

# Evaluation of Consumers' Satisfaction towards Rural Primary Health Care Services in Babylon Governorate

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**Abstract- Study aims:** To evaluate consumers' satisfaction towards rural primary health care services in Babylon Governorate, and to determine the relationship between Consumers' satisfaction towards rural primary health care services with consumers' demographic characteristics of age, gender, occupation, education and socioeconomic status.

**Methodology:** A descriptive study is conducted throughout the period of (October 18<sup>th</sup> 2015 to May 2<sup>nd</sup> 2016) in order to evaluate consumers' satisfaction towards rural primary health care services in Babylon Governorate. A systematic random sample of (240) consumers is selected through the use of probability sampling approach. This sample is distributed throughout three primary health care sectors according to Babylon Health Department. These sections are AL-Mahaweel, Hilla First and AL-Hashimya for primary health care sectors. A total of (12) rural primary health care centers is selected for the purpose of the study. The reliability of the questionnaire which is determined through a pilot study and the validity are achieved through a panel of (10) experts. The overall items, which are included in the questionnaire, are (48) items. These items are divided into (6) sections which include consumers' satisfaction, trust services, empathy, responsiveness, assurance and general building structure of the rural primary health care centers. Data are collected through the use of structured interview technique and the questionnaire as means for data collection. Data are analyzed through the application of descriptive statistical data analysis approach that includes, frequencies, percentages, mean of scores, and graphical presentation of data by pie-chare; and inferential statistical data analysis approach that include Chi-squared test.

**Results:** The study results indicate that consumers' are satisfied with the services provided at rural primary health care centers in a high proportion of satisfaction with the efficiency health services and low proportion of consumers is satisfied to certain limit with the services provided in term of general building structure of rural primary health care centers.

**Conclusion:** The study concludes that the consumers' are satisfied with the efficiency of health care services provided at rural primary health care centers, due to intensive monitoring and evaluation through the government policies. Also, consumers' socio-economic status and occupation have affected their satisfaction in comparison with others socio-demographic characteristic.

**Recommendations:** The study recommends that further studies can be conducted to involve a national level to evaluate the health care services and to compare the health care services provided at rural and urban primary health care centers. And decision makers should support the strength point in the health

care services provided at rural areas to insure that these services can meet the consumers' needs.

**Index Terms-** Consumers' Satisfaction, Rural Primary Health Care Services.

## I. INTRODUCTION

Health services as primary care is the most frequently used in any health care system. The World Health Organization (WHO) defined that it is essential health care services made universal accessible to individuals and families in a community by means acceptable to all peoples<sup>(1)</sup>. Health centers generally introduce health services in terms of primary care as preventive and curative services, mostly adapted to local needs. Dispensaries are aimed to be the system's first line of contact with consumers, but in some areas, health care centers or even hospitals are effectively the first points of contact with the consumers'. Dispensaries provide wider coverage for health preventive and health measures, which is a primary goal of the health policy<sup>(2)</sup>. Rural primary health care are distinct, and while countryside does provides a location disadvantage in terms of access to health care services, other social determinants of health such as socio-economic factors disadvantage are also entwined in a complex form with aspects of rural living<sup>(3)</sup>. Rural primary health services are very different to their urban counterparts. They are generally smaller and are more dependent on primary health care services including general health and community health care. In additions, these services have less infrastructure and provides support to a more populations in dispersed places<sup>(4)</sup>. The satisfaction of consumers for health services and, therefore, has become one of the importance in providing an acceptable quality of health care elements. So that the use of services is proof of the satisfaction with the health care services provided, it is also necessary if the clients to take advantage of the services, and compliance with treatments and maintain an ongoing relationship with practitioners<sup>(5)</sup>. Measuring consumers' satisfaction has become an integral part of strategies management of primary health care centers services, all over the world. Moreover, quality assurance and accreditation process in most countries to be measured consumers' satisfaction on a regular basis concerning health care needs<sup>(6)</sup>. Consumers' satisfaction is adopted where satisfaction is achieved when the client's or user's perception of quality of health care and services received in health care setting (in a facility and community) is positive, satisfying and meets their expectations are achieved<sup>(7)</sup>

**Objectives**

1. To evaluate consumers' satisfaction towards rural primary health care services in Babylon Governorate.
2. To determine the relationship between consumers' satisfaction towards rural primary health care services with consumers' demographic characteristics of age, gender, occupation, education and socioeconomic status.

**II. METHODOLOGY**

**Design of Study:** A descriptive study, using evaluation approach, is carried out the present study. That is conducted on rural primary health care centers in Babylon Governorate for the period of October 18<sup>th</sup> 2015 to May 2<sup>nd</sup> 2016.

**Setting of the Study:** The study is carried out at rural primary health care centers in Babylon Governorate. These centers are distributed throughout three sectors. These sectors are AL-Mahaweel Primary Health Care Sector in North Babylon Governorate, Hilla First Primary Health Care Sector in the Middle of Babylon Governorate, and AL-Hashimya Primary Health Care Sector in the South of Babylon Governorate according to Babylon Health Department.

**Sample of the Study:** A systematic random sample of (240) consumer is selected throughout the use of probability sampling approach. The study sample is distributed throughout rural primary health care centers.

**Study Instrument:** In order to evaluate consumers satisfaction towards rural primary health care services in Babylon Governorate. A constructed questionnaire is prepared by the researcher which composed of the following:

**Part I:** This part contains demographical data and general information which include (primary health care sector, primary

health care center, age, gender, level of education, monthly income, occupation, and the type of services obtained by the consumers in the primary health care center.

**Part II:** This part is composed of (48) item and divided into (6) sections. They include: Client's Satisfaction, Trust Services, Responsiveness, Assurance, Empathy, and General Building Structure of Primary Health Care Center. These sections are composed of different numbers of items, such as (A) Client's Satisfaction which composed of (11) item, (B) Trust Services which composed of (9) item, (C) Responsiveness which composed of (6) item, (D) Assurance which composed of (6) item, (E) Empathy which composed of (5) item, and (F) General Building structure of Primary Health Care Center which composed of (11) item. These items are measured on 3-level type Liker Scale as 3 for satisfied, 2 for satisfied to certain limit, and 1 for unsatisfied.

**III. STATISTICAL ANALYSIS**

The statistical data analysis approach by using (SPSS-ver.20) is used in order to analyze and evaluate the data of the study. A **descriptive** statistical data analysis approach used to describe the study variables : Frequencies and Percentages. **Inferential** statistical data analysis approach: used by application of the Chi-square test this test is used for determining the association between socio-demographic data and consumers' satisfaction in rural primary health care centers. Testing the significant association. For this study the significant P-value ≤ 0.05.

**Results of the Study**

**Table (1): Distribution of Consumers by their Socio- demographic Characteristics**

Socio-demographic data	Rating	Frequency	Percent
Age / years	19 - 26	65	27.1
	27 - 34	55	22.9
	35 - 42	51	21.2
	43 - 50	32	13.3
	51 -58	22	9.2
	59+	15	6.2
Gender	Male	120	50
	Female	120	50
Education	Illiterate	52	21.7
	Primary school	39	16.2
	Middle school	49	20.4
	Secondary school	27	11.2
	Diploma graduate	28	11.7
	Graduate or post-graduate	43	17.9

	<b>Profession or honors</b>	<b>2</b>	<b>0.8</b>
<b>Occupation</b>	<b>Profession</b>	<b>4</b>	<b>1.66</b>
	<b>Semi-profession</b>	<b>10</b>	<b>4.17</b>
	<b>Shop-owner, farmer (self-employed)</b>	<b>103</b>	<b>42.92</b>
	<b>Skilled worker</b>	<b>27</b>	<b>11.25</b>
	<b>Semi-skilled worker</b>	<b>13</b>	<b>5.42</b>
	<b>Unskilled worker (household)</b>	<b>56</b>	<b>23.33</b>
	<b>Unemployed</b>	<b>27</b>	<b>11.25</b>
<b>Socioeconomic Status</b>	<b>High (26-29)</b>	<b>40</b>	<b>16.8</b>
	<b>Moderate (11-25)</b>	<b>45</b>	<b>18.7</b>
	<b>Low (<math>\leq 5-10</math>)</b>	<b>155</b>	<b>64.5</b>
<b>Type of services that obtained by the consumers</b>	<b>Pregnant Mother Care</b>	<b>39</b>	<b>16.2</b>
	<b>Child Care</b>	<b>28</b>	<b>11.7</b>
	<b>Health Promotion</b>	<b>26</b>	<b>10.8</b>
	<b>Immunization</b>	<b>41</b>	<b>17.1</b>
	<b>Family Planning</b>	<b>3</b>	<b>1.2</b>
	<b>Examination and Treatment</b>	<b>94</b>	<b>39.2</b>
	<b>Dental Care</b>	<b>5</b>	<b>2.1</b>
	<b>School Health</b>	<b>4</b>	<b>1.7</b>
	<b>Total</b>	<b>240</b>	<b>100</b>

This table reveals that the (27.1%) of the study sample are within the second age group (19-26) years old. Regarding gender, the majority of them (50%) of the study sample is male and the remaining is female. Concerning their education, the study results indicate that (21.7%) of the study sample are illiterate. In addition to the study sample occupation, the study

results indicate that (42.9%) are shop-owner, farmer (self-employed). Regarding socioeconomic status, the study indicates that (64.5%) are low socio-economic status ( $\leq 5-10$ ). Finally, the study results indicate that (39.2%) of the consumers visits the primary health care centers for examination and treatment.

**Table (2): Distribution of Consumers by their Overall Responses to the Health Care Services Provided at Rural Primary Health Care Centers**

	<b>Rating</b>	<b>Frequency</b>	<b>Percent</b>	<b>M.S.</b>	<b>Evaluation</b>
<b>Consumers overall responses to the health care services</b>	<b>Unsatisfied</b>	<b>4</b>	<b>1.7</b>	<b>2.58</b>	<b>Satisfied</b>
	<b>Satisfied to certain limit</b>	<b>45</b>	<b>18.8</b>		
	<b>Satisfied</b>	<b>191</b>	<b>79.5</b>		
	<b>Total</b>	<b>240</b>	<b>100</b>		

**M.S.= Mean of score, Cut off point (0.66), unsatisfied (mean of score 1-1.66), satisfied to what limit (mean of score 1.67-2.33), satisfied (mean of score 2.34 and more).**

This table depicts that the majority of the consumers are satisfied with the health care services provided at rural primary health care centers (79.5 %).

**Table (3): Statistical Association between the Consumers Overall Responses to the Health Care Services Provided at the Rural Primary Health Care Centers and their Socio-demographic Data**

Demographic data	Scale	Overall satisfied			$\chi^2$	d. f	P-value
		Unsatisfied	Satisfied to certain limit	Satisfied			
Age (years)	19 - 26	5	10	50	17.100	12	0.146 NS
	27 - 34	1	3	51			
	35 - 42	5	1	45			
	43 - 50	3	1	28			
	51 -58	2	1	19			
	59+	0	0	15			
Gender	Male	9	8	103	0.269	2	0.874 NS
	Female	7	8	105			
Education	Illiterate	4	5	43	10.491	10	0.399 NS
	Primary school	0	0	39			
	Middle school	5	4	40			
	Secondary school	1	1	25			
	Diploma graduate	3	3	22			
	Graduate or post-graduate	3	3	39			
	Profession or honors	0	0	0			
Socioeconomic Status	High (26-29)	5	10	20	25.45	4	0.045 S
	Moderate (11-25)	4	43	13			
	Low (less than 5-10)	34	46	55			
Occupation	Profession	3	3	45	27.751	12	0.006 HS
	Semi-profession	9	4	90			
	Shop-owner, farmer (self-employed)	2	2	12			
	Skilled worker	0	1	26			
	Semi-skilled worker	1	0	12			
	Unskilled worker (household)	0	2	1			
	Profession	1	4	22			

Continues...  
 To be continued

Type of services	Pregnant Mother Care	1	5	33	15.861	14	0.322 NS
	Child Care	3	1	24			
	Health Promotion	0	2	24			
	Immunization	0	3	38			
	family planning	0	0	3			
	Examination and Treatment	11	5	78			
	dental Care	1	0	4			
	School Health	0	0	4			

$\chi^2$  = Chi-square, D.f.= Degree of freedom, P-value= Probability value

This table presents that there is a non-significant association between the consumers' satisfaction with health care services and their demographic data at p-value more than 0.05, except with their socioeconomic status, which has a significant association with consumers' satisfaction at p. value less than 0.05. Also the study results indicate that occupation has a high-significant association consumers' satisfaction at p-value less than 0.01.

IV. DISCUSSION OF THE STUDY RESULTS

**Part I: Discussion of the Socio Demographic Characteristics for the Consumers of Health Care Services.**

The study results indicate that the majority of the study sample is within the second age group (19-26) years old. Regarding the socioeconomic status, the study results indicate that most of the study sample have low socioeconomic status. The present study is concurrent with Jiang and others (2009) who have studied the consumers satisfaction with public health care services in China. They find that most of the consumers are (19-25) years old, and low socio-economic status<sup>(8)</sup>. The study results indicate that the (50%) of the study sample is male and the remaining is female. In a study of Gadalla and others (2003) the results indicates that the majority of those reviewing to primary health care centers is female (61%)<sup>(9)</sup>. In another study of Almoajel and others (2014) who have studied patients satisfaction with primary health care in Jubail City, Saudi Arabia. Their findings indicates that the two-third of the study sample is male (73.5%) and the remaining is female<sup>(10)</sup>. Regarding to the study sample occupation, the study results indicate that more of them are shop-owner and farmer (self-employed). A study of Ganguly and Sharma (2014) who have studied the clients' satisfaction with quality of health care services in rural areas, their findings indicate that the majority of the study sample are within (19-26) years old, and the majority of them are free workers<sup>(11)</sup>. Concerning their education, the study results indicate that most of the study sample is illiterates. In a study of Salem (2010) who has studied patient satisfaction with primary health care services in Qassim Province, Saudia Arabia. A cross-sectional study design which are conducted on (1360) subject who have attended primary health care centers in Qassim province. They are selected randomly using systematic random sample, and the data collected by well trained investigators. Their findings indicate that most of the sample are illiterates (not able to read and write)<sup>(12)</sup>. Among the study sample, results

indicate that most of the consumers have visited the primary health care centers for examination and treatment, because inexpensive health care services. These results come consistent with the study of Rasheed and others (2012) who have studied consumers' satisfaction and perception about quality of health care at primary health care centers in India. A cross-sectional study is conducted on (400) participants with interview technique, for the period of May to November 2010. Their results indicate that (89%) of the respondents are reviewed for examination and treatment services provided at primary health care centers in comparison to other health care facilities<sup>(13)</sup>.

**Part II: Discussion of the Consumers Satisfaction with Efficiency of the Services**

Based on the statistical cut off point, the study results indicate that the (79.5%) overall consumers' responses are satisfied with the efficiency of the health care services provided at rural primary health care centers in Babylon Governorate. In a study of Nketiah-Amponsah and Hiemenz (2009) have studied the overall level of satisfaction associated with the choice of a health care providers. They find that the consumers are satisfied with the health care services provided at the health care centers<sup>(14)</sup>. In a study of Mohanraj (2015) has assessed primary health centers services and client's satisfaction. A cross-sectional study is conducted throughout (10) primary health care centers which are selected randomly. The sample includes (300) subject who are interviewed by the use of constructed questionnaire that is used as tool for collecting participants data. Their results indicate that most of the clients are satisfied with the health care services and various facilities introduced by the primary health centers.<sup>(15)</sup>

**Part III: Discussion of the Relationship between the Demographic Data and the Consumers Overall Evaluation the Health Care Services Provided at the Health Care Centers**

The findings depict that there is a non-significant association between the consumers' satisfaction with health care services and their demographic data at p-value more than (0.05) except with their socioeconomic status and occupation. A study of Xesfingi and Vozikis (2016) have studied the patient satisfaction with the healthcare system: Assessing the impact of socio-economic and health care provision factors. Their empirical analysis covers (31) countries for the years 2007, 2008,

2009 and 2012. The dependent variable, the satisfaction index, is defined as the patient satisfaction of their country's health system. They first construct an index of patients' satisfaction and then, at a second stage, this index related to socio-economic and healthcare provision variables. Their findings indicate that socio-economic variables are related to patients' satisfaction <sup>(16)</sup>. Abodunrin and others (2014) have studied the satisfaction with quality of health care received among mothers attending infant welfare clinics in a semi-urban community in Southwestern Nigeria. Their findings indicate that there is statistically significant associations between the level of satisfaction of the respondents and their occupations ( $p = 0.044$ ) <sup>(17)</sup>. Furthermore Jiang and others (2009) who have studied the consumers' satisfaction with public health care services in China. They find that most socio-demographic characteristic, including age, gender, income, education, residency and health status are insignificant in explaining the respondents' probability of being satisfied with public health care services <sup>(8)</sup>.

## V. CONCLUSIONS

The study concluded that the overall health care services provided at rural primary health care centers is efficient due to intensive monitoring and evaluation through the government policies of Babylon Health Directorate. Also, consumers' socio-economic status and occupation have affected their satisfaction.

## VI. RECOMMENDATIONS

The study recommends further studies that can be conducted to involve a national level to evaluate the health care services and to compare the health care services provided at rural and urban primary health care centers. Also, decision makers should support the strength point in the health care services provided at rural areas to insure that these services can meet the consumers'

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