

# Hunger to Nutrition

## *The journey of Sukhiya.....A born fighter*

### **BACKGROUND**

Malnutrition denotes the corollary of chronic nutritional deprivation due to poor perception, poverty or family problems which restrict appropriate nutritional care in children. More than one third of child deaths and 11% of the total disease burden globally are attributed to maternal and child under nutrition. Severe acute malnutrition (SAM) is a preventable and treatable cause of mortality in children under 5 years. These children present with ~9-11% increased mortality risks as compared to well nourished children. The State of Madhya Pradesh is cognizant of the colossal burden of SAM in the State and is been managing these cases since 2005-06 through its 315 Nutrition Rehabilitation Centers (NRCs) established at almost every block health facility.

The severely malnourished child is predisposed to many of the infections due to its impaired Humoral and Cell mediated immunity. Tuberculosis in one of these common infections that the child may acquire especially if it is in the contact of a TB patient. There are evidences of the deleterious effects on nutrition by childhood TB and vice versa.

### **CASE REPORT**

A child named Sukhiya, 24 months old D/o Mr. and Mrs. Durga Bai Rajput of Village Khamariya, Block Gadarwara district Narsinghpur was brought by her father to the NRC in District Hospital, Narsighpur on 23<sup>rd</sup> July 2015 as a case of shock with constant complaint of cough & fever.

Sukhiya was the second child of the three children born to Mr & Mrs Rajput. Her mother was mentally and physically challenged and stayed at home to take care of Sukhiya's younger sister aged 2 months. They stay in a poorly constructed house lacking basic amenities such as sanitation services, supply of potable water, consistent electricity etc.

The visibly wasted Sukhiya weighed 4.945 kg on admission with a length of 75.5cm. Her Mid Upper Arm Circumference (MUAC) was 7.9cm and Weight for Height < - 4 Standard Deviation (SD) from median. Clinical and Medical diagnostics revealed pulmonary TB accompanied with severe anemia (Hb 8.0g/dl).



When probed about the reasons for the present clinical condition of Sukhiya, her father revealed that the child was weak and malnourished when delivered. She was fed on top feed, biscuits and had been sick recently with constant cough further deteriorating her condition.

Sukhiya was treated for shock and started on starter formula feed i.e. F-75. Simultaneously she was put on DOTS treatment too. Gradually, with prompt medical treatment and supervised nutritional care Sukhiya's condition improved and she achieved her target weight, weighing 5.740kg on the 12<sup>th</sup> day of her NRC stay. However, the doctors advised to keep her in NRC for few more days until the medical complications completely resolves. Thus, Sukhiya stayed for 29 days in NRC and was discharged on 20.08.15 with a weight of 7.310 kg and MUAC 11cm. However her W/H was <- 3SD with the measured length of 76.5cm on discharge.



Sukhiya was stringently followed fortnightly for 4 follow-ups and she showed remarkable improvement in weight on every follow-up. This was credited also to the efforts put in by AWW Smt Shivani Namdev who ensured supplementary nutrition in form of weekly Take Home Ration, weight monitoring and counseling through home visits. Constant efforts by the I/c doctor and paramedics in form of counseling of Sukhiya's father during follow up visits on appropriate feeding practices, hygiene, health and nutrition care helped her to recover from her condition as she weighed 8.150 kg on her 4<sup>th</sup> follow up visit on 21.10.15. Her MUAC was 12.2 cm and W/H was <-1SD with the measured length of 77cm.