

**Evaluation the teachers satisfaction regarding the quality of health  
services delivered by primary health care centers for covid 19-  
patients**

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**Abstract:**

Patient satisfaction is a very important issue for health care provider. There is a competitive environment between health organization . Nowadays hospitals and health care centers needs to remain in the competitive aspect with the other hospitals .

The aim of the study is to assess the teachers satisfaction regarding the quality of health care services delivered by primary health care center (PHCC)for patients with Covid 19 .

A descriptive cross- sectional study has been conducted in PHCC/ which belongs to Kirkuk health directorate from the period of 1<sup>st</sup> January till the end of May 2021.

Randomly selected sampling teachers from different scientific departments (kirkuk technical institute and technical collage of health and medicine – kirkuk ) . A special questionnaire form was prepared by interviewing with the study sample and 100 teachers were included in the study after receiving a verbal consent from them before establishing the study

The study results show that majority of teachers are female (62 %) , aged between 51- 60 years (34%), with a bachelors certificate (58%) and they are assistant lecturers (76 %) , and most of teachers were visited PHCC for being ill (44%) ) , and (38%) of them for laboratory investigation.

The study concluded that most of study teachers are not satisfied with the quality of care services delivered by PHCC. .

The study recommended that many educational training programs should be conducted to increase the knowledge of the health staff regarding the principles of patient satisfaction .

Key words :- evaluation , primary health centers , health services , Covid 19

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### Introduction

The quality of health care can be defined as a degree of performance related to a standard optimal interventions which is known to be a safe and have the ability to promote the health within available resources <sup>[1]</sup>.

The quality and continuity of health service which is providing for the patient convenience are the most important factor of quality affecting the degree of patient satisfaction <sup>[2]</sup>.

Patient satisfaction is a multi dimensional approach affected by many factors and healthcare quality affects patient satisfaction, that interferes with the patient behaviors. The patient satisfaction is related directly to the healthcare service quality and they are difficult to measure, but they can be operationalized using a multi disciplinary approach that constitute both of patient inputs, and expert judgment <sup>[3]</sup>

The service providers are usually complaining of many factors and cultural challenges like social, financial, political which are associated with demands for better efficiency, good quality, and fewer costs <sup>(6)</sup>. Health care institutions should go not for a medical view only but for replace it with a holistic social aspect to healthcare. The specific management are not enough, so the patients will be looking for better health service performance <sup>[2,3]</sup>.

The important measurement of service quality in health care organization is the patient satisfaction because of many reasons which are satisfied patient is usually maintaining a good constant relation ship with the specific health provider, identifying the health system weak point and thus can improve its risk management , satisfied patient is more prone to follow the medical treatment, and patient satisfaction is an important measurement for health system performance and therefore contributing to the total quality management of the organization <sup>[6,7]</sup>.

Recently , the main components of quality were defined as the combination of both access and effectiveness. The access meaning that individuals can maintain both health structure and care processes that they need while effectiveness consist from two main elements which are (clinical care , and interpersonal care ) and it means the extent to which health care providers is receiving their intended results<sup>[8]</sup>.

In Iraq primary health care canters services (PHCCs) were first implemented since 1978 <sup>[9]</sup> while quality assurance system were intended first since 2001 <sup>[10, 11]</sup> and one of its most important outcome indicators is patient satisfaction and convincement with health services .

### Aim of the study :-

The study aimed to evaluate the teachers satisfaction regarding the quality of health services delivered by PHCC which are belong to kirkuk health directorate for covid 19 patients

### Subjects and Methods

Official permission was taken from / kirkuk health directorate / and a written consent was taken from each teacher before establishing the study

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A descriptive ( cross- sectional study ) was carried out in PHCC which belongs to Kirkuk health directorate .

Randomly selected sample of 100 teachers from both sexes and from different depts Form technical collage of medical and health –kirkuk ,and kirkuk technical institute. A special questionnaire form was conducted after receiving their verbal consent to participate in the study and the data was collected by interviewing. with the study teachers . The study was conducted during the period from 1<sup>st</sup> January /2021 till the end of May 2021

The questionnaire form has been prepared by the investigator utilizing available related literature which include the following main items :

Part-1- Demographic characteristics including (sex, age, certificate ,scientific degree ).

Part-2- Teachers causes for visiting the PHCC.

Part-3- Teachers satisfaction regarding the quality of health services delivered by PHC included four main standard domains used in North American and European surveys <sup>[12]</sup> which are : .

- 1- Comprehensiveness
- 2- Health education
- 3- Completeness
- 4- Continuation

The last overall final question which is: “Are you satisfied with the services delivered by this PHCC?” had an answer of “Yes” or “No” only.

The data was statistically analyzed by using descriptive statistics for questions with yes and no answer .

The items of teachers satisfaction were rated according to type of likert scale as (yes- uncertain- no ) and scored as :

3 for yes answer

2 for uncertain answer

1 for no answer

Cut off point  $(3+2+1)/3= 2.0$  , so the results calculated by using the following formula :

**No. of teachers said yes ×3 + No. of teachers said uncertain × 2+ No. of teachers said no×1**

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Sample size (100)

The statistical test Chi—square was used .  $p \leq 0.05$  was considered level of significance.

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### **Results:**

Table 1 shows that majority of study teachers are female (62%), aged between 51- 60 years (34%), with a bachelors certificate (58%) and they are assistant lecturers (76%).

Table 2 shows that most of teachers were visited PHC for being sick (44%), and (38%) of them for laboratory investigation.

Table 3 shows that majority of teachers show a grand mean satisfaction index above 2.0 regarding comprehensiveness (2.2) and continuation (2.02) while for health education and completeness show the satisfaction index below 2.0.

Table 4 shows that majority of teachers are not satisfied for health services provided from PHCC (37- 74%) with a P value = 0.000.

### **Discussion:**

The current study shows that majority of teachers visited PHCC for being ill and for laboratory investigation. This result goes with the study done by Ahmed, et al / 2014 [13] on private hospitals of Karachi, Pakistan to assess the level of satisfaction among patient attenders regarding the quality of health services. They reported that majority of attenders visited these hospitals for receiving drugs, for vaccination, for dental services and lastly for maternal and child health care while few cases attended hospitals for laboratory investigation.

Regarding the satisfaction index for the four domains, this study shows that the comprehensiveness and continuation domains are above the cut-off point and the teachers were satisfied for these two domains. Faris in his study in Baghdad 2010/ [14] found that the satisfaction levels regarding the components (comprehensiveness as 47.7% and he explained this because the PHCC doesn't have the data base of each family in its catchments area including the telephone number in addition to that there is an absence of telephone instrument in many PHCCs and in the community.

In comparison with a similar study done by Stephen et al 2003/ [15], it shows higher level of satisfaction to the completeness domains but less for accessibility 59%, continuity 36% and health education 40% and higher for comprehensiveness 62%.

Regarding health education, this study shows a low satisfaction index (below cut-off point) because of unavailability of educational materials and little information received about preventive measures and other certain communicable diseases.

Similar study was done by Yu-Chi Tung/ [16] in 2009, found that a higher satisfaction rate 76.3% among attendants to primary health care in Taiwan regarding health education due to availability of many educational materials and good preventive measures to infectious diseases.

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A similar study was done by *Hamda S. Al-Neyadi* [17] / 2016 in private and public hospitals in the UAE to evaluate the quality of healthcare services by investigating the factors affecting patient satisfaction based on five service quality dimensions of the SERVQUAL namely; tangibles, reliability, responsiveness, assurance, and empathy, using a modified SERVQUAL questionnaire to gather the research data.

The study results show that the perceived healthcare services in private hospitals and public hospitals do not significantly differ in spite of all patients were more satisfied with nursing care, the perceived satisfaction of patients with the quality of services provided by physicians and nurses as well as the quality of the hospital environment do not significantly vary in both public and private hospitals. Therefore, the five dimensions of the SERVQUAL appeared to be a consistent and reliable scale for measuring healthcare service quality in the United Arab Emirates context.

Regarding the completion domain, this study shows that there is a low satisfaction index below cut-off point and this can be explained because of short time spent for each patient and no measuring for physical and vital signs.

Another similar study was done by *Md. Abdul Kaium* in Bangladesh /2019 to explore the perception and expectation of patients concerning the public hospital services by using service quality gap model. He said that Healthcare is one of the largest sectors considering the revenue earnings and employment generation which is expanding rapidly.

But with the fast growing purchasing power, Bangladeshi patients are willing to pay more to avail the health care services of international standard. Such an understanding facilitates hospital management to boost up the quality of service and satisfy patients to a great extent as well. SERVQUAL instrument among several tools of measuring service quality and patient satisfaction is the most widely used tool.

It was found that there is a huge gap in the hospital services like prompt services, willingness to help patients, special care to special patients, attempts to know what patients' needs are and sympathetic treatments. [18]

Gadallah *et al* in 2003[19] conducted a similar study to assess the patient satisfaction in different PHCCs in two districts in Egypt. He found that there is a better result regarding completeness especially the availability of prescribed drugs and its quantity with a satisfaction rate of 63.7% and 52.2% respectively.

For continuation domain the study revealed that the satisfaction index was above cut-off point and this due to that most of attendants replied that they use to consult the same doctor in their visits and this will enhance the continuity of services delivered from them.

Another study was conducted by Judy *et al* / 2002 [20] at the Philadelphia Veterans' Affairs Medical Center and the University of Pennsylvania Health System between May 2001 and April 2002 found that a rate of satisfaction regarding the continuation is between 39.1% to 41.5%. They suggested that health literacy, as assessed through a pronunciation exercise that is closely

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related to more comprehensive measures of literacy, has a consistent, albeit weak relationship with patient satisfaction.

This study shows that the over all satisfaction rate is very low and this can be explained due to the lack of organization inside the PHCC, the over crowding, lack of drugs , poor communication between PHCC staff and the attendances .

A study was done by Joseph and Nichols/ /2007 [21] in West India to assess the patient satisfaction and quality of life among persons attending chronic disease clinics and they found that quality of life and patient satisfaction both are essentials in the monitoring and valuation of healthcare.

Further study was done by Afiq Izzudin A. Rahim/ [22] )/ 2019 who have been proposed as new methods for assessing patient satisfaction and monitoring quality of care. The objectives of this research were to identify service quality (SERVQUAL) dimensions automatically from hospital Face book reviews using a machine learning classifier, and to examine their associations with patient dissatisfaction.

They found that 73.5% of patients were satisfied with the public hospital service, whereas 26.5% were dissatisfied. SERVQUAL dimensions identified were 13.2% reviews of tangible, 68.9% of reliability, 6.8% of responsiveness, 19.5% of assurance, and 64.3% of empathy. After controlling for hospital variables, all SERVQUAL dimensions except tangible and assurance were shown to be significantly related with patient dissatisfaction (reliability,  $p < 0.001$ ; responsiveness,  $p = 0.016$ ; and empathy,  $p < 0.001$ ).

They mentioned that rural hospitals had a higher probability of patient dissatisfaction ( $p < 0.001$ ).

### **Conclusion:**

Majority of teachers show a grand mean satisfaction index above 2.0 regarding comprehensiveness and continuation domains while for health education and completeness the satisfaction index is below and they are not satisfied of health services provided by PHCC .

### **Recommendations :**

The medical staff and sub staff should give more attention time for the patient and training the doctors and other medical staff for different interpersonal communication skills to deal with the patient in a suitable manner.

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**Table (1) : Socio demographic characteristics of the study teachers**

Socio- demographic parameter		Study teachers N=100	
		No,	%
<b>Sex</b>	<b>male</b>	<b>38</b>	<b>38</b>
	<b>Female</b>	<b>62</b>	<b>62</b>
<b>Age Group (years )</b>	<b>25-30years</b>	<b>8</b>	<b>8</b>
	<b>31- 40 years</b>	<b>30</b>	<b>30</b>
	<b>41-50 years</b>	<b>26</b>	<b>26</b>
	<b>51-60 years</b>	<b>34</b>	<b>34</b>
	<b>&gt; 60 years</b>	<b>2</b>	<b>2</b>
<b>Certificate</b>	<b>PhD</b>	<b>4</b>	<b>4</b>
	<b>Master</b>	<b>34</b>	<b>34</b>
	<b>Diploma</b>	<b>4</b>	<b>4</b>
	<b>Bachelors</b>	<b>58</b>	<b>58</b>
<b>Scientific degree</b>	<b>Assistant proof</b>	<b>4</b>	<b>4</b>
	<b>Lecturer</b>	<b>20</b>	<b>20</b>
	<b>Assistant lecturer</b>	<b>76</b>	<b>76</b>

**Table (2): Frequency distribution of study sample according to their perceptions regarding the main reason for visiting the PHC**

The main causes for visiting PHC	Study teachers N=100	
	No.	%
<b>Being sick</b>	<b>44</b>	<b>44</b>
<b>Laboratory investigation</b>	38	38
<b>Dressing</b>	14	14
<b>Consultation and referral</b>	4	4
<b>Total</b>	<b>100</b>	<b>100.0%</b>

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**Table 3: Frequency distribution of study teachers according to their satisfaction index  
regarding the domains of health services**

Satisfaction parameter	Teachers number = 50			Mean of score	Crand mean (CM)/assessment value
	yes	uncertain	No		
<b>Comprehensiveness</b>					
<b>a- Follow- up</b>	26	16	58	1.68	<b>GM=2.2</b>  <b>Above cut- off point</b>
<b>b- Answering all the questions</b>	74	2	24	2.50	
<b>c- Explaining the dosage of each drug</b>	72	20	20	2.52	
<b>Health education</b>					
<b>a-Availability of educational materials</b>	14	46	40	1.74	<b>GM=1.85</b>  <b>Below cut-off point</b>
<b>b-Information about preventive measures certain communicable diseases</b>	0	62	38	1.96	
<b>Completeness</b>					
<b>a- Enough time spent with each patient</b>	34	20	46	1.88	<b>GM=1.62</b>  <b>Below cut- off point</b>
<b>b-Vial signs measured</b>	38	8	54	1.84	
<b>c- Completeness and comprehensiveness of physical examination</b>	14	22	64	1.50	
<b>d- Availability of drugs and of medical and paramedical staff</b>	6	16	78	1.28	
<b>Continuation</b>					
<b>A-referral process</b>	58	10	32	2.26	<b>GM=2.02</b>  <b>Above cut- off point</b>
<b>B-Consultation the same physician</b>	29	26	48	1.78	

**Table 4- Over all satisfaction with health services delivered by PHCC**

<b>Over all satisfaction with health services delivered by PHCC</b>	<b>Study sample N= 50</b>				<b>P- Value*</b>
	<b>Yes</b>		<b>N0</b>		
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	
	<b>26</b>	<b>26</b>	<b>74</b>	<b>74</b>	

$\chi^2 =$  was used