة التقييم (الاستمارة الاستبائية) من خلال استخدام ثبات الاتساق الداخلي(كرون باخ الفا) والذي كانت(0,85) ( $p < 0.001$ ) ) وحدد مصداقية أداة التقييم من خلال مجموعة مكونة من (20) خبير. حلت البيانات باستخدام برنامج (SPSS) النسخة (20) باستخدام الإحصاء الوصفي ( التوزيع التكراري والنسبة المئوية و cut off point) والإحصاء الاستنتاجي ( معامل الارتباط واختبار تحليل التباين ) لغرض تحليل بيانات.

**النتائج:** أشارت نتائج الدراسة إلى أن إجمالي تقييم أبعاد جودة الرعاية الصحية المقدمة للمراجعين في العيادات الاستشارية الخارجية في مستشفى الحلة الجراحي العام ومستشفى الإمام الصادق(ع) العام كانت مستواها ضعيف وأشارت الدراسة أيضا هناك فروق معنوية بين وجهات النظر للمراجعين حول أبعاد جودة الرعاية الصحية و معلوماتهم الديموغرافية (السكن والجنس والعمر و المستوى التعليمي و المهنة).  
**التوصيات:** أوصت الدراسة تعزيز العيادات الاستشارية الخارجية بملاك طبي وصحي من أطباء وممرضين ذوو خبرة وكفاءة عالية بالتعامل مع المرضى ومشاركتهم في الدورات العلمية لتطوير معلوماتهم وإدراكهم حول أهمية عملهم لتقديم أفضل رعاية صحية للمراجعين.

**الكلمات المفتاحية:** تقييم، جودة الرعاية الصحية، المراجعين، العيادات الاستشارية الخارجية .

### Abstract

**Objectives:** To assess quality of health care for clients at outpatient consultancy clinics in Al-Hilla City Hospitals, and to find out significant differences between the clients' perspectives toward quality of health care dimensions and their demographic characteristics such as (residence, age, gender, level of education, and occupation ).

**Methodology:** A descriptive analytic study design was carried out at outpatient consultancy clinics of Al-Hilla city hospital (Al-Hilla and Al-Imam Al-Sadiq general teaching hospital) from April 10<sup>th</sup> to June 15<sup>th</sup> 2019. Non – probability (purposive) sample of 200 clients who were coming to the Outpatient Consultancy Clinics were selected. Data is collected through used of an assessment tools and interview technique with (27) items of questionnaire. A pilot study is conducted for the determination of the reliability of the assessment tool through the use of internal consistency reliability through the use of Alpha Cronbach approach(0,85) ( $p < 0.001$ ) and content validity through a panel of (20) experts. Data are analyzed through the application of the Statistical Package of Social Sciences (SPSS, Version 20) was performed through the application of descriptive statistics (frequency, percentage, mean, and cut off point) and inferential statistics (t-test and one way analysis of variance).

**Results:** The study indicates that The overall assessment quality of health care dimension according to SERVQUAL scale at poor level, and There are significant differences in clients' perspectives for quality of health care with regard to their demographic characteristics of residence, gender, age, level of education, and occupation.

**Recommendations:** Provision of qualified physicians and registered nurses who deals with outpatient consultancy clinics in Al-Hilla city hospitals, and establishment plans of training and development for medical and nursing staff to increase their knowledge, skills, and awareness to quality of health care for their practices that lead to provide best health care for clients.

**Key words:** Assessment, Quality of health care, Clients, Outpatient Consultancy Clinics.

## Introduction

Quality of health care is the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes. Quality of care plays an important role in describing the iron triangle of health care, which defines the intricate relationships between quality, cost, and accessibility of health care within a community<sup>(1)</sup>. Researcher's measure quality of health care to identify problems caused by overuse, underuse, or misuse of health resources. While essential for determining the effect of health services research interventions, measuring quality of care poses some challenges due to the limited number of outcomes that are measurable. Structural measures describe the providers' ability to provide high quality care, process measures describe the actions taken to maintain or improve community health, and outcome measures describe the impact of a health care intervention<sup>(2)</sup>. The quality health care includes a three pronged focus, (1) review resources and organization structure (structure standard); (2) focus on standards of medical and nursing care (process standard); and (3) focus on the consumer's satisfaction regarding to care (outcome standard)<sup>(3)</sup>. Several researchers mentioned the necessity and importance of measuring quality of healthcare services and indicated that the quality of healthcare doesn't improve unless it is measured. It has to be measured to effectively manage healthcare services<sup>(4)</sup>. However, the quality of healthcare service is

difficult to evaluate due to its abstractness, the high degree of intangibility and high professionalism demanded. On the other hand, patients are quite unique as customers compared to other customers in different services. They are worried about the outcome of the treatment and the process of being treated<sup>(5)</sup>.

## Methodology

A descriptive analytic study design was carried out from January 10<sup>th</sup> to June 15<sup>th</sup> 2019. The outpatient consultancy clinics of Al- Hilla city hospital (Al-Hilla and Al-Imam Al-Sadiq general teaching hospital). Non – probability (purposive) sample of 200 clients who were coming to the Outpatient Consultancy Clinics were selected. Data is collected through used of an assessment tools and interview technique with (27) items of questionnaire. The questionnaire was examined by 21 experts from different scientific branches having at least 15 years' experience in their field of work. The reliability had been evaluated through applying Cronbach's Alpha for (27) items, the results was (0.85) at (p<0.001). A statistical program such as SPSS (Statistical Package for Social Science) version 20 was used to analyze the data through descriptive data analysis that included frequencies, percentages, mean, and cut off point as well as inferential analysis, T-test and ANOVA. Data are collected through the utilization of the developed assessment tool and the use of the interview technique and keeping records of all available contacts that facilitate the access to the study sample. Each interview

takes approximately (5-10) minutes. The data collection process is carried out from February 11<sup>st</sup> to May 30<sup>th</sup> 2019.

### Ethical Considerations

The Institutional Review Board (IRB) at the University of Baghdad, College of

### Results:

**Table (1): Distribution of The Clients' Demographic Characteristics in Outpatient Consultancy Clinics: n=200**

List	Items		F.	%
1	Residence	Urban	181	<b>90.5</b>
		Rural	19	9.5
2	Age (years)	0-19	27	13.5
		20-29	67	<b>33.5</b>
		30-39	37	18.5
		40-49	61	30.5
		50 and above	8	4
3	Gender	Male	142	<b>71</b>
		Female	58	29
4	Education	can't Read and write	36	18
		Read and write	40	20
		Primary school	41	20.5
		Secondary school	28	14
		Bachelor and above	55	<b>27.5</b>
5	Occupation	Government Employee	68	<b>34</b>
		Private Employee	21	10.5
		Retired	46	23
		Housewife	28	14
		Un Employee	37	18.5

F= Frequency    % percentage

Nursing approved the study to be conducted. The study protocol meets both the global & the Committee on Publication Ethics(COPE) standards of respecting humans subjects' rights.

Distribution of clients' demographic characteristics indicates that (90.5%) of them are urban residence, (33.5%) are within the aged of (Less than 30) years old, majority of them are male (71%), (27.5%) have bachelor and above, (34%) are government employee.

**Table (2): Overall Assessment Quality of Health Care According to SERVQUAL Scale**

The levels according to cut off point			F	%
Quality of Health Care Dimensions	Tangibility	poor (5 – 8.3)	112.4	<b>56.2%</b>
		Fair (8.4 – 11.7)	51.8	25.9%
		Good (11.8 – 15)	35.8	17.9%
		<b>Total</b>	<b>200</b>	<b>100%</b>
	Reliability	Poor (5 – 8.3)	124	<b>62%</b>
		Fair (8.4 – 11.7)	47	23.5%
		Good (11.8 – 15)	29	14.5%
		<b>Total</b>	<b>200</b>	<b>100%</b>
	Responsiveness	Poor (4 – 6.6)	95	<b>47.5%</b>
		Fair (6.7 – 9.3)	71	35.5%
		Good (9.4 – 12)	34	17%
		<b>Total</b>	<b>200</b>	<b>100%</b>
	Safety and Assurance	Poor (4 – 6.6)	92.3	<b>46.15%</b>
		Fair (6.7 – 9.3)	73.3	36.65%
		Good (9.4 – 12)	34.5	17.25%
		<b>Total</b>	<b>200</b>	<b>100%</b>
	Empathy	Poor (4 – 6.6)	78.5	39.25%
		Fair (6.7 – 9.3)	90.25	<b>45.13%</b>
		Good (9.4 – 12)	31.25	15.63%
		<b>Total</b>	<b>200</b>	<b>100%</b>
	Total (SERVQUAL Scale)	Poor (22–36)	100.44	<b>50.22%</b>
		Fair (37- 51)	66.67	33.33%
		Good (52– 66)	32.91	16.5%

F= frequency; %= Percent

This table shows that (50.22%) of clients reported that quality of health care were at poor level, (33.33 %) of the clients reported that the quality of health care were at fair level, whereas only (16.5%) of clients reported that quality of health care were at good level according to SERVQUAL Scale.

**Table (3):Independent-Sample Test of Variance for clients' perspectives toward quality of health care with regard to their Residence and Gender**

Independent -Sample Test						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Residence	40.434	199	.000	1.26500	1.2033	1.3267
Gender	39.969	199	.000	1.36000	1.2929	1.4271
Clients' perspectives	53.691	199	.000	3.02000	2.9091	3.1309

df : degree of freedom sig. : significant

The results of this table reveal that there are high significant differences found in clients' perspectives toward quality of health care with regard to their residence at  $p \leq 0.05$ .

**Table (4): One Way Analysis of Variance for Clients' Perspectives toward Quality of Health Care with regard to their Age, Level of education, and Occupation**

ANOVA					
Age	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.627	4	2.657	4.493	.002
Within Groups	115.293	195	.591		
Total	125.920	199			
Level of Education	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.031	4	3.008	5.150	.001
Within Groups	113.889	195	.584		
Total	125.920	199			
Occupation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.136	4	2.534	4.268	.002
Within Groups	115.784	195	.594		
Total	125.920	199			

df : degree of freedom , sig. : significant

The results of this table reveal that there are significant differences found in clients' perspectives toward quality of health care with regard to their age, level of education, and occupation at  $p \leq 0.05$

**Table (5): Scheffe Multiple Comparisons of Variance for Clients' Satisfaction toward Quality of Health Care with regard to their Age, level of education, and occupation.**

		Mean Difference (I-J)	Std. Error		Sig.
Age	20-29	0-19	.40278	.20263	.415
		30-39	.47076	.17884	.144
		40-49	.40000	.17194	.252
		50 and above	.69006*	.16370	.002
Level of education	Bachelor and above	Illiterate	.92014*	.22516	.003
		Reads and Writes	.61949*	.18823	.032
		Primary School	.56971*	.17171	.029
		Secondary school	.54688*	.16546	.030
Occupation	Government Employee	Private Employee	.21579	.15975	.768
		Retired	.67135*	.16976	.004
		Housewife	.24682	.19000	.793
		Un employee	.31579	.19191	.609

sig. : significant

The results of this table have revealed that the client's with age group (20-29), level of education (Bachelor and above), and occupation (Government Employee) have higher significantly with their satisfaction toward quality of health care at  $p \leq 0.05$ .

## Discussion

### Part I- Regarding to Socio-demographic Characteristics

The present study indicates that the majority (90.5%) of clients who were coming to the outpatient consultancy clinics of general teaching hospitals in AL-Hilla city were living in urban areas, and the remaining (9.5%) were living in rural areas (Table 1). The present results is agree with the study at AL-Bashir Hospital in Jordan, they found that the majority of the study sample (89%) were living in capital (Amman), and 11% were living in city parties<sup>(6)</sup>. Also these findings are consistent with study conducted in Iraq, which presented that most the clients (92.6% )were urban residence, and (7.5%) in rural areas<sup>(7)</sup>.

Regarding to the patients' age , the finding of the study indicates that the highest percentage of the study sample (33.5%) of clients who were coming to the outpatient consultancy clinics were at age group less than 30 years, while the lowest percentage (4%) of them were at age group 50 years and above (Table 1). These results supported by a study done in India, they revealed that the majority of the study subjects at age (20-30) years<sup>(8)</sup>.

The findings of the present study show that the majority of the study samples were male (71%) and the remaining (29%) are females (Table 1). These results confirmed through a study done in Iraq, which show that most of referred client were male (80%) and (20%) were female<sup>(9)</sup>.

Concerning the educational levels, the findings of the present study indicate that (27.5%) who were coming to the outpatient consultancy clinics have bachelor and above, (20.5%) have primary school, (20%) have read and write, (18%) have illiterate (can't read and write), whereas only (14%) of them were secondary school degree (Table

1). These findings agree with a study done in Iraq, which presented that most the clients were bachelor and above degree (37.2%)<sup>(7)</sup>.

Respect to the occupation, the findings of the present study show that (34%) of the clients have government employee; (23%) have retired , (18.5) unemployed, (14%) housewife , (10.5%) private employee (Table 1). These results are consistent with a study conducted in Nigeria, which reported that the majority occupation of referred clients were 38% government employee and lowest percentage of clients' occupation was private employee (7.4%)<sup>(10)</sup>.

### Part II- Overall Assessment for Quality of Health Care According to SERVQUAL Scale

In (Table 2) the findings show that overall assessment for quality of health care toward clients' perspectives according to SERVQUAL Scale was poor level (50.22%) have range of score (22-36), followed by (33.33%) was fair level of clients have range of score (37-51), and remain (16.5%) was good level at range of score (52-66). These results of the current study were supported by the study done in Iraq, which reported that the five main dimensions of health services quality according to respondents' view are sequenced as follows: (Empathy) at first degree, then (Safety and assurance) at second degree, then (Responsiveness) at third degree, then (Tangibility) at fourth degree, and (Reliability) at last degree<sup>(11)</sup>.

### Part III- The Variance of the Clients' Perspectives toward Quality of Health Care Dimensions with regard to their Demographic Characteristics

The results of the current study show that there are significant differences found in the level of clients' perspectives toward quality of health care dimensions with regard to their demographic

characteristics (residence, age, gender, level of education, occupation, and number of visits to outpatient consultancy clinics) of clients who were coming to the outpatient consultancy clinics at general teaching hospital in AL-Hilla city at  $P \leq 0.05$ .

The results of (Table 3) reveal that there are high significant differences found in clients' perspectives toward quality of health care dimensions with regard to their residence and gender at  $p \leq 0.05$ , these results agree with a study done in South Australia, they reported that the clients demonstrated significantly different mean positive relation scores depending on area of residence and gender, these results come along within the result of the present study which indicated that there are high significant differences found in clients' perspectives toward quality of health care dimensions with regard to their residence and gender<sup>(12)</sup>.

The findings of the current study reported that there are significance differences in clients' perspectives toward quality of health care dimensions with regard to their age and they are (20-29) years group have dissatisfactions toward health care services (Table 4 and 5). These findings are confirmed through a study done in Saudi Arabia, they reported that there was a significant and positive correlation between patients' age and their perspectives toward quality of primary care referral letters and feedback reports<sup>(13)</sup>.

The results of the present study showed that the variance of the clients' perspectives toward quality of health care dimensions with regard to their level of education and they are Bachelor and above level education have dissatisfaction toward health care services (Table 4 and 5). These results are consistent with the results of the study done in Portugal, they reported that regarding schooling, those who obtained

the worse results on the quality of life scale were those who had only completed up to the 4<sup>th</sup> grade or lower, while the best results were from participants who had completed their bachelor degree<sup>(14)</sup>.

The results of the (Table 4 and 5) reveal that there are significant differences found in clients' perspectives toward quality of health care dimensions with regard to their occupation and they are only government employee dissatisfactions toward health care services at  $p \leq 0.05$ . These results of the current study are consistent with the results of a study done in Mongolia, which indicates that regarding professional/employment status, those who were government employee had higher quality of health care services when compared to non-active (Un employee) or those who were disabled<sup>(15)</sup>.

### Recommendation

Provision of qualified physicians and registered nurses who deals with outpatient consultancy clinics in Al-Hilla city hospitals, and establishment plans of training and development for medical and nursing staff to increase their knowledge, skills, and awareness to quality of health care for their practices that lead to provide best health care for clients.

### References

1. Carroll, M.D.; and Aaron, M.S. (2012) : The Iron Triangle of Health Care: Access, Cost, and Quality. *news@JAMA*. Retrieved 2016-11-21.
2. Asian Society of Pediatric Anesthesiologists (ASPA) (2015): The structural measures of health services quality. *Italian Journal of Science*, 14 (1), <http://dx.doi.org/ijis.2015>.
3. Parasuraman, A.; Berry, L.; and Zeithaml, V.A. (1988): SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of the Services



- Quality, *Journal of Retailing*, 64 (1), PP. 12-40.
4. McGlynn, E.A. (2005): Quality Assessment Of Reproductive Health Services. *Western Journal Of Medicine*, 163 (3), 19-37.
  5. Donabedian, A.; and Avidis L. (1998): The quality of care. How can it be assessed. *The Journal of the American Medical Association*, 260(12), doi:10.1001/jama.1988.03410120089033 . PMID 3045356.
  6. Al-Damen R. (2017): Health Care Service Quality and Its Impact on Patient Satisfaction: Case of Al-Bashir Hospital. *International Journal of Business and Management*, Published by Canadian Center of Science and Education. 12 (9), ISSN 1833-3850 E-ISSN 1833-8119.
  7. Shabila, NP.; Al-Tawil, NG.; Wahab, MA.; Al-Hadithi, TS.; Sondorp, E. (2017) : Assessment of the Iraqi primary care referral system, reporting a high self requested referral rate. *Middle East Journal of Family Medicine*. 10 (3), pp. 4-10.
  8. Steptoe, A.; and Mohabir, A. (2012): Health related quality of life and psychological wellbeing in patients with cardiomyopathy. *Journal Cardiovascular Thoracic Research*, 4 (4), pp.95-101.
  9. Al-Tawil, NG; Shabila, NP; Tahir, R; Shwani, FH; Saleh, AM; Al-Hadithi, TS. (2012) : Iraqi health system in Kurdistan region: medical professionals' perspectives on challenges and priorities for improvement. *Conflux Health*; pp. 4:19.
  10. Abodunrin, O; Osagbemi, G; and Akande, T.(2010) : Awareness and perception toward quality of referral system in health care: a study of adult residents in Ilorin, Nigeria, *Journal of African Medicine*, 9 (3), 176-80.
  11. Safa, M.H.; et al. (2010) : Measurement and Assessment of Health Services. Application Study in AL-Faiha General Hospital – Basrah. Iraq.
  12. Winefield, H.; Taylor, A.; Gill, T.; Pilkington, R.; and Koster, C. (2009) : The relationship between psychological distress and psychological wellbeing of the South Australian population. The Assessment of the Determinants and Epidemiology of Psychological Distress (ADEPD) Study. Discipline of Psychiatry, University of Adelaide.
  13. Al-Alfi, MA; Al-Saigul, AM; Abed-Elbast, AM; Sourour, AM; Hasnin, A; Ramzy HA. (2007): Quality of primary care referral letters and feedback reports in buraidah, Qassim region, Saudi Arabia. *Journal Family Community Med*. 14 (3), pp. 113–7.
  14. Lara, G.P.; et al. (2017): Influence of socio-demographic and clinical characteristics on the quality of life and psychological wellbeing for Portuguese patients. *Journal of school of nursing, university of Sao Paulo*. DOI: <http://dx.doi.org/10.1590/S1980-220X2016031903244>.
  15. Chimed, O. (2010) : The Perceived Quality Of Healthcare Service And Patients' Satisfaction In District Hospitals, Ulaanbaatar City, Mongolia [Msc thesis]. Higher Degree Committee of Ritsumeikan Asia Pacific University, International Cooperation Policy.