

An appraisal on the operating nutritional rehabilitation centres (NRCs) in Telangana state

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The present study evaluated the performance of Nutrition Rehabilitation Centers (NRCs) in Telangana State. The information was collected from 12 NRCs in Telangana State decisively by using a structured questionnaire. The study has proposed for a proper and rigorous follow up mechanism to be developed by the Health and ICDS departments. The mechanism of counseling should be strengthened at the NRCs so that mothers will take care of their children and approach for a follow up. A checklist should be prepared for counseling at NRCs. In the absence of the counselor, nursing staff should counsel the mother or some reading material in Telugu should be placed in the counseling area to facilitate better. The cases must be followed up properly. It is suggested to strengthen convergence between health and ICDS departments while discharging the severe acute malnutrition (SAM) child and their follow up. All the follow ups should be recorded and analyzed thoroughly for a better action in future.

Key Words : Nutrition rehabilitation center, Counseling, Severe acute malnutrition (SAM), Health and ICDS departments, Follow-ups

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INTRODUCTION

Malnutrition is a general term. It most often refers to under nutrition resulting from inadequate consumption, poor absorption or excessive loss of nutrients, but the term can also encompass over nutrition, resulting from excessive intake of specific nutrients. In subsequent text, we would use the words malnutrition and under nutrition interchangeably. An individual will experience malnutrition if the appropriate amount of, or quality of nutrients comprising for a healthy diet are not consumed for an extended period of time (Government of India, 2011).

The three indices - weight-for-age, height/length-for age, weight-for- height/length are used to identify three nutrition conditions: underweight, stunting and wasting, respectively. Each of the three nutrition indicators is expressed in standard deviation units (Z-scores) from the median of the reference population based on which under nutrition may be further classified as moderate or severe.

Underweight, based on weight for-age, is a composite measure of stunting and Wasting and is recommended as the indicator to assess changes in the magnitude of malnutrition over time. This condition can result from either chronic or acute malnutrition, or both. Underweight is often used as a basic indicator of the status of a population's health as weight is easy to measure. Evidence has shown that the mortality risk of children who are even mildly underweight is increased, and severely underweight children are at even greater. An underweight child has a weight-for-age Z-score that

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is at least two standard deviations (-2SD) below the median in the World Health Organization (WHO) Child Growth Standards (WHO Growth Standards).

As described in the operational guidelines given by the Govt. of India, stunting is described as failure to achieve expected height/length as compared to healthy, well-nourished children of the same age is a sign of stunting. Stunting is an indicator of linear growth retardation that results from failure to receive adequate nutrition over a long period or recurrent infections. Stunted child has a height-for-age Z score that is at least two standard deviations (-2SD) below the median for the WHO Child Growth Standards.

Wasting represents a recent failure to receive adequate nutrition and may be affected by recent episodes of diarrhea and other acute illnesses. It indicates current or acute malnutrition resulting from failure to gain weight or actual weight loss. A wasted child has a weight-for-height Z-score that is at least two standard deviations (-2SD) below the median for the WHO Child Growth Standards.

Severe acute malnutrition is defined by very low weight – for – height/length (Z – score below – 3SD of the median WHO child growth standards), a mid-upper arm circumference <115 mm, or by the presence of nutritional oedema. SAM increases significantly the risk of death in children under five years of age. It can be an indirect cause of child death by increasing the case fatality rate in children suffering from common illnesses such as diarrhea and pneumonia. Children who are severely wasted are 9 times more likely to die than well-nourished children (Solomon Amsalu and Zemen Tigabu).

India is one among the many countries where child malnutrition is severe and also malnutrition is a major underlying cause of child mortality in the country. In India, it is expected that 9 million children, are suffering from severe acute malnutrition. This is almost 50 per cent of children with severe acute malnutrition (SAM) worldwide. According Global Hunger Reports malnutrition directly or indirectly results in deaths of 5million children every year, which transits into one child death every 10 second. However, these deaths can be prevented with appropriate nutritional and clinical management. Therefore, under national rural Health Mission, nutrition rehabilitation Centers have been set up with the intention to improve the quality of care being provided to children with SAM and to reduce child mortality (Sharma, 2013).

Thus the present study is undertaken to evaluate the performance of Nutritional Rehabilitation Centers in Telangana State.

METHODOLOGY

Sample selection:

A total of 12 nutritional rehabilitation centres (NRCs) were selected for the present study by adopting the purposive sampling method.

Questionnaire:

A pre-tested and structured questionnaire was prepared and used for the present baseline study.

Survey method adopted:

Personal interview method of data collection was applied to collect primary data from the targeted respondents (Mothers, Doctors and Dieticians) to study the functioning of 12 NRCs of the erstwhile districts of Telangana State.

Data analysis:

The results of the collected data were statistically analyzed by using Tabular and simple percentage method (Snedcor and Cochran, 1983).

OBSERVATIONS AND ASSESSMENT

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Findings of NRC's Appraisal :

Infrastructure :

Adequacy of beds:

In the Telangana State 12 NRCs are being run. 10 of these NRCs are 10 bedded and remaining 2 are 20 bedded. Eight NRCs are having 50-100 child admissions, 2 had less than 50 admissions and in the remaining 2 NRCs nearly 100-150 children were admitted. In 7 NRCs 50-100 children got recovered from malnutrition and less than 50 were recovered in 3 NRCs based on the last quarterly report from survey date. More than half of the admitted children were recovered in total. Very low percentage of children admitted in NRC's was relapsed and deaths occurred. The average length of stay was 7-15 days in all the NRCs. Bed occupancy rate was 60-100% in 7 NRCs and 30-60 % in 4 NRCs. The average

weight gain of children was 2 kg.

Water and sanitation:

The availability of safe drinking water and sanitation facility was assured by the hospital in all the centers visited. Mothers reported that the attached toilet and bathroom is well maintained by the hospital staff and also found that most of the NRC's maintained the general hygiene like proper hand wash facility, neat flooring, clean bedding and laundry, good food storage and dishwashing.

Monitoring ward procedures:

It was observed that, the NRCs are following the good feeding practices, warming, weighing, giving antibiotics, medications, supplements and providing good environment to the admitted children.

Human Resources :

Availability of human resources:

All the centers visited were equipped with the medical officer, nutritionist and the nursing staff to monitor the health of children. The role of planning the therapeutic diet for each child is carried out by the nutrition counselor. All other functions were carried out by staff *i.e.* counseling mothers on various topics like nutrition and malnutrition, hygiene and sanitation, infant and young child feeding practices, immunization, family planning etc., detect the feeding problems in children and counsel mothers accordingly and also demonstrate the preparation of low cost nutritious energy dense child food.

Availability of trained human resources:

In Telangana State 12 NRC's are functioning with trained nutritionists and nursing staff on facility based care of SAM. Five NRC's were functioning with untrained medical officers.

Record keeping :

Record of the admitted and discharge children:

The centers have maintained the record book as a key to track the treatment of each SAM child admitted in the centre. The record available in NRCs showed that only one child was referred from the AWC and most of the children were coming for follow-up visit following their discharge from the concerned NRCs. According to the medical officer, majority of SAM cases, except one or two, are referred from outpatient doctor (OPD).

Other Services available :

Counseling on appropriate feeding, care and hygiene:

As per operational guidelines, in addition to curative care, special focus needs to be taken on improving the skills of mothers regarding the appropriate caring and feeding practices for the child. In addition, efforts should be made to build the capacity of mothers through counseling and support to identify the nutrition and health problems in their child. On inquiring, more than half per cent the mothers of the admitted children have reported that counseling session were conducted by staff and 33 per cent were not provided any counseling.

Follow-up of discharged children:

The procedure of follow up of discharged children is missing from the entire model. Since few follow ups were recorded, this confirms the limited capacity for detection, referral and treatment of severe wasting and the lack of linkages between the services. The records available in the center showed that 75 per cent of follow-ups are happening for the first designated follow-up date. The percentage of follow-ups are decreasing during third designated follow-up date (*i.e.* after 3 months) when compared with the first designated follow-up date (*i.e.* after 15 days) and second designated follow-up (*i.e.* after 1 month).

Key observation :

Ward environment for children:

While working in the field it has been observed that, most of the NRCs are child friendly. But the beds provided in the centers do not have side rails to protect child from falling. The surroundings were welcoming and cheerful, mothers were offered a place to sit and sleep and encouraged to be involved in caring their children.

Mother's illiteracy:

It has been observed that 33 per cent of mothers of the admitted children have attained primary school education, 25 per cent finished high school education, 8 per cent had accomplished SSC and Intermediate. Literally neither they possess knowledge regarding malnutrition and its treatment nor do they have any awareness of the condition or improvement in the health of their children.

Age of the mothers:

While interviewing the mothers of the admitted children, it was observed that none of them know their actual age. Forty two per cent of children admitted in NRCs were second born. Early marriages and very less gap between siblings have resulted in low birth weights. The weight of a new born determines the survival chances of the child and is beneficial in long-term health improvement, physical and psychological development.

Conclusion :

Nearly half of India's children under the age of 5 years are chronically under-nourished due to poor diet and lack of nutrients in their food. Malnutrition stunts physical, mental and cognitive growth and makes children more susceptible to illnesses. Every year, thousands of mothers in India are losing their children to illnesses that are directly or indirectly linked to malnutrition, even though it is easily preventable. To fight this silent epidemic, An organization or scheme called Save the Children is working persistently to ensure that the most marginalized children have access to quality healthcare and nutrition. Here are some recommendations from Save the Children to strengthen the NRCs in Telangana State. While working in the field it has been observed that, government has started the NRCs but the infrastructure and facilities are not upto the mark. The beds provided are either kid's bed where mother cannot stay with the child as per the guidelines, or the beds do not have side rails. Age appropriate and child friendly toys are not available at NRCs. NRC staff are to be sensitized on child friendly behaviour and communication. They should have special, technical and interactive equipment available for servicing children. Separate toilet facility must be there for the kids along with kids friendly washbasin and children pot in the toilet. There has to be a play area for children with child

friendly toys. Each and every corner of the NRC must be child friendly like door, chair, bed, bed sheet etc. and there should not be any sharp edged material lying in the ward. The walls must be painted with bright colours, having images, learning material painted on it. There should be an activity calendar in the local (Telugu in Telangana) language to mothers for 10 days where they are educated for care of their child. The mechanism of counseling should strengthen at NRC so that mothers will take their children for follow up. A checklist should be prepared for counseling at NRCs. If the counselor is not available, nursing staff should counsel the mother or some reading material in Telugu should be placed in the counseling area. A proper follow up mechanism is not developed by the Health and ICDS departments. The cases must be followed properly. It is suggested to strengthen convergence between health and ICDS in regard to discharge of SAM child and their follow up. All the follow ups should be recorded and analyzed properly.

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