Concept Note for Malnutrition Free Village

Context

Malnutrition simply put, refers to deficiencies, excesses or imbalances in a person's intake of nutrients; both undernutrition and overnutrition has a multitude of direct and indirect outcomes of disease, disability and infirmity. The outcomes of malnutrition such as stunting, wasting, anaemia, and obesity not only impact an individual in their current life, but if unaddressed also affect the generations to come by perpetuating it through an intergenerational cycle of malnutrition; which means that if a mother is malnourished, her child, and her grandchild have higher chances of being malnourished.

Taking due cognisance of the situation, the Government of India launched various government schemes and programmes aimed to combat malnutrition in the past decades. This includes flagship programmes such as the distribution of prophylaxis against nutritional anaemia, Ayushman Bharat, National Nutrition Mission, i.e POSHAN Abhiyaan, Balwadi Nutrition Programme, ICDS programme, and Mid-day meal programmes. The programmes though have been able to make some dent in enhancing the nutritional status, much more needs to be done.

The Problem

Over 38 percent, or 46.6 million, children are stunted in India. The country accounts for nearly a third of the global burden of childhood stunting. While there are 51 million wasted children in the world, India alone houses 25 million (50 percent) of them[1].

There was a substantial drop nationally in the percentage of stunted and underweight young children from 2006 and 2016, along with a corresponding decline in under-five mortality rate. The NFHS-5 data shows that the percentage of children who are stunted (low height-for-age), wasted (low weight-for-height) and underweight (low weight-for-age) has gone down[2],[3],[4].

Intervention

In India, SAM is a significant preventable and curable cause of morbidity and mortality in children under the age of five. Poshan Purti Kendra will be a health facility unit where children with Severe Acute Malnutrition (SAM) will be admitted and managed. It will be a 20 beds centre where children will be admitted as per the defined admission criteria and provided with medical and nutritional therapeutic care. The child will be discharged once attaining weight gain. Once discharged from the centre, the growth of the child will be monitored continuously for a period six weeks.

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[1] Reducing stunting and wasting in children and women. (2019). Retrieved from https://www.unicef.org/india/media/2676/file/Reducing-stunting-and-wasting.pdf

[2]The National Family Health Survey (NFHS-3) - India - Health Education to Villages. Hetv.org. 2022. Available from: http://hetv.org/india/nfhs/

[3] National Family Health Survey-4, 2015-16. Ministry of Health and Family Welfare. http://rchiips.org/nfhs/NFHS-4Reports/India.pdf

[4] UN Standing Committee on Nutrition. Accelerating the reduction of maternal and child undernutrition. No. 36, 2008. https://www.unscn.org/layout/modules/resources/files/scnnews36.pdf

Objective

- To provide clinical management and reduce mortality among children with severe acute malnutrition.
- To build the capacity of mothers and other caregivers in appropriate feeding and caring practices for infants and young children
- To provide community-level follow-up and dietary management for growth monitoring.
- Referring children with clinical complications to higher health facility

Target Group
Children under 5 years who are Severely acute malnourished according to WHO criteria

Geographic Location: 9-10 nearby villages in Santej

Timeline: 1 year

Services

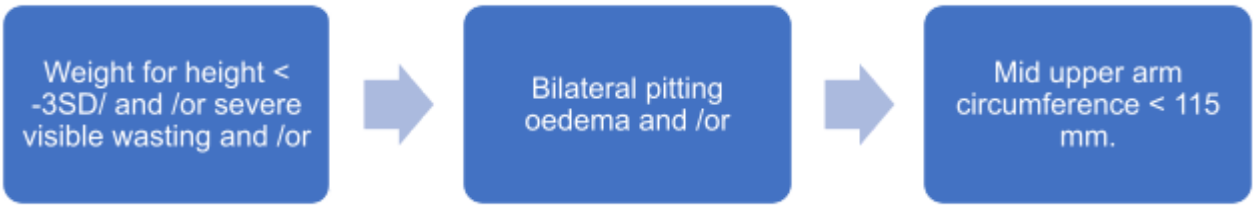
The services and care provided for the children admitted/enrolled in the centre include:

Project Implementation Plan-Phased Implementation of Project

The program will be divided into three phases

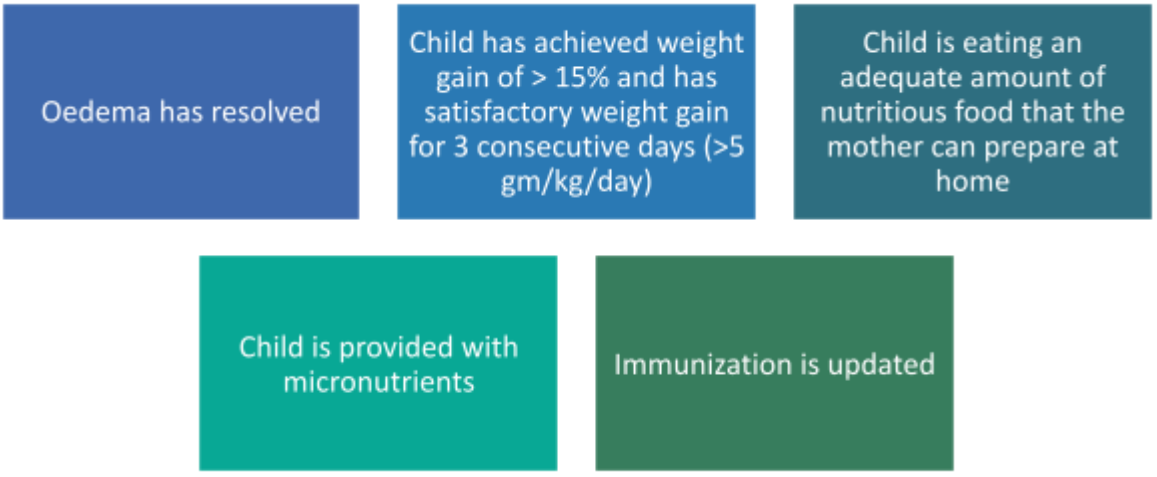
Phase 1: At the village level a community-level screening camp will be organised. A total of 10 nearby villages will be screened for children with SAM and MAM. Basic demographic information and socio-economic status of every child who is SAM and MAM will be taken. A list of all the children will be obtained through the screening. Home visits will be done to sensitise the family on health and nutrition of children using intra-personal communication and group communication.

The admission criteria will be



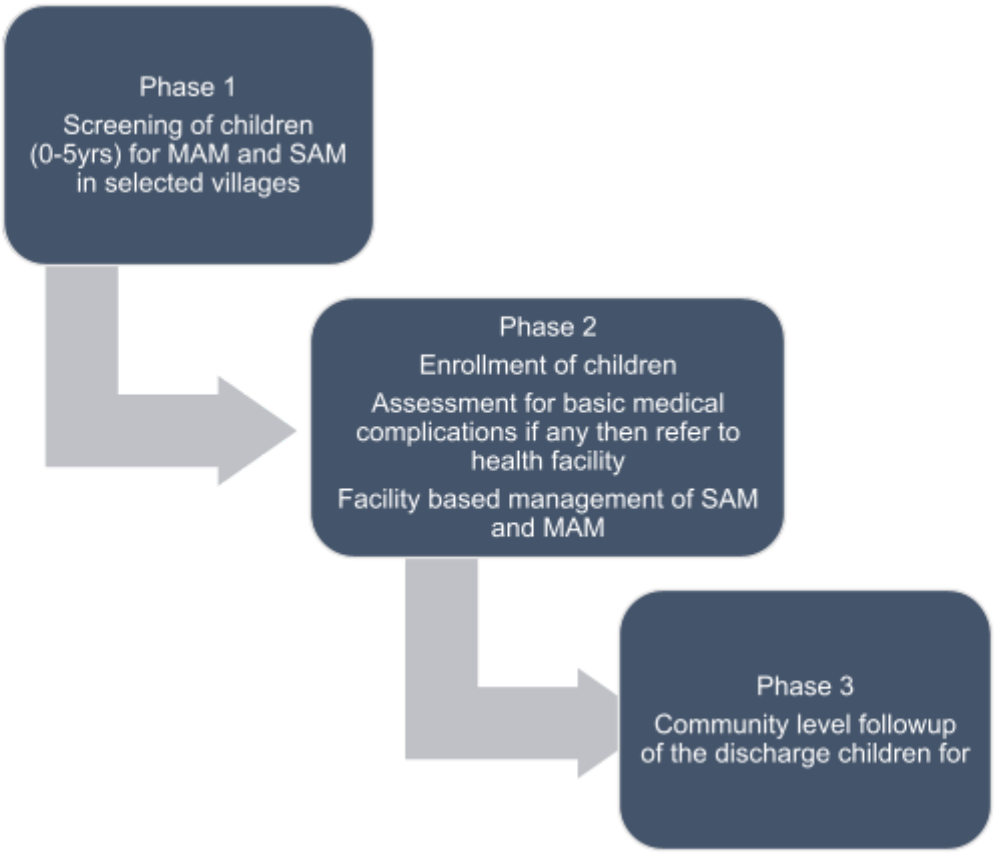
Phase 2: Once identified, these children with SAM need further assessment to determine if they require referral to health facility or whether they can be managed at Poshan Purti Kendra level. If the child is suffering from medical complications he/she will be refered to higher centre. Children with SAM without an adequate appetite and/or a major medical complication will be stabilized at the centre. The feeding formula used during this phase is Starter diet (F75) which promotes recovery of normal metabolic function and nutrition-electrolytic balance. There is gradual transition from Starter diet (F75) to Catch up diet (F 100). This centre will be managed by the medical officer who will design and diet pattern of the children. Once the child regains appetite, other food will be provided after the child. A weekly menu will be in place for all the children enrolled. At the end of 21 days admission child is expected to have achieved above mentioned discharge criteria and will be moved to the community-based management.
The next batch will be enrolled in the centre from the other nearby villages and the treatment process will continue.

Discharge criteria which will be followed:



Phase 3: Children discharged from centre will be followed up at the community level to ensure appropriate feeding, follow up at the centre for scheduled visits and to identify children who are not responding to treatment for referral to the facility level. The followup will be done for 6 weeks. Weekly nutritious supplements will be provided and anthropometry measurements will be recorded. Based on the result the child will be again admitted to the centre if growth faltering is observed.

Figure 1: Overview of the implementation plan



Infrastructure

The centre will have the following-

- Bed for children and mother area so that the mother can be with the child .
- Play and counselling area with toys; audio-visual equipment like TV, DVD player and IEC material
- Kitchen and food storage area, with enough space for cooking, feeding and demonstration
- Attached toilet and bathroom facility for mothers and children along with separate hand washing areas.
- Clinic for the monitoring of the children

Team Structure

Medical officer: The Medical Officer can be any qualified medical doctor (MBBS) trained in facility-baseded management of SAM. Medical Officer will be the overall in-charge of the unit and will be responsible for clinical management of the children admitted in the centre.

Nurse: The nurses posted in the unit will be responsible for nursing care including weight record; give oral drugs; assess clinical signs and fill the multichart with all the routine

information. The nurse will also counsel mothers/caregivers on the emotional needs of her child and encourage them to give sensory stimulation. She is also in charge of the structured play therapy.

Cook cum Care taker: The cook cum care taker will prepare special diet for children as prescribed by the medical officer. The cook will also involve mothers and care givers of admitted children in preparation of food. Under the supervision of MO , they will make local purchase of food items. They can also help cook food for attendants.

Attendant/ Cleaner: The cleaners are responsible for managing the cleaning duties and the provision of detergents, hand soaps, chlorine etc. Floors should be cleaned every day with soap and water. Toilets should be disinfected with 0.5% active chlorine solution.

Project Manager: The manager will be responsible for the smooth function of the centre. He/she will also look into the plan and design of the screening camp of the children in different villages.

Field Assistant: The medical social volunteer should make a social assessment of the family and the community in which the child lives. If needed, she will work together with the family to advise them on their eligibilities and social rights in order to improve their living situation and prevent further malnutrition and impoverishment. She can facilitate linkages with local Anganwadi, PDS and public welfare schemes as may be relevant to the child and the family.

Driver: The driver along with the field assistant will be home to home picking up the children and bringing them to the centre.

Theory of change

Objective	Activity	Output	Outcome	
Screening of children up to age 05 years for nutrition status in select villages	● Anthropometry at the screening camps by trained nurse and supporting staff to screen the children for under nutrition ● Awareness on importance of health and nutrition	Identification of children suffering from SAM, MAM (Moderate Acute Malnutrition), SUW (Severe Underweight), MUW (Moderate Underweight) and Severe and moderate Stunting.	● List of children with SAM and MAM ● Increase in knowledge about healthy living and nutritious diet	●

To give facility-based treatment to children detected with SAM	● Enrolment of children (20 children in one batch) ● Refer patients to higher centre based on the criteria ● Regular weight monitoring and diet therapy ● Discharge children on the basis of discharge criteria	● Medical therapy for treating children with SAM at the centre ● Consumption of diet and nutrition by the SAM children in the day care centre	● Improvement of weight gain ● Improved appetite of children	●
Follow up Community based management of child	● Weekly health check-up and anthropometry measurement for 6 weeks after discharge ● Weekly nutrition provision through dry ration and feeding plan ● Nutrition learning sessions for mothers/guardians	● Monitoring of growth progress ● Provision of nutritious diet for a sustained period ● Education to the mother/guardians on preparing high energy food for the child	● Documentation of all beneficiaries ● Sustained and prolonged impact ● Improvement in healthy diet practices	●

Budget

Human Resources

Staff Position	Number of Unit	Cost (Rs) (Month)	Total (Rs)

• Medical officer/ Incharge (MBBS)	1	60000	60000
• Nursing staff/ Incharge	2	25000	50000
• Cook cum Care taker	2	5000	10000
• Attendant / Cleaners	1	3000	3000
• Project manager	1	30000	30000
• Field Assistant	1	20000	20000
• Driver	1	7000	7000
Total			**180000**

List of Equipment and supplies for Poshan Purti Kendra

S.No	Item	Quantity	Unit Cost	Total
1.	Facility for centre	1		
2.	Electronic Weighing Machine	1	700	700
3.	Stadiometer	1	1000	1000
4.	Infantometer	1	1500	1500
5.	MUAC Tapes	10	25	250
6.	Measuring Cups and Spoons	2 sets	200	400
7.	LPG Connection and stove	1	3500	3500
8.	Storage Tins for Kitchen	10	100	1000
9.	Feeding Utensils, Katori, Spoon, plates, glasses	20	150	3000
10.	Cooking Utensils			4000
11.	Refrigerator	1		11000
12.	Water Purifier	1		10000
13.	Mixer	1		2500
14.	Digital Thermometers for children	2	150	300
15.	Blankets	20	400	8000
16.	Bed sheets	20	300	6000

17.	Mattresses	20		
18.	Cots	20	2000	40000
19.	Chairs	5	1000	5000
20.	Table	2	2500	5000
21.	TV with DVD Player	1		
22.	Dustbin, doormats, Shoe racks	2 each	100	2000
23.	SAM charts	30/months		
24.	Files of children	30/months		
25.	Discharge and Follow up Cards	30/months		
26.	Van	1		
27.	Toys for Children		2000	2000
28.	Van	1		
	Total			**107150**