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## Evaluation of Women's Satisfaction Regarding MCH Services Provided in Health Care Centers with High Maternal and Infant Mortality Rate in Wassit Governorate

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### Abstract

**Background:** As client opinion is useful to improve MCH service delivery, evaluation of client satisfaction should be undertaken periodically.

**Objective:** To determine the level of satisfaction of pregnant women and mothers regard health care services provided in the MCH units in Wassit Governorate.

**Patients and Methods:** A cross-sectional study, with a convenient sample of mothers and pregnant women who were attending to the MCH clinics. The study was conducted in three sectors with high maternal and infant mortality rate which include 28 health care centers in Wassit Governorate. Data were collected through the period starting on 16 December 2018 and ending on 31 March 2019, using a specially designed questionnaire.

**Results:** The important inference of this study is the quality of care from the pregnant women and mothers perspective that reflected in client satisfaction. This study has revealed that (67.5%) of pregnant women were fairly satisfied, while 67.1% of mothers were fairly satisfied with health care services provided in MCH units at different PHC centers in Wassit city.

**Conclusion:** This study revealed that the majority of pregnant women and mothers were fairly satisfied with health care services provided by the MCH unit in the Wassit Governorate and the quality of antenatal care and care for children less than 5 years provided at studied MCH centers need to be improved in all activities.

**Keywords:** Women's satisfaction, MHC services, Health care, Maternal mortality, Infant mortality.

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### Introduction

Patients' satisfaction is considered as an important indicator when measured quality, of health care services deliveries in both low and middle-income countries and constitutes

a significant component for assessing the health care outcome. Studies showed that Patients' satisfied is a good way to develop a relationship with the health care system,

leading to Improve Patients' compliance, continuity of care and better health outcome at the latest [1].

Despite improvements and developments in the delivery of Mothers and Children (MCH) services, studies have indicated that poor provision of essential MCH interventions, poor quality, and low coverage, remain a big challenge for most countries [2].

There is a growing interest in measuring clients' satisfaction, through collecting the opinions, and concerns of service users. These opinions have become an important tool for evaluation of health care delivery and health service performance. Client satisfaction is an important indicator of early detection against potential problems in the provision of health services [3].

A secondary aspect is that through a survey, any organization demonstrates its interest in communicating with consumers in finding out their pleasures, displeasure, needs and well-being. Despite measuring the satisfaction of every client is impossible, these clients whose opinions are request and others who observe these activities and process are given a level of importance and recognition [4].

Prenatal care, antenatal care, child health care and childhood vaccination make up the most important package of preventive services that can save and improve women and child health. Families tend to use private medical services when someone is Suffering from health problem, but frequently neglect beneficial of these preventive services that are essential to improve maternal health [5].

Quality of clients' satisfaction and MCH services is interrelated concepts. Determine the quality of health services represents a true challenge, and the studies have indicated that a positive correlation between clients' satisfaction and MCH services utilization and providing better health care services is indicated an important concept for the future socioeconomic and well-being of any country [6].

## **Patients and Methods**

The Wassit is a Governorate about 180 kilometers south of Baghdad Governorate the capital of Iraq and accounts for four percent of the total area of Iraq. According to the census conducted in 2018 by the local and central authorities, the whole population of the Wassit Governorate was 1,360,000 inhabitants.

### **Design and setting of the study**

A descriptive, cross-sectional study, with a convenient sample of pregnant women and mothers who attended to the MCH clinic. The study was conducted in sectors with high maternal and infant mortality rates (AL-Kut first sector, AL-Kut second sector, and Al-Nummania sector) which include 28 health care centers in Wassit Governorate. Data were collected through the period starting on 16 December 2018 and ending on 31 March 2019, using a special designed questionnaire.

Inclusion criteria all pregnant women and mothers of a child under five years of age were included in the study.

### **Data collection technique**

Data were collected using a special designed questionnaire that was adopted

from basic health service's package from the Iraqi Ministry of Health [7]. With the addition of a few minor modifications after reviewing previous studies. Content validity was determined for the questionnaire through the use of a panel of eight experts in order to evaluate its contents, clarity, relevance and adequacy to achieve the present study aims.

Data of women's satisfaction with maternal and child care unit were collected from pregnant women and mothers. Data were collected by direct interview by using questionnaires. Each interview lasts 15-20 minutes this includes questions about: demographic data, gestation status and satisfaction and acceptance of pregnant women and mothers.

### Statistical analysis

Was done using the SPSS (version 25) package program was employed in the statistical analysis. Data were presented in simple measures as follows: Frequency and percentage, Mean and SD (standard deviation), and Range (minimum-maximum values).

Assessment score of mothers was determined according to the quartile status where those below second quartile (<46) considered as poor services, on third quartile (46-57) as fair and above third quartile ( $\geq 58$ )

as good services. There were 23 questions and the answers were scored as follows (3) for always, (2) for sometimes and (1) for no. While assessment scores of pregnant women was determined according to the quartile status where those below second quartile (<54) considered as poor services, on third quartile (54-67) as fair and above third quartile ( $\geq 68$ ) as good services. There were 27 questions and the answers were scored as follows (3) for always, (2) for sometimes and (1) for no.

Limitations of the study:

1. Some pregnant refused to participate in the study.
2. There is no comprehensive program for the evaluation of MCH services.

### Results

#### Distributions of Demographic data and Gestation status for Mothers and Child

General characteristics of the mothers are described in table 1. Three hundred and forty three (343) mothers were involved in this study. Most of the mothers (31.5%) were in age group (25-29) years. Over one quarter of them (27.1%) were illiterates and 25.4% had one previous pregnancy. Approximately 84% of these mothers delivered their children in hospitals and 55.4% had a regular health visit to the child at the health care center.

**Table (1):** Demographic data and Gestation status for Mother and Child

		No	%
Sector	First Kut Sector	128	37.3
	Second Kut Sector	161	46.9
	Al Numania Sector	54	15.7
<b>1-Demographic data</b>			
Age of the mother (years)	<20	30	8.7
	20-24	87	25.4
	25-29	108	31.5
	30-34	66	19.2
	≥ 35	52	15.2
	Mean±SD (Range)	27.1±6.14 (16-46)	
Social status	Married	341	99.4
	Divorced	2	0.6
	Widow	-	-
Level of education	Illiterate	93	27.1
	Read and write	65	19
	Primary	89	25.9
	Intermediate	40	11.7
	Secondary	22	6.4
	Institute/College	34	9.9
<b>2-Gestation status:</b>			
2-1-Number of previous pregnancies	0	46	13.5
	1	87	25.4
	2	71	20.8
	3	61	17.8
	4	45	13.2
	5	16	4.7
	≥6	16	4.6
	Mean±SD (Range)	2.3±1.78 (0-13)	
2-2-Place of last birth	Hospital	287	83.7
	Midwives	56	16.3
2-3- The regularity of child's visits to health care center	Regular	190	55.4
	Irregular	153	44.6

### Satisfaction and acceptance of mothers about the health services

Details of mothers' responses to the questions of satisfaction and acceptance of mothers about the health services are shown in table 2. Most of mothers were satisfied that their baby's weight and height had always measured has constituted 88%, while majority of the mothers have been reported of the lack of health services regarding the measurement of their baby breathing rate 95.9%, distribution of pills and condoms 95.6%, oral and dental examination 92.1%

and measurement their child temperature 81.6% respectively. About mother satisfaction on doctors' service, this table shows that about half of mothers 49.9% not satisfied with their doctor examination and carefulness to check everything. In considering pharmacy services, 48.1% of mothers reported that sometimes the medications prescribed by the physician are available and adequate. Mothers who neglect their supply with iron and folic acid pills have constituted 91.3%. Regarding the generally satisfied mothers, 46.1% of

mothers said sometimes patients receive the best care from the staff working at this practice and about three quarters 72.3% of studied mothers, answered that they were

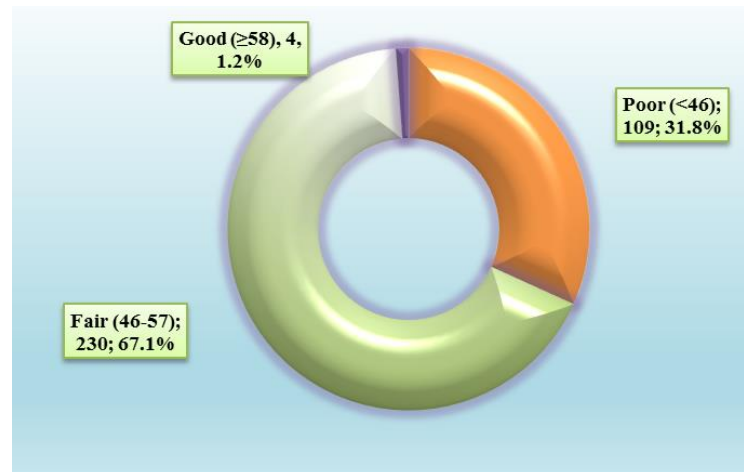
always had absolute faith and confidence in the doctors, while 70.3% of mothers were always had full confidence in the medical staff they treat them.

**Table (2):** Satisfaction and acceptance of mothers about the health services

Satisfaction of mothers about the health services	Always		Sometimes		No	
	No	%	No	%	No	%
<b>a-Mothers and child related services &amp; satisfaction</b>						
Is the baby's weight and height measured	302	88	18	5.2	23	6.7
Measure the baby's breathing rate	9	2.6	5	1.5	329	95.9
Measuring the temperature of the child	47	13.7	16	4.7	280	81.6
Oral and dental examination	19	5.5	8	2.3	316	92.1
Is your child vaccinated with the vaccine due and according to the vaccine schedule	332	96.8	9	2.6	2	0.6
Advised on family planning ( distribution of pills and condoms)	10	2.9	5	1.5	328	95.6
<b>b-Question list about doctor services</b>						
The doctor is very careful to check everything when he examining me	120	35	52	15.2	171	49.9
The doctor is very interested in the patient	150	43.7	133	38.8	60	17.5
I feel I have not been given enough information by the doctor	194	56.6	59	17.2	90	26.2
the doctor makes me feel I am wasting his/her time	43	12.5	47	13.7	253	73.8
The doctor is very understanding and Collaborator	166	48.4	151	44	26	7.6
In general there is harmony and compatibility between the work of the Doctor and the health worker when treating the mother and her child	174	50.7	111	32.4	58	16.9
<b>c-Question about pharmacy services</b>						
The pharmacist's instructions about how to take your medication	253	73.8	45	13.1	45	13.1
Medications prescribed by the physician are available and adequate	96	28	165	48.1	82	23.9
It is supplied with iron and folic acid pills and in sufficient quantity	19	5.5	11	3.2	313	91.3
<b>d-Questions regarding access to the health center</b>						
The time it takes since the patient enters the health center, waiting for admission to the doctor, doing the tests and taking the prescription is convenient and appropriate.	181	52.8	154	44.9	8	2.3

You can reach to the center from home or work.	226	65.9	58	16.9	59	17.2
e-Questions about general satisfaction						
Patients receive the best care from the staff working at this practice	99	28.9	158	46.1	86	25.1
I have absolute faith and confidence in the doctors	248	72.3	69	20.1	26	7.6
In general, the mother has full confidence in the medical staff that is treating her.	241	70.3	88	25.7	14	4.1
Are you satisfied with the level of services given to you	90	26.2	206	60.1	47	13.7
f-Services-related questions						
There are enough seats in the waiting room	105	30.6	112	32.7	126	36.7
The room where mother and child care is provided is characterized by lighting, heating, comfort and tranquility.	157	45.8	129	37.6	57	16.6

This figure showed that 67.1% of mothers had fair level of satisfaction with health care services provided, while 31.8%, 1.2% had poor and good level of satisfaction respectively.



**Figure(1):** Mothers Overall satisfaction score

### Distribution of Demographic data and Gestation status for pregnant women

Table (4) showed that most of the pregnant women 33.7% were aged between 20 to 24 years. It has been found that the highest percentages of them 48.8% were married at the age between 15 and 19 years. Among them, 20.5% were illiterates and 31.9% have no previous pregnancies. On the other hand,

88.5% of mothers delivered in the hospital, ninety-one percent prefer a hospital as a place of birth. Pregnant women who have their first antenatal visit during the second trimester constitute 65.7% and 68.1% of them had regular antenatal visits to the health center. Only 17.4% of pregnant women have four visits to the health center during pregnancy.

**Table (3):** Demographic data and Gestation status for pregnant women

		No	%
Directorate	Wassit Health Directorate	166	100
<b>1-Demographic data</b>			
Age (years)	<20y	31	18.7
	20-24	56	33.7
	25-29	39	23.5
	30-34	23	13.9
	≥35y	17	10.2
	Mean±SD (Range)	25.1±6.09 (15-42)	
Age at time of marriage (years)	<15y	7	4.2
	15-19	81	48.8
	20-24	59	35.5
	25-29	17	10.2
	≥30y	2	1.2
	Mean±SD (Range)	19.6±3.56 (13-31)	
Level of education	Illiterate	34	20.5
	Read and write	27	16.3
	Primary	43	25.9
	Intermediate	21	12.7
	Secondary	19	11.4
	Institute/College	22	13.3
<b>2-Gestation status:</b>			
Number of previous pregnancies	0	53	31.9
	1	45	27.1
	2	23	13.9
	3	25	15.1
	4	10	6
	≥5	10	6
	Mean±SD (Range)	1.6±1.75 (0-10)	
Place of last birth	Hospital	100	88.5
	Midwives	13	11.5
Where do you prefer the place of birth in current pregnancy	Hospital	151	91
	Midwives	15	9
First antenatal visit	First trimester	54	32.5
	Second trimester	109	65.7
	Third trimester	3	1.8
Did your commitment to visits during the current period of	Regular	113	68.1



pregnancy was:	Irregular	53	31.9
Number of visits	1	57	34.3
	2	53	31.9
	3	27	16.3
	≥ 4	29	17.4

### Satisfaction & acceptance of Pregnant mothers about the health services

Details of pregnant women's responses to the questions satisfaction and acceptance of mothers about the health services are shown in table 5. Pregnant women who did not receive advice about danger signs constitute 80.7%. About half of them did not receive folic-acid and ferrofol. However, Most of the pregnant women in the study sample reported, in high proportions, that they always take the tetanus vaccine.89.8%, always measured for blood pressure 86.7%, and always checked for urine 75.3%. With regard to the satisfaction of pregnant women on the services provided by the doctor, more than half 58.4% were not satisfied with

doctor examination and carefulness to check everything. In considering pharmacy services, 36.7% of pregnant reported sometimes medications prescribed by the physician are available and adequate. Pregnant women who neglect their supply with iron and folic acid pills constitute 51.2%. Regarding the generally satisfied pregnant women, 48.2% of pregnant women reported sometimes patients receive the best care from the staff working at this field. In addition, 65.1% of pregnant women in the study sample always had absolute faith and confidence in doctors, while 72.3% of pregnant women were always having full confidence in the medical staff they treat them.

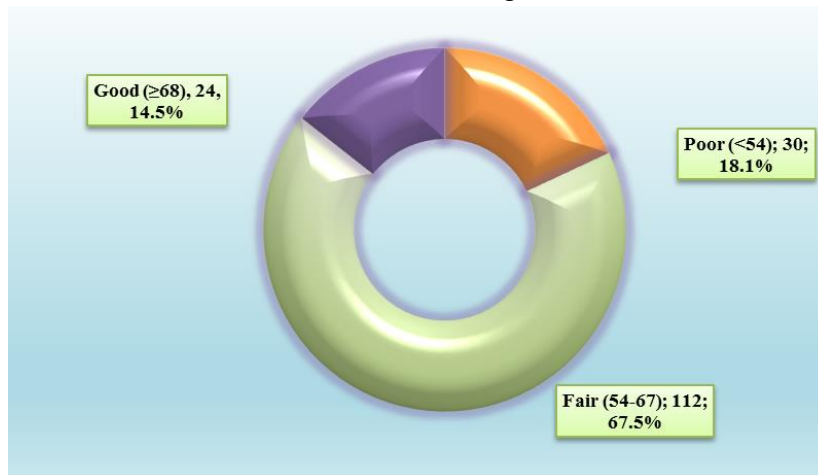
**Table (4):** Demographic data and Gestation status for pregnant women

Satisfaction of Pregnant mothers about the health services	Always		Sometimes		No	
	No	%	No	%	No	%
a-Women's related services & satisfaction						
Advised about danger signs	12	7.2	20	12	134	80.7
Received tablet of folic-acid and ferrofol	65	39.2	17	10.2	84	50.6
does the pregnancy weight and height is measured	140	84.3	17	10.2	9	5.4
Is the pregnant woman vaccinated with tetanus toxoid vaccine	149	89.8	4	2.4	13	7.8
blood pressure measurement	144	86.7	2	1.2	20	12
blood glucose measurement	44	26.5	5	3	117	70.5
Urine analysis	125	75.3	8	4.8	33	19.9
Oral and dental examination in (first, second and third trimester) of pregnancy	53	31.9	17	10.2	96	57.8
b-Question list about doctor services						

The doctor is very careful to check everything when examining me	41	24.7	28	16.9	97	58.4
The doctor is very interested in the patient	71	42.8	67	40.4	28	16.9
I feel I have not been given enough information by the doctor	91	54.8	31	18.7	44	26.5
the doctor makes me feel I am wasting his/her time	19	11.4	33	19.9	114	68.7
The doctor is very understanding and Collaborator	72	43.4	77	46.4	17	10.2
In general there is harmony and compatibility between the work of the doctor and the health worker when treating the mother and her child	94	56.6	53	31.9	19	11.4
c-Question about pharmacy services						
The pharmacist's instructions about how to take your medication	115	69.3	20	12	31	18.7
Medications prescribed by the physician are available and adequate	60	36.1	61	36.7	45	27.1
It is supplied with iron and folic acid pills and in sufficient quantity	59	35.5	22	13.3	85	51.2
d-Question about laboratory services						
there is a clean waiting area in laboratory	95	57.2	52	31.3	19	11.4
Patients are satisfied with laboratory personnel welcoming approach	130	78.3	30	18.1	6	3.6
e-Questions regarding access to the health center						
The time it takes since the patient enters the health center, waiting for admission to the doctor, doing the tests and taking the prescription is convenient and appropriate.	66	39.8	87	52.4	13	7.8
You can reach to the center from home or work.	109	65.7	27	16.3	30	18.1
f- Questions about general satisfaction						
Patients receive the best care from the staff working at this practice	42	25.3	80	48.2	44	26.5
I have absolute faith and confidence in the doctors	108	65.1	38	22.9	20	12
In general, the mother has full confidence in the medical staff that is treating her and satisfied with the level of the service.	120	72.3	36	21.7	10	6.0
Are you satisfied with the level of services given to you	56	33.7	88	53	22	13.3
g-Services-related questions						
There are enough seats in the waiting room	56	33.7	57	34.3	53	31.9
The room where mother and child care is provided is characterized by lighting, heating, comfort and tranquility.	77	46.4	59	35.5	30	18.1

This figure showed that 67.5% of pregnant women had fair level of satisfaction with the

health care services provided, while 14.5% had good level of satisfaction.



**Figure(2):** Pregnant women Overall satisfaction score

## Discussion

The important inference of this study is the quality of care from the pregnant women perspective that reflected in client satisfaction. This study has revealed fairly results (67.5%), regarding satisfaction of pregnant women attending MCH at different PHC centers in Wassit city.

These results disagreed with those observed in previous studies conducted in Baghdad city [3], Erbil city [8] and Saudi Arabia [1], which showed that the pregnant women were satisfied with health care services provided by the MCH unit. A possible explanation might be shortage in the females medical staff, absence of gynecologist, no availability of ultra sound examination, poor staff attitude, long waiting time, poor attention to pregnant women, absence home visits, weak supervision, All of these reasons mentioned lead pregnant women to use private medical services when they have some pregnancy complications.

As regarded demographic data and gestation status for pregnant women the current study found that the 33.7% were in the age group (20-24) years, and 25.9% of them were in primary level of education. These results agreed with those observed in another Egyptian study [9], this showed that 36% of pregnant women in the age group (20- 25) and 43.3% have a primary as a level of education.

About pregnant women's services & satisfaction the study found that 80.7% of pregnant women were not satisfied regarding advice about danger signs. This finding was different from what was found in a Nigerian study, where 84.9% of pregnant women reported to be satisfied with the advice provided on danger signs of pregnancy [10]. This may be due to the small number of health care providers in health centers and the weakness of health education for

pregnant women to avoid those risks of pregnancy.

With regard to services provided by doctors, the study indicates that 58.4% of pregnant women were dissatisfied, particularly with regard to the doctor's care to check them out well. These results differ from a study conducted in Islamabad [11], which showed that 97.1% of pregnant women satisfied were the doctor is checkup. There are two likely reasons for the differences, the first is shortage of medical staff in most of PHCs and the second reason is the lack of tools and equipment.

Regarding to pharmacy services, the study indicates that 36.1% of pregnant women were satisfied that the, medications prescribed by the physician are available and adequate. These results consistent to those observed in earlier Iraqi study, in Baghdad [12], which found that 45.5% of pregnant women were satisfied that the medications prescribed by the physician are available. But it is different from what another Iraqi study found in Erbil. where the percentage was high 91.3% [8]. A possible explanation, that the essential drug for pregnant women was not available in most PHCs.

The study also indicated that 51.2 per cent of pregnant women were dissatisfied with iron and folic acid pills supplied in sufficient quantities. This result is in agreement with the another Nepalese study [13].

The current study demonstrated that 67.1% of mothers were fairly satisfied and 31.8% were poor satisfied with health care services provided for children. These results are

agreed with other studies in Iraq, Basra city [14], and in India [15], Where it was found that 76.75%, 54.31% of mothers were fairly satisfied respectively. However, the results of the current study were disagreed with a Nigerian study [16], and another Egyptian study [17] respectively. This difference might be due to substandard health care services, long waiting time, poor staff attitude, absence of doctors or some centers had one doctor and most of the children were treated by paramedical staff in PHC, these factors have an effect on mothers' satisfaction, about child health services.

## Conclusions

This study revealed that the majority of women (pregnant and mothers) were fairly satisfied with health care services provided by the MCH unit in the health care centers with high maternal and infant mortality rates in the Wassit governorate. The quality of antenatal care, and care for children less than 5 years provided at studied MCH centers need urgent action to be improved in all activities.

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