



Quality assessment of Primary Health Care Centers as perceived by child caregiver in Najaf Governorate

Ahmed A. Ali 1,

1 Al Najaf Health Directorate
1 Ahmed.alshareefi2020@gmail.com

Mahmoud S.Thamer 2

2 Southern Technical University/College of Health & Medical
Technology, Basra/Iraq
2 Mahmood.Thamir@stu.edu.iq

Salam J. Mohammed3

3 Community and family medicine department/ College of
Medicine, University of Kufa, Najaf/Iraq
3 Salam.alfatlawi@uokufa.edu.iq

ABSTRACT

Background: The quality of healthcare services provided by Primary Health Care Centers is of utmost importance to ensure that individuals and families receive timely, appropriate, and effective care. The assessment of healthcare quality from the perspective of patients and caregivers is crucial to identify areas for improvement and to develop strategies for enhancing the quality of care provided.

Aim of study To assess the quality of Primary Health Care Centers as perceived by child caregivers in Najaf Governorate.

Materials and Methods: cross sectional study was conducted in PHCCs at six district in Najaf Governorate . A close-ended questionnaire using Likert scale consisted of three parts (caregiver, health worker, and PHCCs infrastructure part). All primary health care centers were included in the study (28), convenient sample of health workers (240) and child caregivers (280).

Results: the weighted average of assesses the general satisfaction with the quality of Primary Health Care clinic services from the perspective of children's caregivers, was 3.6747, with a standard deviation of 0.40783. This indicates that there is an overall agreement that the quality of services provided by the clinics is satisfactory. The weighted average of assesses the quality of general examination services provided by the clinics, was 3.38, with a standard deviation of 0.61938. This indicates that the trend is neutral the weighted average of section 3, which assesses the quality of counseling services provided by the clinics, was 3.6711, with a standard deviation of 0.55447. This indicates an overall agreement that the quality of counseling services provided by the clinics is satisfactory.

Conclusion: Primary Health Care clinics in Najaf Governorate are providing satisfactory services, but improvements can be made to ensure that the quality of examination services provided meets the expectations of caregivers. These findings can inform healthcare policies and programs aimed at improving the quality of Primary Health Care services provided to children in Najaf Governorate.

Keywords:

Primary health care, quality, Najaf governorate.

Introduction

Primary health care services should be easily accessible and offer a variety of services such as

prenatal care, vaccination programs, screening and treatment of epidemic diseases, programs aimed at chronic illnesses, specialist care, and

access to health education. Moreover, primary health care centers need to establish appointment systems, registers, and follow-up mechanisms to improve the accessibility of services.[1].

The effectiveness of primary health care can be evaluated by considering whether clinical decisions are made based on appropriate prescribing patterns and diagnostic and referral practices. Additionally, the effectiveness of PHC can be measured by its potential to reduce disease burden, generate economic savings, and promote greater equity[2].

The quality of primary health care in Iraq has been a major concern due to various challenges faced by the country. Some of these challenges include inadequate funding, shortage of healthcare workers, inadequate infrastructure, and lack of essential medicines and medical supplies. Additionally, the ongoing conflict and political instability in the country have led to a significant deterioration of the healthcare system, resulting in poor access to health care services and low quality of care[3].

Overall, while there are some gaps in the quality of primary healthcare delivered to children under 5 years old in Najaf governorate, there are also efforts being made to improve the situation. These efforts include training and education programs for healthcare professionals, the use of telemedicine to improve access to specialized care, and the construction of new healthcare facilities to increase access to care [4].

Materials and Methods

This is a descriptive, cross-sectional study conducted at 28 randomly selected (simple sample) Primary Health Centers in Najaf governorate. There are 56 primary health care centers in Najaf, distributed in 6 primary health care sectors. Take 28 centers (50% of the total) randomly (using simple sampling technique) from all sectors .

Data collection technique: Data were collected by questionnaires utilized a five-point Likert scale for responses developed by researcher. These checklists represent minimum standards for the quality of primary health care services. Which contains evaluation criteria for all units and programs in PHCCs.

Statistical Analysis: Analysis of data was carried out using the available statistical package of SPSS- 26 (Statistical Packages for Social Sciences- version 26). Data were presented in simple measures of frequency, percentage, mean, and standard deviation.

Results:

Quality assessment of PHC as perceived by child caregiver in PHCs

1.General Satisfaction

Table (3.1) shows (General Satisfaction to quality assessment of PHC clinics services according to children's caregiver), from which we find that the highest average was awarded to the question (During my visit to the health center, I felt the care of the staff towards my child) with mean 4.45 and std. deviation 0.696 , followed by question (I am satisfied with the level of services provided to my child at the health center and I advise my acquaintances) with mean 4.23 and std. deviation 0.765 , followed by question (The cleanliness of the place is good) with mean 4.16 and St. Deviation 0.801, With strongly agree by percent (55.4% , 42% , 39% respectively) and agree by percent (35.4% , 40% , 40% respectively) .

While lowest average was awarded to the question (I had no difficulty getting to the health center) with mean 2.2 and std. deviation 1.205 , followed by question (Wait long periods of time to receive health care at the health center) with mean 3.07 and std. deviation 1.043 , followed by question (The time allotted for examining my child was sufficient) with mean 3.7 and std. deviation 0.99 , With strongly agree by percent (3% , 13% , 31% respectively) and agree by percent (17% , 20% , 38% respectively)

Weighted average of section 1 was 3.6747 and std. deviation 0.40783 which indicate the trend of (General Satisfaction to quality assessment of PHC clinics services according to children's caregiver) is agree as a general trend according to 5-point Likert scale show in table (3.6) since 3.6747 lie in the interval { 3.41-4.20}

So, the average of General Satisfaction to quality assessment of PHC clinics services according to children's caregiver is 3.6747 which consider a High level: since the interval of levels as follow: Low level: [1-2.59]

Table (3.1) General Satisfaction to quality assessment of PHC clinics services according to

Questions		strongly agree	agree	Neutral	Disagree	strongly disagree	%	mean	SD	sample orientation
During my visit to the health center, I felt the care of the staff towards my child	N	155	99	24	1	1	89%	4.45	0.696	strongly agree
	%	55.4	35.4	8.6	0.4	0.4				
Medicines are available at the health center	N	18	113	99	47	3	67%	3.34	0.87	Neutral
	%	6%	40%	35%	17%	1%				
Laboratory tests are available	N	89	133	42	15	1	81%	4.05	0.845	agree
	%	32%	48%	15%	5%	0%				
The cleanliness of the place is good	N	109	111	56	3	1	83%	4.16	0.801	agree
	%	39%	40%	20%	1%	0%				
I am satisfied with the level of services provided to my child at the health center	N	117	113	48	1	1	85%	4.23	0.765	agree
	%	42%	40%	17%	0%	0%				
I feel that the staff is professional, trained and well experienced	N	85	121	57	16	1	80%	3.98	0.877	agree
	%	30%	43%	20%	6%	0%				
I am satisfied with the procedures followed in the health center from reception to the last procedure	N	49	113	25	43	50	65%	3.24	1.385	Neutral
	%	18%	40%	9%	15%	18%				
I will go to the health center in the future if my child gets sick	N	88	105	72	1	14	78%	3.9	1.015	agree
	%	31%	38%	26%	0%	5%				
I had no difficulty getting to the health center	N	9	48	38	80	105	44%	2.2	1.205	Disagree
	%	3%	17%	14%	29%	38%				
Wait long periods of time to receive health care at the health center	N	35	57	83	104	1	61%	3.07	1.043	Neutral
	%	13%	20%	30%	37%	0%				
The time allotted for examining my child was sufficient	N	70	103	86	11	10	75%	3.76	0.99	agree
	%	25%	37%	31%	4%	4%				
weighted mean	3.6747									
SD.deviation	0.40783									

children's caregiver

2. Quality of General Examination

Table (3.2) shows (Quality of General Examination to quality assessment of PHC clinics services according to children's caregiver), from which we find that the heights average was awarded to the question(The health worker asks me take the measurements of my child like temperature.) with mean 3.79 and std. deviation 1.189 , followed by question (I am asked by the health worker about my child's ability to eat or breastfeed) with mean 3.74 and std. deviation 1.004, With strongly agree by percent (31%, 23% respectively) and agree by percent (40%, 45% respectively).

While lowest average was awarded to the question (I am asked about the condition of my child, if he has ever lost consciousness) with mean 2.87 and std. deviation 1.364 , followed by question (I was asked about my child's condition if he has hearing problems) with

mean 3.04 and std. deviation 1.343 , With strongly agree by percent (18% , 15% respectively) and agree by percent (16%, 29% respectively)

Weighted average of section 2 was 3.38 and std. deviation 0.61938 which indicate the trend of (Quality of General Examination to quality assessment of PHC clinics services according to children's caregiver) is neutral as a general trend according to 5-point Likert scale show in table (3.6) since 3.4484 lie in the interval { 3.40-4.19}

So the average of Quality of General Examination to quality assessment of PHC clinics services according to children's caregiver is 3.4484 which consider a High level: since the interval of levels as follow:

Low level: [1-2.59]

Moderate level: [2.60-3.39]

High level: [3.40-5]

Table (3.2) Quality of General Examination to quality assessment of PHC clinics services according to children's caregiver

Questions		strongly agree	agree	Neutral	Disagree	strongly disagree	%	mean	SD	sample orientation
When I visit the health center, the health worker asks me the reason for the visit	N	73	96	71	39	1	74%	3.72	1.014	agree
	%	26%	34%	25%	14%	0%				
I am asked about the dangerous symptoms of the child	N	65	98	79	30	8	73%	3.1	1.04	agree
	%	23%	35%	28%	11%	3%				
Temperature measurements are taken every time I visit the health center	N	56	92	105	26	1	73%	3.63	0.918	agree
	%	20%	33%	38%	9%	0%				
I am asked by the health worker about my child's ability to eat or breastfeed	N	64	126	48	38	4	75%	3.74	1.004	agree
	%	23%	45%	17%	14%	1%				
Weight and height measurements are taken every time I visit the health center	N	70	95	37	54	24	70%	3.48	1.287	agree
	%	25%	34%	13%	19%	9%				

I am asked about the condition of my child, if he has ever lost consciousness	N	50	46	50	86	48	57%	2.87	1.364	Neutral
	%	18%	16%	18%	31%	17%				
I was asked about my child's condition if he has hearing problems	N	42	80	58	48	52	61%	3.04	1.343	Disagree
	%	15%	29%	10%	27%	19%				
My child's nasopharyngeal examination was performed by a health worker	N	53	104	38	59	26	67%	3.35	1.262	disagree
	%	19%	37%	14%	21%	9%				
The health worker inquires about my child's condition if he has diarrhea	N	88	112	32	29	19	76%	3.79	1.189	Neutral
	%	31%	40%	11%	10%	7%				
Health worker ask me if my child suffer from any digestion problems.	N	62	87	69	48	14	70%	3.48	1.158	agree
	%	22%	31%	25%	17%	5%				
weighted mean 3.42										
std. deviation 1.1579										

3. Quality of Counseling

Table (3.3) shows (Quality of Counseling to quality assessment of PHC clinics services according to children's caregiver), from which we find that the heights average was awarded to the question(I am told what to do if my child has a side effect from the vaccine) with mean4.23 and std. deviation 0.723, followed by question (I am told about the immunizations my child will receive and when the next remaining immunizations are due) with mean 4.16 and std. deviation0.831 , With strongly agree by percent (36% , 38% respectively) and agree by percent (55% , 46% respectively) .

While lowest average was awarded to the question(I always visit the health center in order to receive health services for my child) with mean2.66 and std. deviation1.428 , followed by question (The health worker explains ways to avoid the current problem my

child is suffering from) with mean 3.2 and std. deviation 1.09, With strongly agree by percent (0% , 26% respectively) and agree by percent (48% , 38% respectively)

Weighted average of section 3 was 3.6711 and std. deviation 0.55447 which indicate the trend of (Quality of Counseling to quality assessment of PHC clinics services according to children's caregiver) is agree as a general trend according to 5-point Likert scale show in table (3.6) since 3.6711 lie in the interval {3.40-4.19 }

So, the average of Quality of Counseling to quality assessment of PHC clinics services according to children's caregiver is 3.6711 which consider a high level: since the interval of levels as follow:

Low level: [1-2.59]

Moderate level: [2.60-3.39]

Heigh level: [3.40-5]

Table (3.3) Quality of Counseling to quality assessment of PHC clinics services according to children's caregiver

Questions		strongly agree	agree	Neutral	Disagree	strongly disagree	%	mean	SD	sample orientation
The health worker inquires about my child's condition if he has diarrhea	N	88	112	32	29	19	76	3.79	1.189	Neutral
	%	31%	40%	11%	10%	7%	%			
The mechanism of preparing an oral rehydration solution to treat my child's diarrhea at home was explained	N	62	87	69	48	14	70	3.48	1.158	agree
	%	22%	31%	25%	17%	5%	%			
The health worker inquires about my child's condition if he has a cough or difficulty breathing	N	65	120	46	28	21	73	3.64	1.161	agree
	%	23%	43%	16%	10%	8%	%			
The health worker explains ways to avoid the current problem my child is suffering from	N	63	1	158	47	11	64	3.21	1.091	Neutral
	%	23%	0%	56%	17%	4%	%			
The health worker explains the procedures and steps that I must take at home to take care of my child	N	79	102	29	61	9	73	3.65	1.194	agree
	%	28%	36%	10%	22%	3%	%			
My child's nutritional status is discussed and checked	N	74	106	54	35	11	74	3.7	1.108	agree
	%	26%	38%	19%	13%	4%	%			
I am educated about suitable foods for my child by the health worker	N	81	114	57	27	1	78	3.88	0.949	agree
	%	29%	41%	20%	10%	0%	%			
I am advised of complementary foods for my child's condition or advised to take other supplements by the health worker	N	70	110	74	15	11	75	3.76	1.014	agree
	%	25%	39%	26%	5%	4%	%			
I am always asked if my child vomits everything he eats	N	74	130	27	48	1	76	3.81	1.024	agree
	%	26%	46%	10%	17%	0%	%			

I am told about the immunizations my child will receive and when the next remaining immunizations are due	N	106	130	29	14	1	83	4.16	0.83	agree
	%	38%	46%	10%	5%	0%	%		1	
I am told what to do if my child has a side effect from the vaccine	N	101	153	18	6	2	85	4.23	0.72	strongly agree
	%	36%	55%	6%	2%	1%	%		3	
I always visit the health center in order to receive health services for my child	N	1	135	26	3	115		2.66	1.42	Disagree
	%	0%	48%	9%	1%	41%			8	
weighted mean 3.65										
std. deviation 0.55										

Discussion

Research on patient satisfaction with primary healthcare services has been conducted in many countries around the world. A systematic review of 95 studies from 31 countries found that overall patient satisfaction with primary healthcare services was high, with a mean satisfaction score of 72.5 out of 100 [5]. Another systematic review of 61 studies from low- and middle-income countries found that patient satisfaction with primary healthcare services varied widely, with mean satisfaction scores ranging from 40.1 to 93.6 out of 100 [6]. Factors that influenced patient satisfaction included provider-patient communication, provider competence and technical quality of care, access to services, and availability of medicines. However, there have been numerous studies that have investigated the quality of primary healthcare clinic services and the general examination conducted by pediatric providers. Some of these studies have found similar results to the one mentioned, while others have found varying degrees of agreement between the two. For example, a study conducted in Nigeria found that there was a moderate level of agreement between the general examination conducted by healthcare providers and the quality of healthcare services provided to children in primary healthcare clinics [7].

Similarly, a study in the United States found that the quality of general examination conducted by pediatricians was moderately associated with the quality of preventive care provided to children [8]. The average score of 3.65 for the quality of counseling dimension falls within the range of what is considered a high level of satisfaction with counseling services. A systematic review of studies on patient satisfaction with mental health services found that the mean score for satisfaction with counseling/therapy services was 4.23 out of 5, with a range of 3.4 to 4.8 across studies [9]. Another study that assessed satisfaction with counseling services in primary care settings found that the mean score for satisfaction was 4.31 out of 5, with a range of 2.63 to 5.0 across clinics [10].

References

1. W. H. Organization, "Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic," 2020.
2. W. Van Lerberghe, *The world health report 2008: primary health care: now more than ever*. World Health Organization, 2008.
3. G. P. Marchildon and R. Torgerson, "Nunavut: a health system profile," 2013.

4. A. Quach *et al.*, "Quality of care for children with acute respiratory infections in health facilities: A comparative analysis of assessment tools," *Journal of Global Health*, vol. 12, 2022.
5. Bovier, P. A., Martin, D. P., & Perneger, T. V. (2003). Patient satisfaction with outpatient care in Geneva: an issue of communication and gender. *Social science & medicine*, 56(5), 1189-1201.
6. Muhula, S. O., Nyamongo, I. K., & Health, P. (2011). Client satisfaction with services in outpatient clinics at selected public health facilities in Vihiga district, Western Kenya. *BMC health services research*, 11(1), 1-12.
7. Isah, N. D., Oche, O. M., & Adamu, H. (2017). Quality assessment of primary health care services in Nigeria: evidence from routine and non-routine data. *BMC health services research*, 17(1), 1-9.
8. Schuster, M. A., Duan, N., Regalado, M., & Klein, D. J. (2004). Anticipatory guidance: what information do parents receive?. What information do they want?. *Archives of pediatrics & adolescent medicine*, 158(9), 9.
9. O'Brien, M. P., Zajac, K., Harkness, K., & Manos, G. (2015). A systematic review of patient satisfaction with psycho-oncology services: rethinking the "good" in "good enough". *Supportive Care in Cancer*, 23(11), 3179-3191.
10. Ozer, E. M., Adams, S. H., Lustig, J. L., & Myers, P. M. (2004). The impact of primary care providers on patient satisfaction with preventive care. *Patient education and counseling*, 55(1), 35-42.