

## **Experience of Nutrition Officers running CMTC under ‘Mission Balam Sukham’ in a Rajkot district of Gujarat**

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### **ABSTRACT**

State Government has started a programme “Mission Balam Sukham” to combat the malnutrition with 3 tier approaches including Village Child Nutrition Center (VCNC), Child Malnutrition Treatment Center (CMTC) and Nutrition Rehabilitation Center (NRC). Present study was conducted with the objectives to compare the availability of articles present at Child Malnutrition Treatment Center (CMTC) in a Rajkot District of Gujarat. Childhood under nutrition is an important challenge to public health and socioeconomic development in India. The prevalence of Severe Acute Malnutrition (SAM) in children is very high in spite of overall economic development in India. An individual will experience malnutrition if the appropriate amount or quality of nutrients comprising a healthy diet is not consumed, or not absorbed adequately or not metabolized for an extended period of time. Hence such problem her attracted me for the study.

**Key Words :** Malnutrition, District child malnutrition center, Mission Balam Sukham

### **INTRODUCTION**

*“Healthy Children ..... Healthy Nation”*

India is one of the highest-ranking countries in the world for the number of children suffering from malnutrition. Child Malnutrition Treatment Centre (CMTC) provide nutritional therapy to severely undernourished children which is one of the newer initiative of Government of Gujarat to tackle undernutrition among children as part of “Mission Balam Sukham”. After 2 years of completion of “Mission Balam Sukham”, the Centre should be evaluated to identify good aspects and areas which need to be improved upon. The World Health Organization defines malnutrition as

*“deficiencies, excesses or imbalances in a person’s intake of energy and/or nutrients.”*

Malnutrition can be a result of a lack of macronutrients or micronutrients. However, some of the most serious forms are with malnutrition in paediatrics or infants. There are two serious types of malnutrition among children: severe acute malnutrition and moderate acute malnutrition. Severe acute malnutrition, or SAM malnutrition, is the most extreme condition of malnutrition. Children experiencing severe acute malnutrition require urgent nutrition in order to survive. They have very low weight and have severe muscle wasting. Moderate acute malnutrition is also very serious but is less urgently life threatening.

The present study was undertaken with the following objectives:

- The objective of the study is to evaluate of Child Malnutrition Treatment Centre (CMTC),

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Gujarat.

- To identify the appropriate scope of intervention for the improvement of the poverty situation.
- To identify project-defined indicators (poverty-related socioeconomic determining factors) for evaluation.

## METHODOLOGY

The present study was an attempt to study the nutritional as well as health status of Selected Pre-School Children visiting as beneficiaries of CMT Center of Gujarat state. Systematic and Scientific procedures were followed to conduct the research. The research procedure can be described as under:

### Sample size :

Child Malnutrition Treatment Centre (CMTC) list was taken from District. CMTCs from were selected by systemic random sampling and compared with centers from the availability of necessary articles. The programme was initiated in phased manner from Rajkot district. Nutrition officers who ran the CMTCs for 2 years were interviewed about their experience of running CMTC.

### Inclusion, exclusion criteria :

All the Nutrition officers form selected list and given the consent to take part in the study were included.

### Data questionnaire :

Data was collected by using semi structured questionnaires for availability of articles at the centers. All the information was collected from Nutrition officers. Questionnaire included checking the availability of articles listed in state CMTC guidelines including food articles, toys, medicines, educational articles, washing facilities etc. The interviews were conducted at respective centers which were comfortable place for CMTCs. The interviews were conducted after completion of CMTC. The interviews were started after taking consent and explaining the confidentiality of the information collected.

Main topics covered in the in-depth interviews were following:

- Training for CMTC
- Problem in grading and enrolment
- Problem in reporting and use of report formats
- Benefits of CMTC
- Problems in running CMTC
- Suggestions for improvement

### Consent :

At the time of data collection, the purpose of the study was clearly explained to the Nutrition officers and their consent was taken.

### Data management and statistical analysis :

The quantitative data collected was entered and analyzed in Microsoft excel worksheet. The

Qualitative data from the in-depth interviews of CMTCs were obtained in form of field notes in vernacular language. Note expansion was done in the same language and then analysis was done manually by giving codes to common responses to the questions and then translated into English. Verbatim were used as they were.

## RESULTS AND DISCUSSION

Comparisons of availability of articles at CMTC and control group. The first objective of the study was to evaluate and compare the availability of food and articles in cmtc working as Nutrition officers. Article list was taken from State CMTC guideline. In this study, most of the articles like WHO growth charts, utensils for serving, books and toys were 100% available at CMTCs. As per guideline under CMTC, thermometer should be available at CMTC but it was not available at any CMTC or control Nutrition officers. There were not much differences in availability of articles like weight machine, MUAC tap, IMNCI (Integrated management of neonatal and childhood illnesses) chart, Utensils for cooking, soap and water supply.

Table 1 : Availability of articles in CMTCs	
Articles	Availability
Functional weight machine	9
MUAC tape	10
Thermometer	02
MAMTA Card	10
WHO growth chart	10
IMNCI chart	9
Referral slip	60
Utensils for cooking	10
Utensils for serving	10
Soap	6
Tape water supply	10
Toys	Yes

Table 2 : Availability of food articles in CMTCs	
Food Articles	Availability
Rice	10 kg
Wheat	10 kg
Green gram	8 kg
Ground nut	10 kg
Tail	5 kg
Oil	10 ml
Jaggary/Sugar	10 kg
Pauva	8 kg
Chana Dal	7 kg
Tuver Dal	9 kg

As per CMTC guideline centers were provided money to purchase food articles listed above so most of the food articles were available at CMTCs as compared to control centers. Wheat,

ground nuts, tail, jaggary/sugar, Chana dal/ Tuver dal were available at all CMTCs. Some of the food articles like rice, green gram, pauva were not available at control centers because they were not provided (Table 2).

CMTC medicine kit was provided by government to all centers containing PCM, Gential violet solution, GBHC, albendazole, povidone iodine, chloramphenicol eye ointment and dressing materials. CMTC medicine kit was present in 100% of CMTCs.

<b>Table 3 : Availability of medicines in CMTCs</b>	
Medicine	Availability
Medicine kit	10
Iron tablet/ syrup	9
Folic acid	9
Vitamin-A	7
Zinc	6
Calcium	10
Clotrimoxazole	5
ORS	10

Drugs like Iron folic acid, vitamin A, zinc, calcium, clotrimoxazole, ORS should be present at all centers for treatment according to IMNCL. All these drugs also recommended under CMTC guideline for all malnourished children.

#### **Experience of Nutrition officers running CMTCs :**

According to 2nd objective all Nutrition officers from CMTC group were interviewed to know their experience of running CMTC.

#### **Training for CMTC :**

- All of the Nutrition officers found the training very informative to learn about supplementary nutrition, anthropometric measurement, malnutrition and how to do reporting.
- Few of the Nutrition officers found the training time less. They need the training to be longer about 3-4 days with more hours/day.
- One Nutrition officers found the need for refresher training because her training was done before 1 year and so was difficult for her remember without practice.

#### **Problem in grading and enrolment :**

All of the Nutrition officers did not have any problem in grading the malnutrition according to WHO growth chart. Most of the Nutrition officers had difficulties in grading the children according to SAM and MAM criteria. They said it was newer technique for them to take height and MUAC for grading malnutrition so it was somewhat difficult. For few of them it was difficult to compare grade according to growth chart and MUAC said, “According to tape fewer children come in red, according to growth chart more children come in red.” Most of the Nutrition officers did not find any problem in enrolment of children.

#### **Problem in reporting and use of reports :**

Most of the Nutrition officers did not experience any problem in reporting because they were

taught about reporting in training and also got support from supervisor. Few of the Nutrition officers did not understand some columns in report like IMNCI grading, SAM with complication, SAM without complication etc. Most of Nutrition officers complained about the billing part in reporting.

#### **Benefits of CMTC :**

- All Nutrition officers said that many children had gained weight and improved malnutrition status.
- Most of the Nutrition officers said that there was marked increase in attendance due to CMTC.
- Some of the Nutrition officers said that children and their mothers learned good hygienic practices while attending CMTC.
- Few of the Nutrition officers said that there has been marked decrease in less nutritious junk food like, Kurkure? and, Gopal? in children. Instead of that children started to take nutritious food.
- They also said CMTC was also useful to decrease disease occurrences among malnourished children.

#### **Problems in running CMTC :**

Most of the Nutrition officers complained about the timing of CMTC. They said it was difficult for them and children both to sit there from 9 to 5 without any recess.

All the time children ran away after breakfast and have to be called for next meal. Some of the Nutrition officers had problem in managing money to run CMTC. They were given not enough money to buy all stock before starting CMTC month. They had to buy the stock from their own money.

Few of the Nutrition officers had difficulty to make the sick children sit without proper treatment. Said, "Children had cough and cold but still we made them sit after giving paracetamol. Children also need medicines with food."

#### **Suggestion for improvement :**

Few of the Nutrition officers suggested that CMTC menu should include some salty and spicy food. Children were bored of sweets 4 to 5 times a day.

One Nutrition officer suggested that all Nutrition officers should be provided working weighing scale before starting of CMTC to get the correct idea about weight gain. She also suggested that children must be visited by doctor after enrolment.

Some of Nutrition officers suggested that centers should be provided outdoor toys like slides, swings and small merry-go-round for children because it would help to increase children's attendance and interest.

#### **Discussion :**

According to first objective of comparing articles at CMTCs, most of the articles were present at both the groups like utensils for serving, WHO growth charts, books and toys. Many medicines and supplements necessary at both the places were available in adequate quantity.

Regarding the experience of Nutrition officers running CMTC, most of the Nutrition officers did have enough medicine stocks and functioning weighing scales. Support from the other staff and community was good in most of the Nutrition officers. It was difficult to understand SAM, MAM

and 15% weight increment charts for most of the Nutrition officers. It was also difficult for them to make less than 2-year child to sit at CMTC with their mothers from 9 am to 5 pm. According to most of the Nutrition officers many malnourished children improved their grades rapidly by CMTC interventions.

**Conclusion :**

Nutrition officers needed more detailed and refresher training to run the CMTCs along with proper support from higher centers, funding and material supply in adequate quantity and quality. As the state programme was in initial phase, result may be change over a time or with greater sample size.

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