# Maternal satisfaction of pediatric care providers for children with chronic diseases.

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# الخلاصة

خلفية الدراسة: يعرف المرض المزمن بأنه حاله مرضية مستمرة يعتمد الأطفال المصابون بأمراض مزمنة اعتمادا كبيرا على علاقة مستقرة، مستمرة مع الأطباء السريريين و نظام الرعاية الصحية. إن استمرارية الرعاية بمثابة أساس لبناء الثقة، كما يعد الاتصال الفعال بين العائلات المتضررة و الأطباء شرط أساسي للجودة العالية. إن تقييم اقتناع المرضى يسمح باستكشاف مستوى خدمة الأطباء و الممارسين العاميين في تلبية احتياجات المرضى. يسهل نظام المقابلة في الإفصاح عن المشكلة للعائلة. يبدي الأطباء الاحترام عندما يضمنون أفكار الآباء مما يزيد ثقتهم بالنفس والشعور بالكفاءة

الهدف: تهدف الدراسة الحالية إلى تقييم اقتناع الأمهات بموفري العناية من أطباء الأطفال للأطفال المصابين بأمراض مزمنة مختارة. الطريقة: دراسة مقطعية شاملة ، أجريت في مشفى بابل التعليمي للنسائية و الأطفال (الردهات و العيادات الخارجية في المشفى) في مدينة الحلة العراق للفترة من أكتوبر 2011 إلى نوفمبر 2012. وقد جمعت المعلومات من خلال مقابلة مع الأمهات ل 110 طفلا مصابا بواحد من أربعة من الأمراض المزمنة (الربو، مرض البول السكري ، الشلل الدماغي ، والأمراض القلبية الولادية) لتحديد أجوبتهم عن موفري العناية من أطباء الأطفال الذين استشاروهم في العام الماضي، عاينوهم في أغلب الأحيان، والذين كانوا يعاينوهم أطول فترة من الوقت. معدلات سجل عدم الاقتناع بموفري العناية من أطباء الأطفال أيضا.

النتائج: إن احتمالية تسجيل مستوى عالي من الاقتناع (اقتناع بالغ) لمقدمي الرعاية من أطباء الأطفال ذوي الأختصاص الدقيق أكثر من أطباء الأطفال المختصين بقيمة تنبؤية < 0.04 ، ولكن الأمهات ذكرن أن الأطباء الأختصاص (يوفرون الرعاية الصحية العامة بشكل أفضل بقيمة تنبؤية <0.002 و القدرة على الإجابة على الأسئلة حول حالة المرضى بقيمة تنبؤية <0.002 و القدرة على الإجابة على الأسئلة حول حالة المرضى بقيمة تنبؤية <0.002 و القدرة على الإجابة على الأسئلة حول حالة المرضى بقيمة تنبؤية <0.002 و القدرة على الإجابة على الأسئلة حول حالة المرضى بقيمة تنبؤية <0.002 و القدرة على الأسئلة حول حالة المرضى بقيمة تنبؤية <0.002 و القدرة على الأحداث المؤلفة المؤلفة

الاستنتاجات: الأمهات أكثر اقتناعاً عندما تتحقق معظم أو كل الاتصالات المتوقعة بين الآباء والأطباء.

## **Abstract:**

Background: Children with chronic illnesses need continuous correlation with pediatrician. Assessment of patient satisfaction allows health care providers to explore the extent to which their service meets the needs of their patients. Interview techniques are important for explanation of the problem to the family. The pediatrician deals with respect to the parent's ideas to improve their self-esteem and competency

Objective: To assess maternal satisfaction of pediatric providers of children with selected chronic illness.

Patients and Method: A cross sectional study, conducted in Babylon Gynecology and Pediatrics Teaching Hospital (wards and outpatient clinic), Al-Hilla, Iraq. From October 2011 to November 2012. Information was collected by interview with mothers of 110 children with one of four chronic illnesses (asthma, diabetes mellitus, cerebral palsy and congenital heart disease) to determine their response about pediatric providers whom they consulted in the last year, seen most frequently, and who were seen over the longest period of time. Rates of dissatisfaction with those providers are also reported.

Result: The probability of reporting a high level of satisfaction (extreme satisfaction) was for subspecialist pediatric care providers than with specialist pediatrician, P- value <0.04, but mothers mentioned that specialist pediatrician providing better general health care, P-value <0.001, realy listening to their opinions, P-value <0.002, and ability to answer questions about condition, P-value <0.02.

Conclusions: Achievement of Mothers-pediatrician communication ensures best maternal satisfaction

Key words; maternal satisfaction, chronic illness.

## **Introduction**:

Chronic disease is condition in which one or more of the following are present at the time of diagnosis or during the illness; limitation of function, deformity, drug dependent, special diet and/or continuing treatments at home, and the need for medical care above the normal needs <sup>(1)</sup>.

Many studies show that about 30% of children have chronic illness. Boy's rates higher than girls. Asthma is the most common chronic illness. Children with chronic illnesses need continuous correlation with pediatrician. Reactive communication among general practitioner and pediatrics specialist is vital for follow-up management plan (2). Children with chronic illnesses or disabilities receive care from a variety of health care providers during lives(general and subspecialty pediatrician, general practitioner and physician's assistants)(3)

The role of Health care providers are to help parents to face the daily challenges ,to promote their competency and confidence in their child's health<sup>(4)</sup>.

Interview techniques are important for explanation of the problem to the family. The pediatrician deals with respect to the parent's ideas to improve their self-esteem and competency (5). The health care providers are differing in skill, cooperation, and medical services patients need over long period of time (6). Evaluation of maternal satisfaction allows health care providers to explore the extent to which their service meets the needs of their patients. (7) The questionnaires also show us the area of least parent satisfaction in order to improve this aspect of care. (8)

The aim of this study is to assess the maternal satisfaction of pediatrics care provider with selected chronic illness in Babylon Gynecology and Pediatrics Teaching Hospital.

## **Patients and methods:**

A cross sectional study, conducted in Babylon Gynecology and Pediatrics Teaching Hospital (wards and outpatient clinic), from October 2011 to November 2012. Information was collected interview with mothers of 110 children with one of the four chronic illnesses (asthma, diabetes mellitus, cerebral palsy congenital heart disease) to determine their response about pediatric health providers (pediatrics subspecialty, specialist pediatrician and others), whom consulted in the last year, seen most frequently, and who were seen over the longest period time. Rates of of dissatisfaction with those providers are also reported. We select eight items of continuing relations that shows the satisfaction, that is to say; managing child chronic condition, providing general health care, communication with other providers, sensitivity effort to be flexible, background and beliefs, really listening to their opinion, ability to answer question about condition and amount of information and guidance (modified from multidimensional assessment of parent satisfaction (MAPS) for children with special needs). If the mother was strongly agree with eight interviewing questions, so she was regarded extremely satisfied, mother who was agree with six to seven questions regarded very satisfied. If agree with five questions, regarded satisfied and if agree with less than five questions, regarded as dissatisfied The data for this analysis were collected during facilitated discussions. Parents discussed challenges they faced and generated strategies they found helpful.

**Statistical Analysis:** Chi-square test was used to measure the strength of association between the factors considered and the dependent variable. P-value < 0.05 was considered significant.

# **Results:**

During the period from October 2011 to November 2012, we interview 110 mothers who were in hospital wards according to hospital authority. Mothers and pediatrician characters distribution. Table 1(a & b). The mean age of patients was  $5.44 \pm 3.30$  years, and mean mother age was 21.03

 $\pm$  5.99 years. Numbers of providers was in .Around 80% of mothers had low range 1-12 with mean  $\pm$ SD of 4.52  $\pm$  2.14 educational level.

Table 1 a; characteristic of patients and mothers

Characteristics	Range (years )	Means <u>+</u> SD
Mothers age	18-50	21.03 <u>+</u> 5.99
Child age	1-13	5.44 <u>+</u> 3.3
Time since diagnosis	0.6-12	3.35 <u>+</u> 2.63

Table 1 b; characteristic of patients and mothers

	Number	Percentage
Mother education Illiterate	17	15.5
Primary school	48	45.7
Secondary school	21	19.1
Institution or college	24	21.8
Chronic illness Asthma	34	30.9
Congenital heart disease	27	24.5
Cerebral palsy	23	20.9
Diabetes mellitus	24	22.7
Provider Subspecialist pediatrician	79	30.3
Specialist pediatrician	106	40.6
General practitioner	75	28.7
Other	2	0.8
Number of providers 1-3	41	37.3
4-6	51	46.4
7-9	18	16.4
10-12	2	1.8

The range of duration of relationship with providers was 1-60 months with mean  $\pm$ SD of 15.13+12.20 months; 50% of patients visit their pediatrician in about one year. Table-2.

Table 2: Duration of relationship with providers (months)

Duration ( months)	No.	%
<12 months	55	50
12-24mo.	38	34.5
25-36mo.	6	5.4
37-48m	4	3.6
>48 mo.	5	4.5

Table-3 shows the satisfaction of mothers with their children providers, classified according to their agreement with interviewing questions. More than 90% of mothers were extremely satisfied or very satisfied, and 3% were very dissatisfied. The extreme satisfaction was more with Subspecialist pediatricians, while it was more with specialist pediatrician in those who were very satisfied or just satisfied.

Subspecialist pediatricians		Specialist pediatrician		P- value
(44)		(66)		
No.	%	No.	%	
12	27.3	4	6.1	0.04
8	18.2	16	24.3	0.10
16	36.4	32	48.5	0.02
8	18.2	14	21.2	0.20
	No. 12	(44) No. % 12 27.3 8 18.2 16 36.4	(44) (6 No. % No. 12 27.3 4 8 18.2 16 16 36.4 32	(44) (66) No. %  12 27.3 4 6.1 8 18.2 16 24.3 16 36.4 32 48.5

More than half of mothers mentioned that the specialist pediatrician had been seen for longer period, seen most frequently during the last year and had best knowledge- ability of the family. Table 4.

Table 4: Family - providers' relationship

providers	Seen fo	Seen for longest		Most frequently seen		Best Knowledgibility	
	period	period of time		during the last 12mo.		of the family	
	No.	%	No.	%	No.	%	
Subspecialist pediatricians	40	36.4	43	39.1	45	40.9	
Specialist pediatricians	68	61.8	66	60	63	57.3	
General practitioner	1	0.9	0	0	1	0.9	
Others	1	0.9	1	0.9	1	0.9	

Eighty-four percent of mothers reported that they were extremely satisfied that their subspecialist pediatricians managing their child chronic disease, while sixty eight agree that their specialist pediatrician providing general health care, p- value < 0.001.mothers were satisfied that specialist pediatrician most likely listen to their opinion, p- value < 0.002, and answer questions about condition p- value < 0.02 (table5).

**Table5:** The relation of maternal satisfaction with interviewing items

Interviewing item	Subspecialist pediatricians No=44		Specialist pediatrician No=66		P -value
	No.(agree)	%	No.(agree)	%	
Managing child chronic condition	37	84.1	30	45.5	0.33
Providing general health care	20	45.5	45	68.2	0.001
Communication with other provider	38	86.4	34	51.5	0.63
Effort to be flexible	39	88.6	54	81.8	0.11
Sensitivity to background and beliefs	12	27.3	20	30.3	0.15
Really listening to your opinion	16	36.4	38	57.6	0.002
Ability to answer question about condition	38	86.4	60	90.9	0.02
Amount of information and guidance	36	81.8	48	72.7	0.19

## **Discussion:**

Many families of children with chronic illness consult different health care providers, and then stick to health care providers that they satisfied with them. We found that maternal satisfaction is highly affected by the first visit to the pediatrician and his communication style, especially his kindliness, interest, and responsiveness with affected family, this will promote sticking to him. These are similar to the finding of Clarck et al and Drotar . (9, 10) In our study nearly half of families have seen their providers for less than 12 months, but satisfaction was more in families with long duration of relationship, . We found eight items of continuing relations that shows the maternal satisfaction, these are interviewing items mentioned in table (5). The families' level of satisfaction in our study was consistent with finding of Beach. et al and Patel. (12, 13).

One of the main limitation in this study we did not measures child satisfaction with care, but just maternal satisfaction, on the other hand many studies proposed that no difference between them<sup>(14)</sup>, furthermore the sample size which may be small to give significant results. Finally, our results may be biased because most of interview done with mothers who visit the hospital because they are satisfied with the care.

Maternal satisfaction depend mainly on kindliness of the pediatrician to the affected family, also, maternal satisfaction depend on pediatrician good explanations of the illness and answering the family questions. (10)

Street study <sup>(17)</sup> found that the maternal satisfaction not depend on quantity of pediatrician statements or the time of interview. An another study done by Goore et al <sup>(15)</sup> found that mother satisfied better with modest- answers.

In our study, we found that the communication events with parents influence their satisfaction, which depends on the way of presentation of the content rather than content itself, this is consistent with study of Megan et al <sup>(16)</sup>.

In this study there were lower maternal satisfaction ratings of the care delivered by the child's general practitioners. These findings may have important implications for improving primary care models for children chronic conditions.

## **Conclusions:**

- 1. Achievement of Mothers-pediatrician communication ensures best maternal satisfaction.
- 2. Effective satisfaction is identified by the family themselves, and not observed by others.

## **Recommendations:**

- Improve medical student communication skills, especially for chronic pediatrics illness.
- 2- More detailed and big sample size study about patient with chronic illness and their family satisfaction.

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