



Quality assessment of under-five clinic services at urban health centre setting of medical college of Mumbai district

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Abstract

Introduction: UFC is a centre where preventive, promotive, curative, referral and educational services are provided in a package manner to under five under one roof. Health outcomes of such centres have been improved by investing in infrastructure, medical equipment, and drug supplies and by ensuring access to a certain number of qualified health workers.

Objectives: **1.** To assess the quality of services provided in under five clinic and the utilization of facilities by the community. **2.** To evaluate the client satisfaction.

Methodology: 90 children registered in 2 months were included in study. Quality of service was assessed by age calculation, plotting on growth chart, counselling, attending sick child, etc. To assess the client satisfaction, a close ended questionnaire was used consisting of four parts- care givers satisfaction, infrastructure, waiting period and time spent per patient. Positive responses were graded.

Conclusion: The quality of services provided at Under Five Clinic and the infrastructure are very good. However efforts have to be taken to find the reason for less follow up.

Keywords: quality assessment, under five clinic, urban health centre

1. Introduction

Malnutrition among children below five years continues to be one of India's major human development challenges. In spite of tremendous economic progress made in the last two to three decades, malnutrition among children in both urban and rural India still claims many lives. The three main indicators used to define under nutrition, i.e., underweight, stunting, and wasting, represent different histories of nutritional insult to the child. Overall goal of Under Five Clinics is to provide comprehensive healthcare to young in a separate specialized facility. UFC is a centre where preventive, promotive, curative, referral and educational services are provided in a package manner to under five under one roof. Quality Assessment is a process of meeting quality standards and assuring that care reaches an acceptable level. Until quite recently, governments and aid organizations have tried to improve health outcomes by investing in infrastructure, medical equipment, and drug supplies and by ensuring access to a certain number of qualified health workers.

2. Objectives

1. To assess the quality of services provided in under five clinic
2. To assess the utilization of facilities by the community
3. To evaluate the client satisfaction.

4. To assess the health status of children attending under-five clinic

3. Materials and methods ^[1]

It was a retrospective study conducted in field practice area of Urban health training centre (UHTC), attached to tertiary medical college. UHTC covers a population of 52,158. By complete enumeration method all children up to 5 years of age registered in Under five clinic of UHTC, Samartha Nagar between February 2017 to May 2017 were included. A total of 90 children registered at UFC were included in the study. Information regarding age, sex, birth weight, birth order, height, weight, mid arm circumference, etc. was taken. Quality of services given at Under five clinic was assessed. The parameters for quality of service included age calculation, plotting on growth chart, counselling, attending sick child, etc. To assess the client satisfaction, a close ended questionnaire was used consisting of four parts- care givers satisfaction (general satisfaction, general examination and counselling), infrastructure (toilet facility, drinking water facility, accessibility, etc.), waiting period and time spent per patient. Positive responses were graded as follows

- | | | |
|--------|---|---------------|
| <50% | → | Below average |
| 51-75% | → | Average |
| 75-90% | → | Good |

>91% → Very good/excellent

Confidentiality was maintained by numbering the children. Data was entered in Microsoft Excel 2013 and analysed for descriptive statistics.

4. Results

A total of 90 children registered were included in the study. Male- female distribution was almost equal.

Age and sex distribution

Table 1

	Male	Female	Total
<1 mo	4(4.4)	2(2.2)	6(6.6)
1-6 months	20(22.2)	16(17.8)	36(40)
6-12 months	7(7.7)	9(9.9)	16(17.8)
1-3 years	13(14.4)	13(14.4)	26(28.9)
3-5 years	2(2.2)	4(4.4)	6(6.6)
Total	46(51.1)	44(48.9)	90

Majority (46.6%) of the children were below 6 months of age. Sex distribution was almost equal. Half of the parents had completed their education upto

Nutritional Status

Table 3

Weight /Age	Male	Female	Total
Normal	36	38	74(82.2)
Moderate	10	6(6.6)	16(17.8)
Height /Age			
Normal	38 (42.2)	35(38.9)	73 (81.1)
Moderate	7(7.8)	7 (7.8)	14 (15.6)
Severe	1(1.1)	2 (2.2)	3 (3.3)
Weight /Height			
Normal	37(41.2)	39(43.4)	76(84.6)
Moderate	3(3.3)	5(5.5)	8(8.8)
Severe	6(6.6)	0	6(6.6)
BMI/Age			
Normal	36(40)	42(46.8)	78(86.8)
Moderate	4(4.4)	2(2.2)	6(6.6)
Severe	6(6.6)	0	6(6.6)
Total	46	44	90

More than 70% children were Normal by Weight for Age, Height /Age, Weight /Height and BMI/Age. Only 3.3% were severely wasted, 6.6% were severely malnourished by Weight /Height and BMI/Age. More than 80% children were Normal by MAC/Age and HC/Age.

Education level of mother and or father had no significant impact on the nutritional status of children. Similarly Birth weight and birth order too did not have significant impact on nutritional status of children. No significant difference between education of mother and or father and immunisation status and number of visits to UFC were observed.

standard 10th. Mothers were better educated than fathers. One fourth were graduate and above. Most of the mothers were housewives while most fathers were working in private companies.

Socioeconomic status

Table 2

Socioeconomic status	Number	Percentage
Upper	4	4.44
Upper Middle	7	7.78
Lower Middle	40	44.44
Upper Lower	39	43.33
Lower	0	0

Majority families belonged to upper lower and lower middle class according to Kuppuswamy Socioeconomic status (updated 2017). None belonged to lower class.

Health status of children

More than one fourth (29.8%) children were born low birth weight. Majority (55.6%) were first birth order while 33.3% were second birth order. 94.4% were immunised till date.

Dimensions of child caregiver quality assessment of UFC

Table 4

	Dimension	Percentage	Grade
1.	General satisfaction	91.49	Very good
2.	General Examination	98.52	Very good
3.	Quality of counselling	97.78	Very good

General Satisfaction of Caregivers was good. 83.33% said the Doctor / health worker greeted them while 90% said they felt the courtesy and concern of UHC staff towards their child.

According to their opinion 100% staff was professional, well trained and gave enough time (91.1%) to examine their child. However only 87.78% thought that doctor asked about danger signs and told method to avoid current situation. 94.44% were satisfied with availability of drugs and cleanliness of UHC.

General examination of children at UFC was very good as all parents/ care givers said their children were weighed, 96.67% were asked about child’s eating habit and 98.89% were asked if the child was currently suffering from any health problem like fever, cold, cough, diarrhea, digestion problems, etc.

Quality of counselling of counselling was very good. 96.67% were explained the procedures and steps to take care of my child at home. 98.89% were encouraged to visit again. 97.78% were asked about child’s nutritional status and advised suitable food according to child's age. 97.78% were advised me about complementary food for my Childs condition. 16.67% regularly visit UHC for receiving the UFC services. Majority (86.67%) had to wait for less than 5 mins for their turn at the UFC. 47.78% received counselling for 5-15 mins and 43.33% received it for >15 mins. 72.2% parents or care givers were satisfied with the timings of UFC. In spite of the good quality of healthcare provided at UFC only 16.67% beneficiaries visited the centre regularly.

Assessment of UFC (Infrastructure)

Table 5

Parameter	Number	Percentage	Grade
Accessibility	72	80	Good
Waiting area	81	90	Good
Availability of equipments	90	100	Very good
Availability of Medicines	85	94.44	Very good
Drinking Water Facility	0	0	Below average
Toilet Facility	90	100	Very good

80% found the centre accessible. However others complained that the centre was too far and had to spend money. 90% found that there was enough waiting area and all care givers said required equipments were available at the clinic.94.44% commented there were enough medicines. There is toilet facility but no separate toilets for males and females. Drinking water facility is not available.

Assessment of healthcare worker/ Doctor at UFC

Table 6

Parameter	Number	Percentage	Grade
Age Calculation	83	92.22	Very good
Weighing and other measurements	86	95.55	Very good
Plotting of Growth Charts	86	95.55	Very good
Referral and Follow up	88	97.77	Very good
Breast feeding	87	96.66	Very good
Nutritional Education	84	93.33	Very good
Attending to sick child*	20	100	Very good

*20 children attending Under five clinic were ill.

Growth monitoring and nutrition education were done only by Doctors. Age calculation and record maintenance were very good (92.22%). The weighing method was also good (95.55%), but some children were weighed with the clothes.

All growth charts were plotted properly. The mild and moderately malnourished children were given nutritional education (which included breast feeding, weaning, balanced diet and locally available food), health advice and multi vitamin syrup. Those who were severely malnourished were referred to paediatrician and to nutritional rehabilitation centre. Mothers were explained the growth chart after plotting and importance of road to health was explained. They were given follow up date and were advised to visit if the child was ill or his condition worsened. However outreach educational sessions were very rarely conducted and importance was not given to these sessions.

5. Discussion

General Satisfaction of Caregivers was good. General examination of children at UFC was very good. 96.67% were asked about child’s eating habit and 98.89% were asked if the child was currently suffering from any health. In contrast to this Rashmi and B vijaykumar in their found that history taking (36.3%) and physical examination (20.41%) was poor [6]. All care givers were counselled according to the condition of their child and quality of counselling of counselling was very good. In a study by Allison Lind, the caretakers were counselled about feeding during illness in only 18% of consultations [5]. More than 95% care givers about child care at home, follow up visits, nutrition. In study conducted in Palestine, perceptions of caregivers of children under 5 years old showed positive assessment towards the quality of clinics services in all dimensions (general satisfaction, quality of general examination and quality of counselling) [7]. Waiting time was less than 5 mins in our study. 47.78% received counselling for 5-15 mins and 43.33% received it for >15 mins. Whereas Allison Lind in her study found that the consultation lasted 10 min for 93.5% of children with a median of 5 min [5]. 72.2% parents or care givers were satisfied with the timings of UFC. In spite of the good quality of healthcare provided at UFC only 16.67% beneficiaries visited the centre regularly. The study in Karnataka by Rashmi and B vijaykumar found that the client satisfaction in child examination was low in interpersonal quality (77.78%) and efficiency to treat (83.33%). 13% of clients had problem with professional competence and skill, 9% had problem with duration to wait and fulfillment of health care facility, and 100% of clients were satisfied with availability of services, facilities, and equipments [6].

80% found the centre accessible. However others complained that the centre was too far and had to spend money. 90% found that there was enough waiting area and all care givers said required equipments were available at the clinic. 94.44% commented there were enough medicines. There is toilet facility but no separate toilets for males and females. Drinking water facility is not available. In study conducted at Palestine, quality assessment of under five clinics regarding to services, infrastructure, medical equipments, drug availability and cleanness of the facility was significantly positive [7]. Growth monitoring and nutrition education were done only by Doctors. In a study by Allison Lind, A majority of the children (93%) were examined by doctors and 10% were examined by female providers [5]. In our study, age calculation and record maintenance were very good (92.22%). The study in

Karnataka by Rashmi and B vijaykumar found age calculation and record maintenance were very good ^[6]. The weighing method was also good (95.55%), but some children were weighed with the clothes. All growth charts were plotted properly. However a study in Afghanistan found 56% of the children weighed, had their weight checked against a growth chart ^[5].

6. Conclusion and Recommendations

The quality of services provided at Under Five Clinic and the infrastructure are very good. However efforts have to be taken to find the reason for less follow up. Also outreach activities should be started. This can promote more number of people to come back to the centre for follow-up.

7. References

1. Sharples J. Assessing the quality of service. Module 6. Geneva: Aga Khan foundation, 1993.
2. Agarwal M, Idris MZ, Ahmed N. Quality of child health services at Primary care level (Rural v/s urban) in Lucknow District. Indian J Comm Med. 2004; 29:192-5.
3. <http://www.who.int/childgrowth/standards/en/>
4. Reli M, Marlis P, Mitch B. Quality of child health care service indicators, RICHE Work Package 2, Final Report, 2012.
5. Allison L, Anbrasi E, Philippe B, Lais M, Peter H, Gilbert B, David P. Quality of outpatient hospital care for children under 5 years in Afghanistan. International Journal for Quality in Health Care. 2011; 23(2):108-116
6. Rashmi, B Vijaykumar. Quality Assessment of Child Care Services in Primary Health Care Settings of Central Karnataka (Davangere District). Indian J Community Med. 2010; 35(1):24-28.
7. Baheye A, Quality Assessment of Primary Health Care Delivered to Children Under 5 Years Old in North West-Bank / Palestine, An-Najah National University Faculty of Graduate Studies. https://staff-old.najah.edu/sites/default/files/Quality_Assessment_of_Primary_Health_Care_Delivered_to_Children_under5_Years_Old_in_North_West_Bank_Palestine.pdf