

Undernutrition among children and mothers is a critical area of concern in India. The National Family Health Survey (NFHS 3) observed that the proportion of children who are stunted increases rapidly with the child's age from birth to 20-23 months. When the child reaches 18-23 months – which is typically when most children are weaned off the breast milk – 30% of children are severely stunted and one-fifth are severely underweight. The high mortality and disease burden resulting from undernutrition is a call for urgent action through implementation of nutrition sensitive and nutrition specific interventions to reduce their occurrence and consequences.

SUPRABH project was initiated by CHETNA and TATA Motors to improve the nutritional status of children in seven villages of Sanand-Taluka, Ahmedabad District, Gujarat. CHETNA focused on counselling and awareness building approaches to address undernutrition amongst children.

At the end of one year and eight months of intervention, almost 45% of children fell into the category of 'normal' nutritional status!



Seven villages:

Juwal (4545), Jambuthal (1000+), Shiyawada (2256), Bol (2150), Goraj (4879), Juda (2330), Rupavati (1180)

Prevalent Castes:

Kodi, Patel, Bharwad, Vankar, Vaghari, and Thakor

Prevalent Occupations:

Farming, field labourers, rickshaw drivers

Objectives

- Identify moderately and severely undernourished children
- Manage undernourished children at the village and family levels
- Create awareness among family members and village level stakeholders about prevention of undernutrition among children

Supported by



Partners

- Government of Gujarat
- Department of Women and Child Development
- Department of Health and Family Welfare

Undernutrition in Sanand-Taluka

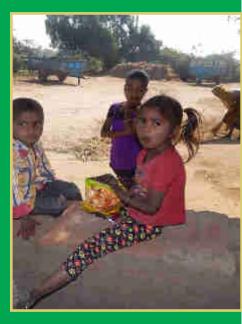
A total of 1,113 children between the ages of six months to five years (from seven villages) were screened to learn about their nutritional status. As per the weight for age criteria, 322 (29%) of the children were observed to be undernourished – out of that, 53% were severely undernourished and 47% were moderately undernourished. There was not a significant difference noticed with regard to gender. However, in some families, discrimination in feeding the girl child was observed. Early marriage and early pregnancy was also common in these villages.

Focus Group Discussions (FGDs) were conducted with mothers whose children were included in the programme. This revealed that the caretakers (either the mother or the grandmother) had poor knowledge regarding complementary feeding practices. Prolonged breastfeeding without adequate complementary feeding was widely prevalent. The caretakers were poorly informed about feeding the child during and after illness. Additionally, poor hygiene practices were observed; very few families would wash their hands with soap and water after defecation.

CHETNA assembled a field team of seven women – one from each village – who were equipped to conduct awareness and counselling activities at the field level.

Many children were not registered at the Anganwadi of the Integrated Child Development Scheme (ICDS). The reason given for this was due to long distances. In some villages, mothers avoided sending their children to the Anganwadi because the helper belonged to a socially disadvantaged family; caste discrimination also existed in the villages.

Children above the age of one year were found consuming commercial packed *Namkeen* (fried snack) of a popular brand "Gopal." The packets are available in the size of one serving and costing about Rs. 5/-. It was observed that many children were eating these commercially packaged foods daily. As soon as the child is mobile, they would go along with an elder child of the family to buy these packaged foods.



Activities







The programme activities were conducted with 333 families, out of which eleven children were under the "normal" category. Since these children were on the border of the normal category, they were included in the programme activities since there was a chance they could shift into the moderately undernourished category.

Regular Monthly Monitoring of Children

Each participating child was weighed every month. Their weight was plotted on the growth chart to learn their nutritional status. The children whose weights were not increasing or decreasing received special attention and frequent home visits.

Behaviour Change Communication (BCC) Material

To inculcate the practice of complementary feeding, BCC materials were developed and extensively field-tested for use during the individual and group counselling sessions. For the nutrition demonstrations, six energy dense local recipes were promoted. These recipes were prepared from locally available and accessible grains.

Individual and Group Counselling

What was key to SUPRABH's efficacy was regularly held individual and group counselling sessions with the caretakers of the children. After counselling the mothers of undernourished children, the mothers and grandmothers of neighbouring houses were personally counselled as well. This helped in creating a positive and supportive environment for the mothers who had undernourished children. The counselling sessions were conducted on the initiation of complementary feeding after six months, along with breastfeeding, basics of nutrition, importance of personal hygiene and environmental sanitation, timely immunisations, feeding during and after illness, etc. Home visits were also conducted regularly to ensure that knowledge gained from the counselling sessions were retained and practiced. Having these counselling sessions is necessary for successful intervention.

Nutrition Demonstrations

Nutrition demonstrations were held at the Anganwadis to orient and teach caretakers six energy-dense recipes which could be made using locally sourced and accessible foods.

Mothers were counselled about feeding *khichadi* with oil/ghee and green leafy vegetables which will increase its nutritional value.

"I do not want to come inside [the Anganwadi] as my children do not eat such foods. You teach others."

"We already cook all these foods at home so why are you teaching us these recipes? Our daily diet includes khichadi...what new things are you teaching us?"





Health Camps

Health Camps were organised in all seven villages. Worm infestations, anaemia, upper respiratory tract infections (URTIs) and diarrhoea were common illnesses found among the children. These children were also given medicines. The field team ensured that the treatment was completed. During the health camp, doctors emphasised the importance of feeding homemade foods to children, avoiding tobacco consumption by parents and maintaining hygiene and cleanliness.

Capacity Building

CHETNA trained Accredited Social Health Activists (ASHAs) and Anganwadi workers (AWWs) on basics of nutrition, health and hygiene, communication and counselling. This effort was made with the vision that the role of the field team can eventually be taken over by these frontline workers and that the counselling approach be mainstreamed into the existing programmes of the government.

Challenges

The SUPRABH programme underwent various challenges which demands immediate attention.

The programme failed to organise health camps at the beginning of intervention. Because of this, worm infestations and other illnesses were left untreated. The result was that the weight of the ill children moved up and down.

A large number of children acquired the measles infection. The communities' strong belief of not seeking medical intervention to treat measles led to severe weight loss. This is due to secondary respiratory tract infection and poor feeding practices during the infection.

Initially, men were not approached for counselling. It was later realised that this was necessary and essential. With counselling, the mothers were convinced not to feed commercial foods to their children but in her absence, children used to take money from their fathers to purchase it.

We believed that recipe demonstrations will eventually lead to feeding energy dense foods to children. However, our hypothesis was proved wrong. They were not convinced of cooking special foods for their child daily. Also, many mothers mentioned that they do not have the time to follow our advice. It was later decided to demonstrate at the family level how to make routinely cooked food energy dense by adding jaggery, oil, and ghee as well as making it tastier for the child. It was also emphasised to take out the vegetables before adding spices. This approach was not effective. In the endline survey, mothers have narrated that they did not benefit from the recipe demonstrations.

Regular counselling of the caretakers of undernourished children is non-negotiable for ensuring sustainable change in feeding practices and personal hygiene behaviour. We are not sure whether these kinds of efforts will be made by the existing frontline workers of the government programme.

Review and Evaluation



Graph 1: Nutritional Status of Children Before & After Implementation

After one year and eight months of intervention, in March 2016, the SUPRABH project underwent an evaluation. Information from the mothers/caretakers of the participating families was collected. There were 28 less interviews conducted as compared to the baseline because of the non-availability of the mothers/family at the village level.

44.8% of children presently fall in the 'normal' nutritional status. Only 18.6% are severely undernourished. On an average, children have shown an increase in weight, which is an important indicator that children are being fed more appropriately.

The percentage of undernutrition will continue to decrease as appropriate nutrition and hygiene practices are accepted and maintained.

During the intervention period, children shifted between nutritional grades (normal to moderately undernourished or moderately undernourished to severely undernourished, etc.). This is primarily due to episodes of illness like measles, diarrhoea, respiratory tract infections and the lack of proper nutrition and care given during that period of time. Regarding the awareness of caretakers, 55.9% of them knew the weight of their child compared to the 16.2% observed in the baseline. These caretakers also narrated the nutritional status of their child during the endline survey. There has been a remarkable improvement in the knowledge and practice of caretakers regarding their children's health. Majority of the caretakers (94.7%) now better understand the importance of breastfeeding, compared to 36.5% prior to the intervention.



They have also become well-informed about complementary feeding intervals as well.

Hygiene practices have also improved measurably – only 10% reported using soap to wash hands after defecation at baseline; this increased to 80% after the intervention.

Majority of caretakers (99.4%) shared that they have benefited from SUPRABH's activities.

It is clear that SUPRABH has brought nutritional and hygienic changes among children and caretakers. These behaviour changes, if sustained, will definitely continue to improve the nutritional status of children.



Recommendations for the Way Forward

- To bring about change in the nutritional status of children, the intervention needs to be done at the family level, educating all the family members including men and boys.
- Group and individual counselling is imperative to bring about change in the nutritional status of children and for sustaining it. Group counselling helps to create a supportive and positive environment for families with undernourished children.

 Ensure that there is targeted counselling during and after illnesses. Not feeding the child during illness is a deeply rooted social belief which urgently needs to be changed. In SUPRABH, many children faced weight setbacks due to illness which made it increasingly difficult for the child to regain weight if they were not given timely and appropriate food and care.

- Any nutrition programme needs to start with diagnostic health camps to rule out the presence of worms and other infections, and ensure the timely treatment of illnesses like diarrhoea and respiratory tract infections.
- Active involvement of ASHAs and AWWs in nonnegotiable for mainstreaming the approach of individual and group counselling and ensuring the sustainability of the approach.

 Undercurrents related to caste discrimination exist, which have direct or indirect effects on the outcome of intervention. Any intervention needs to focus on social change towards equality.

Acknowledgments

Overall guidance and support:

Ms. Pallavi Patel and Dr. Neeta Shah

Financial support: TATA Motors

Programme Team: Ms. Antara Trivedi, Ms. Hetvi Shah and Dr. Trupti Maitrak

Field Team: Sangitaben Jadav, Meenaben Parmar, Shagunaben Patel, Dhartiben Parikh, Sangitaben Senva, Sudhaben Bharwad and

Shushilaben Shrimali

Data collection and analysis:

Mr. Bhargav Patel

Health Camp Doctors:

V.S. Hospital: Dr. Asheeta Shah, Dr. Anil Katara,

Dr. Himanshu and Dr. Jignesh

Government of Gujarat: Dr. Prakash Vaishnav

Documentation: Ms. Shivani Pandya

Design: Mr. Anil Gajjar

Document Reviewers: Ms. Indu Capoor, Ms. Pallavi Patel and Ms. Nitvasri SN



Vision

CHETNA envisages an equitable society where disadvantaged communities are empowered to live healthy lives

Mission

To empower children, young people and women, especially from marginalised social groups, so that they become capable of gaining control over their own, their families' and communities' nutrition, health and wellbeing.



For Women Young people Children

Centre for Health, Education, Training and Nutrition Awareness

Supath-II, B-Block, 3rd Floor, Opp. Vadaj Bus Terminus, Ashram Road, Vadaj, Ahmedabad-380013. Phone: 91-079-27559976/77 Fax: 91-079-27559978 E-mail: chetna@chetnaindia.org Website: www.chetnaindia.org