## Mothers' Satisfaction with the quality of Maternal and Child Services (out patient Pediatric unit) in Assiut and Beni-Suef Governorates

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Abstract: Nowadays, quality of life is one of the important aspects in promotion, prevention, and referral of at risk infancy is the major component of MCH services. Primary health-care centers provide outpatient health care and primary preventive activities for people in general and for mothers and children in particular. Medical care aims not only to improve health status, but also to respond to patients' needs and wishes and to ensure their satisfaction with care. The patient-clinician relationship is a central feature of primary care. Health services and health education are the basic services provide to babies and mothers to achieve many objectives for example; protect our children, prevent any complication during life and maintain normal growth and development. Primary health care have many elements which facilities are established to provide communities with basic diagnostic, therapeutic, rehabilitate health services and medical outcomes, and are greatly influenced by client satisfaction with health care services. Client satisfaction has become a specific organizational goal and is used as an indicator of provider performance. This study aimed to assess mother' satisfactions regarding services in pediatric outpatient clinic and recommended how improve its quality. Subject and Methodology; the studied clients were 240 mothers, 126 mothers of them were from MCH centers at Assiut governorate (Kolta and El-Walidia) and 114 mothers from MCH centers at Beni-Seuf governorate (El Reiadi and El-Shorafa). The total sample were selected randomly which they attendant to these centers (Mothers attendant for seeking medical care or follow up of vaccinations for their children). Descriptive cross sectional research design was used in this study. This study is divided to two tools; was consists of demographic data of services health providers' team in the four studied centers, and observation checklist: of the place and persons that give services to the child. A cross sectional study was conducted during six months from January to June 2010. Was used in collecting data for this study, a descriptive study has been chosen, and the Maternal and Child Health Units selected randomly. The Results revealed that. The most of health care providers spent many years working in this facility (OPD). The majority of the clients were satisfying from follow up service, regarding geographic accessibility; most of interviewed clients in the studied were about the time reach to the center, the major number from them needs less than 15 minute (47% in Kolta, 49% in El Reiadi, 38% in El-Walidia and 41% in El-Shorafa). And they were satisfying from the waiting time tell see the doctors, it was short time for most of the interviewed clients as follow (82.4%, 82.8%, 93.8% & 75.5%) in Kolta, El Reiadi, El-Walidia and El-Shorafa). And there is no satisfaction significant difference between the MCH and RHCs as P.value = >0.05. And all of them satisfying from "doctors and nurses listen in good way" as follow (91%, 61.5%, and 86 % and 94%) in (Kolta, El Reiadi, El-Walidia, and El-Shorafa). It's concluded OPD services in MCH have high quality and large number of the clients receive the services are more satisfactory, this is probably due to increase the health awareness and educational status among clients in urban areas. Still low/ lack of training courses of the health care providers. Increase the price of the service after renovation of this centers, lack of health education, especially in rural area. Until now the worker personnel lost motivating development factors. Recommendation; Health education sessions should be planned for increase awareness of the mothers about ideal baby care methods, available a new trends follow up training program for health care providers and should be suitable to the duty, supervision system should be adequately developed, .

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**Key Words:** Assess, mother, satisfactions, pediatric, outpatient clinic, services, improve, quality.

#### 1. Introduction

Primary health care is essential health care based on practical, scientifically sound and socially accepted methods and technology, made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost the community and the country can afford  $\underline{I}$ 

The term "Maternal and Child Health (MCH) is widely used by many national and international

organizations for the set of services related to maternity and basic childhood health care and medical assistance such as deliveries and immunizations and immunizations, limited child illness and decreased mortality to a baby after birth up to the age of five  $\frac{2}{3}$ 

Childhood immunization is considered to be among the most effective preventive services, and is therefore critical to monitor and evaluate.1-Although national immunization levels for a comprehensive

series of vaccines among 2-year-olds recently exceeded the Healthy People 2010 goal of more than 80%, 2-few children receive vaccine doses within age-appropriate windows, exposing a significant problem of delays in immunization.<sup>3</sup>

The quality of services provided in the health centers and how people perceive that quality would determine the level of utilization of the MCH services. In recent years developing countries, influenced heavily by findings in developed countries, have become increasingly interested in assessing the quality of their health care. Quality of care can be measured at three levels: the policy level; the service delivery level; and the client /outcome level. Outcomes have received special emphasis as a measure of quality. Assessing outcomes has merit both as an indicator of the effectiveness of different interventions and as part of a monitoring system directed to improving quality of care as well as detecting its deterioration  $\frac{4}{2}$ . And Mostafa et al. 2005added quality assessment studies usually measure one of three types of outcomes: medical outcomes, costs, and client satisfaction. For the last mentioned, clients are asked to assess not their own health status after receiving care but their satisfaction with the services delivered.

Satisfaction with medical care is a multidimensional concept defined as the "personal evaluation of health care services and providers". It is related to **client's** expectations of health services based on their sense of what they deserve or the level of participation they have in decision making  $^2$ 

Quality of child medical care and follow up could be defined as, "the totality of features and characteristics of product or service that bears on its ability to satisfy stated needs provided to child from birth until two years to promote the well being of newborn and child, and it is essential to reduce child morbidity and mortality". Which is measured by examining two components: first, the timing and quality of visits? Second, the quality of health services<sup>5</sup>.

Numerous studies have shown that the receipt of adequate child medical care and follow up are associated with improvement in child heath, particularly a reduction in the risk of child morbidity and mortality  $^{\underline{6}}$ .

For upgrading governmental MCH services, attention must be given to each level of implementation, from national to provincial to district to local, where patience and persistence are required to remedy weaknesses, identify and spread strengths and support workers and communities who have found their way towards MCH system <sup>2</sup>

Equity is one of the basic principles of primary health care approach despite achievement in the 2<sup>nd</sup> half of the 20<sup>th</sup> century in improving life expectancy

and child survival. Inequities in health services have persisted and in some care have been widened  $\frac{8}{2}$ .

#### Aims of the work:-

The study aimed to assess mother' satisfactions regarding services in pediatric outpatient clinic and also recommended how improve its quality

#### **Objectives:**

#### **General Objectives:**

To prospectively evaluate the impact of mothers satisfaction regarding MCH Services (child medical care and follow up,) with Pediatric Unit and also recommended how improve its quality in Assiut and Beni-Suef Governorates.

#### Specific Objectives: Our Specific Objectives is:

- To assess the child medical care and follow up services
- What extent it has been achieved.
- To assess in detail the expectations of quality of MCH' health care services and the level of satisfaction of clients attending in Assiut and Beni-Suef Governorates.

#### Design:

A cross sectional study using interview questionnaire, variables explored were rating of quality of services, level of satisfaction with the services and willingness to pay for quality improvements as well as ability to pay for services.

# 2. Subjects and Methods Study design:

Descriptive cross-sectional research design was used to conduct this study.

#### **Study time frame:**

This study needs six months, started at January and ended at June 2010. A descriptive study has been chosen, and the Maternal and Child Health Units selected randomly.

#### Study site and Setting

The study was conducted at two MCH centers from 25MCH centers in Assiut governorate {kolta MCH and Alwelidia RHC center}. And two MCH centers from 15 MCH in Beni-Seuf governorate which are {El-Reiadi MCH and El-Shorafa RHC}.

#### **Study subjects and Participants**

The investigator visited every MCH and met the mothers which attendant for seeking medical care or follow up of vaccinations for their children, the study sample included **240 mothers**; (126 mothers of them were from .....MCH centers at Assiut governorate and 114 mothers from .....MCH centers at Beni-Suife

governorate), who enrolled in MCH centers between January and June 2010. The total sample was selected randomly. Informed consent was obtained at the time of enrollment and reviewed prior to the Interview.

#### Methods of data collection

Following approval for the research program by the Ministry of Health research committee, personal meeting were held with each of the subjects. Each client answered a questionnaire individually. Two tools were used in this study.

Tool 1- consists of two parts, 1<sup>st</sup> part, structure questionnaire was used to collect socio-demographic data of services health providers' team in the four studied centers either medical (physicians) or paramedical personnel (nurses, laboratory workers, the health visitors) were included in the study. 2<sup>nd</sup> part, observation checklist: of the place and persons that give services to the child. Observation was helpful in verifying the way of organization of the daily activities, the flow of mothers and actual working hours for each service.

### 2)-Attendant clients exit Interview Questionnaire:

An exit interview questionnaire was used to collect data from the attendant clients to assess service provider and client satisfaction the studied client should comfortably seated assured for confidentiality and motivated to give true answer. A modified questionnaire based on that provided by the WHO will be used it, will be translated into simple Arabic language to be understandable by illiterate Egyptian women. It will depend on closed-ended questions about different service aspects as ( the number of seeking medical care visits and follow up- time spent in the waiting room and with the caregiver and the amount of the information received during the visit ......etc)

Questionnaire is designed to take 15-20 minutes. The acceptance of the client to take the questionnaire is considered a verbal consent.

## Implementation of the study:

**Pilot study**: It was done before the actual data collection, the aim was:

- To test the questionnaire as regard clarity and coding process.
- To test acceptance understanding responses and to identify possible field problems.

## Feedback from the pilot study:

- Performance some modifications in both (providers and exit interview) questionnaire forms
- The majority of the respondents were cooperative with the researcher.
- The time needed to complete the exit interview questionnaire form and the self-administered

questionnaire form of the health providers ranged from 15-20 minutes.

#### **Field visits:**

Through the period of the study the researcher had to visit each MCH center once weekly and one rural center once weekly this is according to the time of work of each center as the MCH center gives the service six days weekly. But the rural center gives the services once weekly.

The collected data were examined and some scores were calculated such as, social and geographic accessibility scores based on the following Criteria:

#### 1-Social scoring system:

The social scoring standard of the family can be determined by the level of education and occupation of the husband and wife. Certain numerical values will be dedicated for the achievable level of education and occupation <sup>7</sup>as follow:

#### **Education:**

Illiterate=1, Primary=2, Preparatory=4, Secondary=5, University= 7

#### Occupation:

Housewife, no work=1, Industrial or agriculture worker=2, Skilled worker=4, Semiprofessional=5, Professional=7

According to the sum of the parent's score values, the social standard can be classified into three levels:

Low level if the sum is <8, intermediate level if the sum ranges from 8-18, high level if the sum ranges from 19-28.

#### 2)-The geographical accessibility scoring system:

It based on giving certain numerical values for the attendant client to the following items, the traffic method used, time taken to reach the center and their residence as follow:

Traffic method; on foot= 2 by mean of transport= 0

#### Time taken

Less than 20 minutes= 2, 20 minutes= 1 30 minutes= 0

#### Residence:

Within the mother village= 2, Out side the mother village= 0

#### The score was classified into three levels:

- Easy if the sum was >4 Easy to some extent if the sum ranged from 3-4
- Difficult if the sum was<3.

#### Data analysis:

- Data will be coded, entered and analyzed using the SPSS soft ware version 12 under windows XP.
- Descriptive statistics were performed in the form of frequency tables, and percentage, chisquare test were performed to compare

different qualitative variable. 0.05 level of significance was applied.

#### Administrative Issues:-

Permission was obtained from the two public health departments in Beni-Suef city and Assiut city to the director general of MCH letters were issued to district directors then to the studied health centers, to explain the goal and objectives of the study and ensure their cooperation.

#### 3. Results

This study was conducted to assess the quality of health services provided to children under school age and health education to her mother's which attending PHC facilities. This study included the following; {El-Reiadi MCH and El-Shorafa rural health center (RHC) in Bani-Suef governorate) and (kolta MCH and El-Walidia RHC in Assuit governorate).

The studied PHC facilities were designed to be healthy. The two MCH centers in two cities from two governorate and the two RHC centers two villages from two governorates. There was dental clinic with equipments and instruments in three of steadied centers (El-Reiadi- El-Shorafa in Bani-Suef governorate and El-Walidia in Assuit governorate) but kolta in Assuit city has no dental clinic. The researchers don't see the dentists at all except once in Bani-Suef city.

Table (1) The Building of-kolta MCH in Assuit was good although it is old but still acceptable, while El-Reiadi MCH in Beni-Suief city is an old design it need renovation, on the contrary, the two RHCs are modern design as they were rural units and renovated into modern centers. In the MCH centers there were an outpatient clinic for children only, immunization room with refrigerator for giving and preserve the vaccine. In MCH centers present oral dehydration room, dental care room, and social care room in OPD, while the two RHC; absent oral re-dehydration room, no dental care room, and no social care room in OPD.

Table (3) was found that; present personal data, qualifications and duties in the studied PHC facilities at the time of data collection, the most of health care providers spent many years working in this facility (OPD).

All physicians in the four studied PHC were GP; the majority of training courses offered to the physicians were FP.

Related the nurses who providing health care service, there training courses were diarrhea, infection control, TB. Hypothyroidism, immunization, quality and home visit.

And one laboratory technicians in each PHC facilities, most of them received training course concerning to their field.

Table (4) shows that; most of the interviewed clients were less than 35 years follow (95%, 80%, 77%,

and 73%) in (kolta, El-Reiadi, El-Walidia, and El-Shorafa). As regarding the age there is statistical significance difference between the studied centers as (P. Value = < 0.05\*).

The most educational status of the interviewed clients was preparatory (kolta 60%, & El-Reiadi 46%, and most of them were illiterate in (El-Walidia, 44%, & El-Shorafa 40%. And there is a high statistical significance difference (*P Value*=<0.05\*\*).

The most interviewed clients were intermediate class 70.5%, 75%, 51.5%, and 55%) in (kolta, El-Reiadi, El-Walidia, and El-Shorafa) respectively. And there is no high class as regarding the social score there is statistical significance difference (*P. Value*=<0.05\*).

Table (5) clear that; majority of the clients them baby have follow up cards and received this service as in (Kolta 98.5%, El-Walidia 89.7%, El Reiadi 100%, and El-Shorafa 100%), and there is a high statistical significance difference as (P.value=<0.05\*\*).

Most interviewed clients were able to reach the center as it was suitable to all studied clients as follow (82.5%, 85%, 70.5%, and 77%) in (kolta, El-Reiadi, El-Walidia, and El-Shorafa), and there is no statistical significance differences (*P. Value*=>0.05NS).

Most of interviewed clients in MCH were reached the center for medical care to her children, (69 % in kolta, 57 % in El-Reiadi), but in RHCs most of interviewed clients were reached the center for immunization (90 % El-Walidia, and 69 % El-Shorafa). There is a high statistical significance difference between MCH and RHCs as (P. Value =<0.05\*\*). While the all mothers in rural areas side that; the PHC no provide follow up services for their children. As regarding the waiting time it was short for most of the interviewed clients and there is no statistical significance difference between MCH and RHCs as (P. Value =>0.05). Most of interviewed clients came to the studied center 5+ times in the MCH AND RHCs except in El-Shorafa RHCs the most of them came from 2:4times. And there is a high statistical significance difference between there as (P. Value = < 0.05\*\*).

As regarding the time of DR/ nurse meeting was enough for the majority number of the interviewed clients in all PHC facility, and there is statistical significance difference as  $(P.\ Value = < 0.05*)$ .

In all PHC facility most of the interviewed clients answer is positive "say yes or enough" related the following; - time of DR/ nurse meeting, DR/Ng. listen in good way, the knowing about the result of physical examination, fell security, and hours of work. While according to physical examination, most number till "yes" in all PHC facility except El-walidia RHC the majority till "no". and there is statistical significance difference as (*P. Value* =<0.05\*).

Table (1): Distribution of health care providers among the four studied facilities at 2010

Items	Assuit –kolta	El-Walidia RHC	Beni-Suief- El-	El-Shorafa RHC
	MCH		Reiadi MCH	
The Building	Old & accepted	modern design and	old design, &	modern design and
		renovated into modern	need	renovated into modern
		centers	renovation	centers
- OPD for children	Present	Present	Present	Present
- immunization room	Present	Present	Present	Present
- refrigerator	Present	Present	Present	Present
- dehydration room,	Present	Not present	Present	Not present
-dental care room,	Present	present	Present	Not present
- social care room,	Present	Not present	Present	Not present
Population served each facility2010	64320	23744	10146	9017
Distribution health team :-				
*-Director	1	1	1	1
*Outpatient clinic				
1- Practitioner Nurse	1	Non	Non	1
2- Assistant Nurse	1	Non	1	1
3- child care	1	Non	2	1
4- FP & child care	Non	Non	1	1
5-charge all the above	Non	Non	Non	Non
6-Dental care	1	1	1	1
Paramedical Personnel				
Lab technicians	1	1	1	1
Nurses	11	14	5	6
Sanitarian	1	1	2	1
workers	2	01	2	
Total	20	19	16	14

Table (2): Characterize the four studied facilities Finding from the observational checklist

Items	Assuit -kolta MCH	El-Walidia RHC	Beni-Suief- El-Reiadi MCH	El-Shorafa RHC
OPD				
Utility				
Cleanness	Good	moderate	good	good
Illumination	Moderate	good	good	good
Aeration	Moderate	moderate	good	good
Power source	Good	good	good	good
Basin	Good	good	good	good
Furniture				
Desk	Present & available	Present & available	Present & available	Present & available
Chairs	Present & available	Present & available	Present & available	Present & available
Cupboard for files	Present & available	Present & available	Present & available	Present & available
Examination bed	Present & available	Present & available	Present & available	Present & available
Baravan	Present & available	Present & available	Present & available	Present & available
Basket	Present & available	Present & available	Present & available	Present & available
Instruments				
Sonicaud	Present & available	Present & available	Present & available	Present & available
thermometer	Present & available	Present & available	Present & available	Present & available
stethoscope	Present & available	Present & available	Present & available	Present & available
sphygmomanometer	Present & available	Present & available	Present & available	Present & available
Height & weight scale	Present & available	Present & available	Present & available	Present & available
Laboratory				
Microscope	Present & available	Present & available	Present & available	Present & available
Centrifuge	Present & available	Present & available	Present & available	Present & available
Glasses	Present & available	Present & available	Present & available	Present & available
Chemicals-strips for sugar- test	Present & available	Present & available	Present & available	Present & available
Chemicals-strips for	Present & available	Present & available	Present & available	Present & available
urine analyses				
HCI for	Present & available	Present & available	Present & available	Present & available
Hemoglobin				
Supply for thyroid test	Present & available	Present & available	Present & available	Present & available

Table (3): Distribution of health providers involved in OPD & Describe them activity.

Items	Items   Assuit – kolta MCH   El-Walidia RHC   Beni-Suief- El-Reiadi   El-Shorafa RHC					
items	Assuit –koita MCH	EI-Walidia KHC		EI-Shoraia KHC		
71			MCH			
a-Physicians:-						
Number	1	1	1	1		
age	46y	25y	49y	28y		
sex	Female	Male	Female	Male		
Graduation	M.B.B.Ch	M.B.B.Ch	M.B.B.Ch	M.B.B.Ch		
experience OPD	12years	2 months	15y	One month		
training courses	Hypothyroidism& addiction	Non	Family planning	Immunization		
last training	8years		10 years	15 days		
Duties	Pediatric medicine	Pediatric medicine	Pediatric medicine	Pediatric medicine		
b-Nurses						
Number	2	2	1	1		
age	38v & 24	30 &35v	35y	26y		
sex	Female	Females	Female	Female		
Graduation experience	N D	A Diploma	N D	A Diploma		
training courses	12&5v	11 & 17y	12v	9v 1		
	Diarrhea & infection	TB.,& home visit	Hypothyroidism	Quality, PHC, &		
last training	control	,		Immunization		
Duties	9 & 5 years	8 & 12 years	8 years	8 years		
	Pediatric Nursing	Pediatric Nursing	Pediatric Nursing	Pediatric Nursing		
c-Laboratory technician		2	-	5		
Number						
age	1	1	1	1		
sex	46y	45y	56v	38y		
Graduation experience	Male	Male	Male	Male		
training courses	ND	A Diploma	ND	A Diploma		
2.4	27y	19y	4y	21y		
last training	Laboratories	FP	Laboratories	Urine, blood analyses &		
Duties				infection control		
	20 years	12 years	3 years	16 years		
	Laboratory technician	Laboratory technician	Laboratory technician	Laboratory technician		
d-Workers						
Number	1	1	1	1		
Age	41y	58y	43y	38y		
Sex	Male	Male	Male	Male		
Graduation	Non	Non	Non	Non		
Experience	16v	27y	23y	8y		
Training courses	Non	Non	Non	Non		
Duties	worker	worker	worker	Worker		
Duties	WOIKEI	WUIKEI	WOIKEI	WUKCI		

FP = family Planning

N D = Nursing Diploma

A Diploma = Agricultural diploma

### **Table (4): Characteristic of the clients**

Items	Assuit –kolta MCH( no.=68)	El-Walidia RHC(no.=58)	Beni-Suief- El- Reiadi MCH(no.=65)	El-Shorafa RHC(no.=49)	
1-Age(years)					
- <25	38(55.8%)	32(55.2%)	30(46.1%)	25(51%)	x2 = 15.1
- 25-	27(39.7%)	13(22.4%)	22(33.8%)	11(22.4%)	P=< 0.05*
- 35+	3(4.4%)	13(22.4%)	13(20%)	13(26.5%)	
2-Client's education:					
- Illiterate	13 (19.1%)	26 (44.8%)	17 (26.2%)	20 (40.8%)	x2 = 31.78
- Primary	14(20.6%)	11(19%)	8 (12.3%)	9(18.4%)	P=< 0.05*
- Preparatory	41(60.3%)	17(29.3%)	30(46.2%)	13 (26.5%)	
- secondary	00000000	4(6.9%)	10 (15.4%)	7(14.3%)	
3-Social score					
- low	20(29.4%)	16(24.6%)	28(48.3%)	22(44.9%)	x2 = 10.4
-intermediate	48(70.6%)	49(75.4%)	30(51.7%)	27(55.1%)	P=< 0.05*

\* = significant study

\*\* = high significant study

Table (5): Assessment the clients' opinion and satisfied of some aspect of OPD

Table (5): Assessment the clients' opinion				T	
Client's opinion:	Assuit –kolta MCH	El-Walidia RHC	Beni-Suief- El- Reiadi MCH	El-Shorafa RHC	Significance
1- client's satisfied :					
- unsatisfied	12(17.6%)	17(29.3%)	10(15.4%)	11(22.4%)	x2 = 4.19
- satisfied	56(82.4%)	41(70.7%)	55(84.6%)	38(77.6%)	P=>0.05NS
2- reason OPD visits:	20(02:170)	11(70.770)	55(51.670)	20(77.070)	1 0.05115
- Immunization	21(30.9%)	52(89.7%)	28(43.1%)	34(69.4%)	x2= 52.1
- medical care	47(69.1%)	6(10.3%)	37(56.9%)	15(30.6%)	P=<0.0 5**
3-resived follow up services & cards:-					
- no	01 (1.5%)	06 (10.3%)		49(100%)	x2 = 15.2
- yes	67 (98.5%)	52 (89.7%)	65 (100%)		P=<0.0 5*
4- hours of work :					
- not enough	02(2.9%)	00000	00(100%)	01(2%)	x2 = 3.38
- enough	66(97.1%)	58 (100%)	65 (100%)	48(98%)	P=>0.0 5NS
5- waking time to reach OPD :	00(57.170)	20 (10070)	03 (10070)	10(2070)	1 - 0.0 5115
- <15m	32(47.1%)	22(37.9%)	32(49.2%)	20(40.8%)	x2= 4.59
->15m	24(35.3%)	19(23.8%)	23(35.4%)	18(36.7%)	P=>0.0 5NS
->30m	12(17.6%)	17(29.3%)	10(15.4%)	11(22.4%)	
6- Waiting time to meet DR/ Ng.					
- long time	12(17.6%)	10(17.2%)	04(6.2%)	12(24.5%)	x2 = 7.5
- short time	56(82.4%)	48(82.8%)	61(93.8%)	37(75.5%)	P=>0.0 5NS
7- utilization OPD / month :	ì	, ´ ´	, í	` ´	
- once	04(5.9%)	03(48.3%)	15(23.1%)	21(42.9%)	x2 = 74.5
- 2-4	21(30.9%)	27(46.6%)	24(36.9%)	25(51.0%)	P= <0. 05**
- 5+times					1 - <0.03
	43(63.9%)	28(5.2%)	26(40.0%)	03(06.1%)	
8- time of DR/ nurse meeting:			1=/2 / 20/1		
- not enough	04(5.9%)	13(22.4%)	17(26.2%)	09(18.4%)	x2 = 10.5
- enough	64(94.1%)	45(77.6%)	48(73.8%)	40(81.64%)	P=<0.0 5*
9-DR/Ng. listen in good way:					
- no	06(8.8%)	08(13.8%)	25(38.5%)	03(6.1%)	x2 = 28.2
- yes	62(91.2%)	50(86.21%)	40(61.5%)	46(93.9%)	P=<0.0 5*
10-Physical examination:-	` ′		, ,	ĺ í	
- no	14(20.6%)	40(69%)	21(32.3%)	21(42.9%)	x2 = 32.7
- yes	54(79.4%)	18(31%)	44(67.7%)	28(57.1%)	P= <0.0 5*
11-Knowing the result of examination	34(77.470)	10(3170)	11(07.770)	20(37.170)	1 40.0 3
•	12(10 10/)	40(02 00/)	24(26.00/)	22(46,00/)	v2= 65 0
- no	13(19.1%)	48(82.8%)	24(36.9%)	23(46.9%)	x2= 65.8
- yes	55(80.9%)	10(17.2%)	41(63.1%)	26(53.1%)	P=<0.0 5*
12-Fell security:					
-enough	01(01.5%)	09(15.5%)	21(32.3%)	10(20.4%)	x2 = 22.8
- not enough	67(98.5%)	49(84.5%)	44(67.7%)	39(79.6%)	P=<0.0 5*
13-Received health education					
- no	41(60.3%)	57(98.3%)	50(76.9%)	43(87.8%)	x2 = 30.3
- yes	27(39.7%)	01(01.7%)	15(23.1%)	06(12.2%)	P=<0.05*
14-Service price	(-2.2.7.4)	(	- ( - : / */	- ( . / *)	
- suitable	56(95.6%)	27(46.5%)	55(84.6%)	07(14.3%)	
- unsuitable	03(04.4%)	31(53.5%)	10(15.4%)	42(85.7%)	
	03(04.470)	31(33.370)	10(13.470)	42(03.770)	-
15-Accessibility	64(04.40()	10/00 70/0	50(00.20()	0.4(00.20()	
-near	64(94.1%)	12(20.7%)	58(89.2%)	04(08.2%)	
- far	04(05.9%)	46(79.3%)	07(10.8%)	45(91.8%)	
16- client attitude to the DR:-					X2 = 107.
- accept	08(11.8%)	07(12.1%)	06(09.2%)	10(20.4%)	P=<0.0 5*
-not accept	60(88.2%)	51(87.9%)	59(90.8%)	39(79.7%)	
	1	1			
17 17 17 17 1					
17- client attitude to the nurse:-	66(05.100)	02/05/02/0	52/01/50/0	11/00 100	
17- client attitude to the nurse: accept	66(97.1%)	03(05.2%)	53(81.5%)	11(22.4%)	
- accept -not accept	66(97.1%) 02(02.9%)	03(05.2%) 55(94.8%)	53(81.5%) 12(18.5%)	11(22.4%) 38(77.6%)	
- accept -not accept					
- accept					

<sup>\* =</sup> significant study

#### 4. Discussion

The four PHC facilities located in a suitable, clean place, near the population, wide street with no refuse, building designs were old in the two MCH, but the two rural centers were renovated, mention that the

studied centers were recently renovated, they have the basic essential infra structure, suitable size, clean, as well as suitable waiting areas. There was dental clinic (room) with equipments and instruments in three of studied centers (El-Reiadi in Bani-Suef governorate)

<sup>\*\* =</sup> high significant study

NS = no significant study

and (kolta and El-Walidia in Assuit governorate). But El-Walidia has no dental clinic, the researchers doesn't see the dentists at all center except once in Bani-Suef clinic. (Abou-ziena et al., 1998), find that no any dental clinic due to very limited space areas, the center providing very limited variety of dental services.

In this study the four studied centers for the quality of OPD care were subjected for evaluate criteria of OPD care room according to the MOHP checklist obtained from the four PHC facilities directorate. table (1),

The four centers were found mostly good as regarding utility, furniture, instruments, laboratory as an essential for providing good services for babies. (Table2), this is similar to (Mostafa et al., 2005), as she mentions that the studied centers were also having the essential equipments functioning and available according to (MOHP, 2004)12 standards. But this is differ to (Abdel Hamid et al., 1998) as she found that lack of equipment is one of the main limiting factors for service delivery, this include sphygmomanometer, weighting scale. Light and ventilation wee badly before intervention and good after.

In our studied we found the periodic training courses of health team members were limited, from long time and many of it not concerning to their responsibilities and this reflect on the quality of the services and then on the client's acceptance and satisfaction. The Physicians in all studied centers were GP, they experience in OPD range between (one month to 12 years), and those training courses were from (5:12 years ago about hypothyroidism, FP., immunization. (**Table 3-a**),

The training courses of nurses were diarrhea, control, visit, quality, infection home immunization, TB. And hypothyroidism, experience in OPD range between (5 to 17 years). (Table 3-b), (Hifnawy et al., 2000) find that nurses had the chance to get more than one of the following training courses; (diarrhea, immunization, FP., ARI. Most of the nurses received more than training courses in their field. And (Mostafa et al., 2005) reported that the majority of providers had participated in multiple courses, but no providers had received basic training to the services. Similar conclusion was raised in a study done by (El Mouelhy et al., 2001) how concluded the importance of prompt training courses in improving providers performance; they add that it should be started before starting work.

According laboratory technician, every PHC facility has only one; they received training courses from (3:20) years ago about laboratories, FP, urine test, blood analyses& infection control. **Table (3-c)**, And every PHC facility has only one worker they no educated and not resaved any training courses. **Table (3-d)**,

As regarding the age of clients in this study, about 82.5% of clients were with age group less than 35 years, and least proportion about 17.5% were more than 35 years. (**Table4-1**), while (**Hasan & Elwindi**,1995) find that 40.3%with age from 25-29 years, and 35 years and more was the least proportion.(**Abdel Hamid et al., 1998**) find that about 76,8% of interviewed women were with age group 20-34 years, teenage constituted 9.8% and 34 years old and more formed 13.4%. (**Attia et al., 2005**) find that 40% were less than 30years, 30% were 40 years old, and 30% were from 30-39 years.

As regarding educational status of clients in the current study most of the interviewed women were preparatory education in Assiute & Beni- suef city (Kolta 60% and 46% in El Reiadi) MCH and the most were illiterate in urban (El-Walidia RHC 44% and 40% in El-Shorafa RHC. (**Table 4-2**), (**Abdel Hamid et al.**, **1998**) find that the majority of clients was either illiterate (40.6%) or just had primary education (39.4%).

In this study as regarding socioeconomic standard most of interviewed clients were intermediate classes about {(70. % in Kolta,75.% in El Reiadi) MCH, (51.7% in El-Walidia, 55% in El-Shorafa) RHC} and there is no high class, (Table4-3), while this differ from findings reached by **Dunn, 2000**; who find that clients who have a high social level are likely to have better health behaviors, including use of preventive health services, than those who have low level.

In this study clear OPD services providers represented mainly in nurses who nearly done all services (registrations, give the follow-up card, measuring weight and height, some times measuring blood pressure, give the vaccine, diagnostic tests (hypothyroid test), health education, home visit (out reach) to clients who doesn't make regular follow-up, finally tell her about the time of the next visit and that reflect the important of nurses as a caregiver, and this differ from finding reached by (International Institute of Population, 2007)15 which proved that; the nurses provided poor quality of services than doctors and they should be as competent as doctors. While (Abou-Zienh et al., 1998) find that the director of the center was poorly examining the clients, no weighting was done, as he said the center does not had a baby' weight scale.

Health services provided to babies and her mothers in rural centers were less than that provided to their counterparts in MCH facilities, vital signs, body weight, growth and developments measurements, medical examination, were not done routinely, (Table 5-2), this similar to finding reached by (MOH, 1994 & Abou-Zienh et al., 1998). As regarding immunization all babies received basic vaccines from (0: 18 months), the immunization was free, disposable syringes were provided freely, in PHC facilities (MCH

centers). This similar to what find by (Abou- Zienh et al., 1998) who find that the immunization was provided freely, disposable syringes were provided freely, but usually the clients were asked to bring the required syringes.

The majority of the clients were satisfying from follow up service (Table 5-3), on the same way (Hasan, & Elawindi 1995) find all the studied clients don't make follow up.

As regarding geographic accessibility; most of interviewed clients in the studied were about the time reach to the center, the major number from them needs less than 15 minute (47% in Kolta, 49% in El Reiadi, 38% in El-Walidia and 41% in El-Shorafa) (**Table 5-4**), and this similar to finding reported by (**Mostafa et al., 2005**) at the studied centers were geographically accessible, being located in a densely population area, on the main braved road, with multiple transportation facilities and it was accessible for about 64.5% in Darasa and 81% in Ein-Elsira centers that they can reach the center easy, major percent of them needed less than 15 minutes to reach the center.

The waiting time tell see the doctors, it was short time for most of the interviewed clients as follow (82. 4%, 82. 8%, 93.8% & 75.5%) in Kolta, El Reiadi, El-Walidia and El-Shorafa). And there is no satisfaction significant difference between the MCH and RHCs as P.Value = >0.05 (Table 5-5), (Abdel Hamid et al.,1998) find that clinical examination services started functions after arrival of health services providers which was usually not earlier than 10 am. The women had to stay in the waiting area tell the time of initiation the work, but waiting time tell the examination was reduced because 3 cases were examined at the same time in 3 rooms.

All the mothers said that; doctors and nurses listen in good way as follow (91%, 61.5%, and 86 % and 94%) in (Kolta, El Reiadi, El-Walidia, and El-Shorafa). (Table5-8),

As regarding health education in this study it represent low percent either in MCH or RHCs in rural centers and it was about 20.4% from the studied group, while still MCH has a high attendance, but there was oral massages given to the attendant women while taking the services and there was sufficient number of posters for HE, diarrhea for preschool age, important of basic vaccine (immunization) and this reflect the health awareness and high education in urban than rural community, (Table5-12), this similar to findings reached by (Hifnawy et al., 2000 & Renee et al., 2002) find that; there was no HE sessions even messages given to the attendant women and this is differ from what reported by (Mostafa et al., 2005) as a high number of women had attended ANC health education sessions in about 82.5% in Ein- Elsira and 67.9% in Darasa center and health education session were held regularly on Monday and Wednesday focused on

infancy and pre school health also nutritional education was done through demonstrating haw to prepare food and how to select food with high value without much money.

Available services all time was a cause of satisfaction in all centers, so that major number from the women were satisfaction from OPD services price (95.6%Kolta MCH, & 84.6% El Reiadi MCH). (Table5-13), and nurses' activities and serves towards the mothers and tem baby was a major cause to give good attitude to the clients (97.1%Kolta MCH, & 81.5% El Reiadi MCH), while RHCs in the rural still not accepted. But (Uzochukwu, B.C.2004) lack of doctors and limited staffing which are a reflection of perceived technical quality of care, poor attitude of health workers and long waiting hours are powerful predictors of client satisfaction and non-use of the centers, and therefore threaten the success of the programmer. And added improved drug availability and physical appearance of the health centers thereby leading to high levels of consumer satisfaction.

#### **Conclusions:**

The study reflects some positive and negative aspects in our facility services that affect on clients judgment, opinion and satisfactory.

- 1- OPD services in MCH have high quality and large number the clients receive the services are more satisfactory, this is probably due to increase the health awareness and educational status among clients in urban areas.
- 2 The rural areas this PHC facilities were completely renovated with modern instruments but utilization from the services still low and this may be due to (lack of training courses of the health care providers so that they unable to use the instruments even the training courses they had not concerning to their duties, increase the price of the service after renovation of this centers, lack of health education, especially in rural area as many women are illiterate the important of PHC services.
- 3- MCH centers provide many services for mothers and their children, and the majority of the clients were satisfied with the services. However, the most common reason for dissatisfaction was the long waiting time. There is difference between clients' satisfaction in MCH and rural PHC facilities as the clients in urban were highly satisfaction from the services of MCH centers for example (follow up occurred in the time of the next visit exactly as the nurse till them), while in the rural centers there is no satisfaction, no awareness of important of the service, no confirmation from the nurses about important of follow up and the time of the next visit.

4- Still the worker personnel lost motivating development factors for example; graduation level, training courses job desecration.....etc.

#### Recommendation

Baby / child care is a major component of MCH services, promotion, prevention, early diagnoses, prompt management and referral of at risk baby, as well as health education are the basic services provide to the mothers to protect them baby, prevent any complication during age stages and that can achieved through:

- Health education sessions should be planned for increase awareness of the mothers about important of baby care
- In our group study still rural units the price of the service should be decreased for continues utilization.
- Rural health centers should be geographically accessible should be suitable for clients especially who live outside the mother village.
- New trends /follow up training program for health care providers should be with high quality and should be suitable to the duty.
- Supervision system should be adequately developed and maintained to assure keeping up of quality of care.
- Continuous quality improvement (CQI) must be an on going system implemented through a teambuilding approach, starting at the unit level and continuing at each higher level.
- Assuring job satisfaction through improvement of the working environment, providing suitable motivating factors.
- Increasing develop the worker personnel in the PHC facilities. This will help to improve the services by frequently increase they graduation education level, New trends /follow up training courses example (good environment sanitation, infection control, job description.....etc)
- Sudden supervisory visits to improve the performance of health workers.
- Encouraging and rewarding any health facility that fulfills a high rate of attendance and client satisfaction, and reduction of waiting time. Attention should be directed to the environmental conditions of the rural center.

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