

Editorial

Glimpse from Nutrition Rehabilitation Unit (NRU), Department of Pediatrics, Ad-din Women's Medical College and Hospital: Trend and Rehabilitation for Childhood Protein Energy Malnutrition

Ashraf Uddin Ahmed¹, ARML Kabir², Dilruba Akter³, Masuma Khan⁴

The initial mission and vision:

Current Ad-din Women's Medical College and Hospital (**AWMCH**) was formerly known as '**Ad-din hospital**'-serving only the women and children that started in 1997 in partnership with the Save the Children Fund (**SCF-UK**) at the premises of **CNU** (Children Nutrition Unit) after the agreement between **Ad-din Welfare Trust** and the **SCF, UK**. This was inaugurated in April, 1998 by the Hon'ble Prime Minister of GoB **Sheikh Hasina**.

The chief aim of **AWMCH** was to provide low cost health care service deliveries making it affordable for the low-income settings/ communities to deliver quality care rendered by specialist physicians (child health experts). It started its OPD and indoor services for mother and children with 20 free beds in indoor to serve the severely malnourished children (Nutritional Rehabilitation Unit: **NRU**).

With the gradually increasing demand and patient loads, Ad-din Hospital's **Pediatric OPD** started previously,

divided into two wings: for **under 1-year** (0-12 months) and **above 1-year** old children. Other services at the Pediatric OPD consisted with growth monitoring and nutrition-promotion activities (including anthropometric assessment), nutritional counseling, breastfeeding corner, lactation management corner, immunization and/or family planning facilities.

Scopes and Advantages of Nutritional Rehabilitation Unit (NRU):

To assist the poorer communities, 20 free-beds were allocated for NRU on special ground located at the pediatric indoor to serve the malnourished children attending AWMCH who are being assessed for their nutritional status, at first, using following anthropometric measurements:

- Weight is measured using scales, salters like hanging scale, digital scale and baby scale
- Height/length is measured by infantometer or stadiometer, as applicable
- Mid-Upper-Arm Circumference (MUAC) by Shakir's MUAC Tape
- Occipito-frontal Circumference (OFC) measured by simple measuring tape.

This NRU is specially designed as child friendly with many cartoons, colorful pictures, toys etc. on the walls with good environmental temperature to allow full recovery as a whole and to assist to improve proper growth and development to these SAM children.

1. Professor, Nutrition Coordinator (NRU), Department of Pediatrics, Ad-din Women's Medical College and Hospital
2. Professor and Head, Department of Pediatrics, Ad-din Women's Medical College and Hospital
3. Nutritionist & Councilor, Department of Pediatrics, Ad-din Women's Medical College and Hospital
4. Associate Professor, Department. of Pediatrics, Ad-din Women's Medical College and Hospital

Correspondence: Ashraf Uddin Ahmed, Professor, Nutrition Coordinator (NRU), Department of Pediatrics, Ad-din Women's Medical College and Hospital

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Severe Acute Malnutrition (SAM) as managed by the NRU:

Once any child is diagnosed as **SAM** (having weight for height/length Z score $< -3Z$, having bilateral pitting pedal edema or MUAC < 115 mm among children 6 months to under 5 years old) are treated following a standard protocol (introduced first in 1999 by an Australian Nutrition Trainer) that was followed by WHO guidelines.

Later in 2003-2004 the protocol was updated by Professor Mike Golden UK pediatrician following an international training workshop in ICMH (Matuail) for the management of SAM patients. NRU had a well-organized nutrition team comprising of pediatric consultants, nutritionist, nurses and food assistant, coordinated by a nutrition coordinator, who was mainly responsible for implementation of this management protocol for SAM patients.

There was fixed one day weekly nutrition team meeting to discuss and to improve the services of its members in reducing the overall outcome in term of morbidity and mortality of SAM patients.

Nutrition Coordinator along with other Pediatric consultants looks after the clinical management following treatment protocol; Nutritionist used to look after feeding these children, daily weight monitoring, record keeping, monthly and yearly reporting, play therapy, nutrition education and disseminated a minute written by nutrition coordinator to all its members and SCF-UK. Food assistants were responsible for preparing and serving special diets like F-75, F-100, F-100D, ReSoMal and Khichuri accurately to the SAM patients by using a special kitchen in pediatric indoor department. These trends are still continuing in NRU of pediatric department of AWMCH.

Trends in NRU:

Regarding trends of SAM patients in NRU of AWMCH, there is decline day by day probably due to improvement in services delivery, different training programs, awareness of people in general and improvement of economic conditions of the people of the country. In early part of beginning, NRU had full 20 bed sometimes extra bed were needed to treat the SAM patients, all the expenses were bearded by the authority free of cost during not only in hospital but also after that next 6 months of the admission in NRU. The overall outcome in term of morbidity and mortality were about less than 5% as within acceptable limits of WHO. Many post-graduate medical students collected data from our NRU for their dissertation/theses. Now-a-days, we observe about less than 10 SAM cases in our NRU.

Concluding Remarks:

Due to well reputation of AWMCH's NRU, undergraduate medical students and BSC nursing students from various institute used to visit this hospital for training purpose since last 1999 for clinical nutrition and dietetics. Thus, it also played a role for our nutrition coordinator in participating and developing national guidelines for the management of SAM patients in the country. Our respected Executive Director (E.D.) Dr Sheikh Mohiuddin is the key person for the whole activities of this special NRU of the pediatric department of AWMCH-who we remain grateful for assisting these poor and deprived children (SAM). Our contribution to NRU led the parents of recovered children referring others to bring several others parents showing gratitude and satisfaction on our treatment and management system of SAM children, very successfully.