

Baseline Survey Report

Bhavishya Alliance has brought together stakeholders in order to combat under nutrition and enhance child nutrition in selected blocks of Maharashtra that are in urgent need of attention. As part of these efforts, a baseline survey was undertaken in order to assess the nutritional status of children less than 3 years of age and to understand the care and feeding practices with a view to identifying areas for planning and implementing strategic interventions.

A cross-sectional survey was conducted by Department of Food Science & Nutrition of SNDT Women's University to elicit information on approximately 3000 under threes from 3 tribal blocks namely Dharni in Amaravati district; Peint in Nasik district; Mokhada in Thane district and one urban block viz. Kurla, in L-ward of Mumbai city.

Salient Findings that merit Attention:

- ★ Almost one-third to sixty percent of the children's weights were below the 3rd percentile.
- ★ The percentage of severely undernourished children increased with increasing age.
- ★ Some gender differences were observed, with male children being worse off than females.
- ★ About one-fourth to one-third of the children were low birth weight. (However, birth weight data was not available for more than half the young children in Mokhada of Thane and 80 percent in Peint of Nasik.)
- ★ Almost 90 percent of the tribal families have a per capita income below Rs 344 per month.
- ★ One-fourth to 90 percent of the tribals live in "Kaccha" houses
- ★ The mother is the main caregiver in both urban Kurla and 3/4ths of children in Dharni and Peint. In Mokhada almost 15% of the children are cared for by the older sibling.
- ★ At least 1/3rd to half the mothers are below 20 years of age.
- ★ Considerable percentage of mothers are working - almost 1/3rd to half the tribal mothers.

Care Behaviour and Feeding Practices

Care behaviour includes all activities which affect food, nutrition and health security of mothers and children in order to promote growth and development.

A. The Mother

- ★ Almost all mothers reported that they avail of ANC services. However, among the tribal blocks, 67% from Peint go for only 1-2 visits.
- ★ High percentage of home deliveries was reported in all tribal blocks. Even in urban Mumbai, with good health infrastructure, 14 percent home deliveries were reported. In the tribal blocks, half to two-thirds of the deliveries were conducted by untrained dais.

B. The Young Child

- ★ Most mothers reported initiating breastfeeding within 1 to 6 hours after delivery.
- ★ Less than 20% of infants were given a pre-lacteal feed. However, for these children, the mode of administration (finger, cotton wick etc) is likely to increase risk of infection.
- ★ 1/3rd to half of the children are not exclusively breastfed. In Dharni 10% of children were not breastfed at all.
- ★ Considerable percentage (at least 30%) of infants are given animal milk at < 3 months of age.
- ★ Breast feeding is discontinued at approximately 12 months of age in tribal blocks.
- ★ Most infants are not given complementary foods at the appropriate age (6 months) since introduction is mostly delayed. Approximately half the children have not received complementary foods at 6 months of age. However, in Mokhada early introduction (<3 months of age) is seen for 1/4th of children.
- ★ 10-20% of children aged 13-18 months continue to be solely breastfed
- ★ Children's diets are extremely limited and monotonous.
- ★ 10-20% of children are fed cereal or millet alone
- ★ Intakes of sources of micronutrients viz. green leafy vegetables, fruits and other vegetables are very low
- ★ The diets are not only limited in micronutrients, but do not include foods which can enhance bioavailability. Furthermore, inhibitors of iron absorption are present in the diet.
- ★ 25 – 40% children from Kurla block and 10-30% from Peint are given processed foods like glucose biscuits, khari or butter biscuits. These foods lack good quality protein and are poor sources of micronutrients.
- ★ The problem is further aggravated by children being given highly inadequate amounts and mostly not more than 2-3 feeds per day.

Sanitation and Hygiene

- ★ Considerable percentage of houses are located in close proximity to open nallas (Dharni-21.5%, Kurla-45.2%); open area of defecation (Dharni-51.8%) and garbage disposal (Peint-91.8% and Kurla-33.8%).
- ★ Personal hygiene of mothers and children needs improvement especially in the tribal blocks. 30 percent of children from Kurla had signs of skin infection.
- ★ Considerable percentage of mothers do not perceive that sanitation and hygiene may be linked with health and disease.
- ★ 20-40 percent of children in the 4 blocks were ill in the week preceding the survey.

Availability and Utilization of Health Services

- ★ Majority of mothers reported availability and utilization of government and/or municipal services.
- ★ At least half the mothers reported that services of private doctors are available and utilized.
- ★ Utilization of ICDS Anganwadi services is reported by 90% of tribal mothers but only half to 2/3rd of urban mothers in Kurla.
- ★ Availability of immunization cards with mothers is less than 10% in Dharni and Mokhada; approx 25% in Peint and 46% in Kurla.
- ★ Entry of dates of immunization is very poor in Dharni and Kurla.
- ★ Coverage for measles and vitamin A prophylaxis is poor.
- ★ Coverage for iron supplementation is low.
- ★ Coverage for deworming of infants less than 12 months of age is very low in all blocks except Dharni.
- ★ 20-50% of children were reported to have diarrhoea in the week prior to the survey.
- ★ 30-80% of these children were not taken for any treatment.
- ★ Among those taken for treatment in the tribal blocks, only 1/4th to half the children were taken for treatment on the same day.
- ★ ORS was given to a small percentage of children- 10% in Mokhada to 40% children in Dharni received ORS.

The findings of the survey clearly highlight the need for holistic approaches to improve the nutritional status of children. It is vital to adopt preventive, promotive and therapeutic approaches. Interventions aimed at behaviour change cannot target the mother alone because she may not be the decision maker. Besides the mother, the family and community, local NGOs and government/municipal functionaries should be deliberately and meaningfully involved.

Few recommendations:

- ★ It is important to ensure that birth weights are recorded even in case of home deliveries as part of the existing preventive health services/programmes. This issue can be addressed by training dais on priority basis in these areas and by sensitizing communities for availing services of trained dais.
 - ★ A young child left in the care of another sibling is an issue that warrants attention for intervention.
 - ★ The data highlight that it is essential to make ANC service timings flexible for the benefit of working, tribal women.
 - ★ Early introduction of other foods i.e. liquids into the young infant's diet would
 - displace breast milk and reduce its nutritional and immunological benefits
 - increase risk of infection
 - initiate the vicious cycle of morbidity and under nutrition
- Thus, energy density of children's diets needs to be improved to meet the nutritional requirements of the rapidly growing child. Since the diets are predominantly cereal or millet-based with minimal or no inclusion of animal foods, fruits or vegetables; problem nutrients are vitamin A, iron, zinc, calcium as well as the other essential vitamins including folic acid, vitamin B-12 and riboflavin. These data highlight the need for urgent action to improve the food and nutrition security of these vulnerable children.
- ★ The delay in treatment and non-administration of ORS would aggravate dehydration and under nutrition and increase the risk of death.
 - ★ Non availability and poor recording of the immunisation card reflects low awareness level of the community on importance of immunisation and hence requires improvement in interventions for awareness and ensuring records being maintained by grassroot functionaries of health department.