MOTHERS USING MUAC TO SCREEN ACUTE MALNUTRITION

Improving Care-Seeking & Self-Referral in the Fight Against Malnutrition

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INNOVATIONS
PROMOTING EARLY
IDENTIFICATION IN
THE TRIBAL BELT OF
BARAN, RAJASTHAN

It was early 2014, when Fight Hunger Foundation (FHF), Indian member organization of Action Against Hunger International Network, operationalized its nutrition-care practices integrated programme in the malnutrition hot-spot, Kishanganj block of Baran district in the southeastern corner of Rajasthan. It was the time when state health, women & child development departments responsible for management of malnutrition were clueless on broader screening efficiency a simple handy tool like Mid-Upper Arm Circumference (MUAC) tape afforded. Village-level screening of children between 6 months to 5 years by local frontline workers, the ASHA and Anganwadi Worker, relied solely on growth monitoring at Anganwadi centers. Children with below average weight-for-age were referred to Malnutrition Treatment Centers (MTC) with 'visible' wasting estimated by untrained workers, further resulting in refusal of cases disqualified on WHZ admission criteria, inadvertently losing beneficiary confidence in the due process of referral and nonadmission.





In its primary response to universalize active screening, FHF in collaboration with district authorities organized capacity-building trainings for ASHA and Anganwadi workers. Post trainings, workers were provided hand-hold support and supervision by FHF community mobilizers in identifying acutely malnourished children through door-to-door screening. Regular group screening sessions using MUAC were organized at the Anganwadi centers where children came to receive supplementary food and mothers accompanied young children on Village Health & Nutrition Days. When the state decided to roll out POSHAN (Community-based Management of Acute Malnutrition – CMAM trial) in December 2015, the earlier trainings received by government frontline workers proved immensely useful for effective screening coverage. Over time, it was noticed that however well-trained and motivated the frontline workers are, they have limitations following cohort of malnourished children, who usually stayed in the outskirts of villages, have limited access to the Anganwadi centers or subcenters turned into out-patient therapeutic clinics by then.

In order to overcome the challenge of accessing treatment services by the most vulnerable notso-easy-to reach children, it was important that the families hosting these children should be regularly visited and monitored for their nutritional health. However, competing health programs and village administrative works are found to put lesser premium on home-visits by frontline workers, especially when the families stayed in settlements away from service units. FHF nutrition program prioritized a three-pronged intervention as the most sustainable solution in such situations. Large-scale community mobilization and engagement meetings were held in hot-spot pockets to spread awareness on malnutrition causes and consequences, sensitizing families about early care practices, value of vigilante parenting to improve careseeking at times when villages are cut-off from the mainstream transport due to flooding and when there is high risk of water-borne diseases and morbidities during monsoon. More intensive second-tiered intervention prioritized delivering key messages on nutritional care practices to specific vulnerable groups of pregnant and lactating women, caregivers of malnourished children, and decision-makers, usually the men as heads of the households in participatory focus group discussions and practical demonstrations of care through baby massage workshops, breastfeeding positioning and latching, ORS preparation, hand-washing and child excreta disposal, utilization of diversified foods through community cooking, etc.

In the third and more specific interventional phase, mothers support groups were formed to empower them on several essential care practices building maternal confidence and behavioural practices around continuum of care. These groups are covered in 7 selected villages and have seen participation of around 139 mothers engaged to enhance peer support network. Depending upon the groups' perceived needs for knowledge on child care, attitudinal inclination towards prevalent cultural practices pertaining to maternal and child care, initial sessions focused on maintaining their interest to assemble together on regular basis, discuss common problems in caregiving as simple as not finding time to rest, challenges spending quality time in baby-care, breastfeeding difficulties, lack of family support, or inability to access quality healthcare or Anganwadi ration services. As the groups became conjoint and regular, complex interventions ritualizing behaviour change were introduced. One among them is monitoring child's growth using MUAC!

DEVELOPING PARTICIPATORY TRAINING STRATEGY

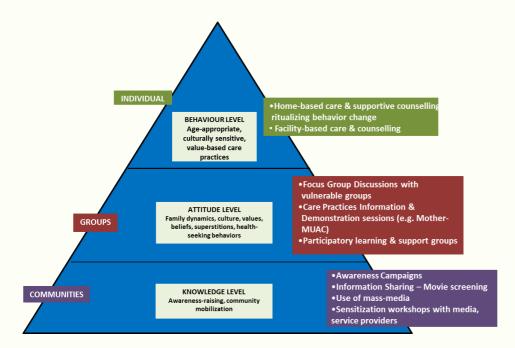
There is no one-size-fits-all approach to community engagement in an integrated nutrition-care practices programme. The predominantly tribal population of Baran district presents critical intergenerational malnutrition thresholds, diverse socio-cultural beliefs, and child-rearing practices, and face stringent challenges to accessing healthcare services. Prevalent gender roles and responsibilities, differential capacities and vulnerabilities of the individual families including men, women, boys, and girls exhibit stark inequalities in terms of access and control over assets. Lack of basic education, lack of autonomy in family-level decision-making, and lack of self-determination put women, especially pregnant and nursing mothers, in the most disadvantageous situation, when they are bound to dual duties of child care and subsistence earning to feed the family. It is important then to design interventions that align with cultural practices of the tribe, encourage participation, and inherently build cohesive social network availing vulnerable women opportunities to engage, express and empower.

Traditionally, Sahariya tribe has a unique way of monitoring child growth and development. Immediately after birth and on offering initial prayers to the family deity, caregivers tie thread bands on arms, wrist, waist, or ankle of a new-born. It is culturally understood to protect the child from evil eyes, but also is alternately used to monitor physical growth. As the thread band loses its grip, it symbolizes falling health, sending an alert to seek treatment. Aligned with this cultural belief and practice, Mid-





Upper Arm Circumference (MUAC) measure makes for accurate and easier way of noticing physical changes. Mothers have been convincingly found to accept this scientific technique and easily adapted it in practice when the cultural narrative was presented to them.



Comprehensive Community Engagement strategy involves awareness-raising on malnutrition causes and consequences with different community groups at different social levels, alongside capacity-building of health service providers.



STEP 1

Determining Coverage Area

In this pilot program, 7 villages from among 130 villages, where AAH-FHF nutrition-care practices integrated program is operational, were selected based on certain vulnerabilities and facilitating factors:

- Hamlets far away from Anganwadi centers, posing difficulties to access on regular basis
- Inability of ASHA and Anganwadi workers to visit the hamlets periodically due to long distance
- Caregivers frequently absent due to clashing working hours when frontline workers also visited them
- Motivation of mothers to engage in participatory learning group
- Cordial working relationships between beneficiaries and local frontline workers

STEP 2

Preparing Trainers

Community Mobilisers appointed for the selected villages have been provided technical training on effectively engaging mothers to use MUAC. Training of trainers involved:

- Provision of adequate number of MUAC tapes
- Provision of set of training aids and tools per trainer (e.g. IEC on malnutrition causes and consequences, Audio-Visual aids explaining use of MUAC and checking for oedema, Terms of References with key messages, Monitoring Sheet to maintain attendance records, and adequate number of MUAC tapes to distribute)
- Collaboration strategy to equally train local frontline workers and receive their assistance to form mothers group
- Developing a timeline from pre-training visits (to get the community health workers trained, informing community leaders and maximize number of mothers available for training sessions) to post-training follow-up visits (to train mothers who were unavailable during group training sessions, provide supervisory support to mothers needing additional understanding on practical usage of MUAC tape, and monitoring quality of anthropometry measures)

STEP 3

Developing Training Sessions

The participatory learning groups have been exposed to a mix of presentations and practical demonstrations, with messages clear and simple, delivered in local language. An outline of a typical 40 – 60 minutes session includes:

- Welcoming mothers and explaining objectives of Mother-MUAC
- Understanding malnutrition types, causes, and consequences (through flip-charts, using Audio-Visual aids)
- Understanding difference between wasting and oedema presentations
- How to recognize early signs of malnutrition
- Cultural proximity between practice of tying thread band and using MUAC to monitor child growth
- Advantages of Mother-MUAC
- Practical demonstration of using MUAC colour codes to effectively identify acute malnutrition
- Frequency of use when to use MUAC and check for oedema
- Information on 'What to do', 'Whom to contact' if a child is found acutely malnourished referral procedures reinforced
- Ensuring periodic follow-up: initially once every week for first 4 weeks and later twice a month
- Thanking mothers for participation

STEP 4

Follow-up with Mothers

Follow-up to track effectiveness of training and bridge additional support needs to arrive at accurate measurements are important steps to sustain mothers motivation and ritualize the practice of growth monitoring at home. Community mobilizer as a trainer and local frontline worker as an assistant managed periodic follow-ups at village level. It involved:

- Motivating mothers to continue using MUAC and oedema checking procedures
- $\bullet \ Repeat \ appropriate \ key \ messages \ for \ identification \ and \ referral \ to \ services, in \ case, when \ MUAC \ measurement \ indicate \ loss \ of \ body \ mass$
- Apprising mother of child's growth status and deciding the appropriateness of education session on young child feeding, dietary diversity
- Encouraging mothers to keep up with good practice and support other mothers, young adolescents to regularly screen all children in the neighborhood



Even a child feels protected and reassured when mother caters to her needs!

KEY FINDINGS

- In the 7 pilot villages, 11 of the AAH-FHF field staff (4 Field Supervisors, 7 Community Mobilizers) received technical training on Mother-MUAC.
- Trained Community Mobilizers cascaded the training to government frontline workers and build capacities of 7 Anganwadi Workers and 7 ASHA Workers.
- 139 mothers participated in learning groups and were trained on using MUAC color-codes to identify acute malnutrition and oedema in its early stages.
- 20 children between 6-59 months were identified with Moderate Acute Malnutrition (MUAC measuring between 116mm 125mm, indicated by Yellow color) by their mothers
- 12 children were identified with Severe Acute Malnutrition (MUAC measuring <115mm, indicated by Red colour) by their mothers
- All of the children with acute malnutrition (SAM or MAM) were readily referred to appropriate services. Mothers of children with MAM received supplementary nutrition services from Anganwadi Centers on a regular basis. Mothers of children with SAM were able to inform timely to ASHA workers and get the child admitted effectively to Malnutrition Treatment Center.
- On average, 57 children are regularly screened by trained mothers every month.
- Mothers report that having MUAC tool at home adds to their voice to convincingly demand health services in the times of need. Referral
 services mandating mothers to leave homes for a facility-based care (usually at Malnutrition Treatment Center) for a prolonged period of
 2 weeks or more are no more challenging because mothers literate on MUAC measurement are able to receive more support from
 husbands and other family members to take appropriate care decisions.

FIELD OBSERVATIONS & EVIDENCE SUPPORT

- Mothers screening for malnutrition using color codes on MUAC tape, despite their challenges with numbers (numerical illiteracy), are no inferior to standard anthropometry measures taken by community health workers. All those mothers reporting their children to have MAM or SAM showed complete agreement with measurements taken at admission by health workers.
- MUAC can be either performed on the right or left arm, and the mid-point of upper arm can be estimated without losing accuracy (supporting Blackwell et. al, 2015 research study).
- MUAC tape tied to a flexible thread helps determine mid-point of upper arm relatively easy and with accuracy. This simple measure protects the tape from getting torn and damaged due to repeated folds and adds to the durability of the tool.
- Consistent engagement and periodic follow-up with mothers boosts their confidence and helps ritualize the practice of monitoring child growth within flexibility of home environment.



Foranti, our Community Mobilizer, is a young girl residing in Sahariya hamlet, runs mothers' participatory learning groups in Lehruni village. In October 2015, in her regular screening drive, Foranti was shocked to find 6 children with SAM and 11 children with MAM. With continuous awareness programs and innovative implementation of Mother-MUAC, Lehruni village, exactly 2 years after, has 1 child with SAM and 1 child with MAM. Foranti and mothers trained in her support group attribute this success to vigilante parenting a simple yet powerful tool like MUAC afforded. Mothers are able to diagnose acute malnutrition in children and seek appropriate treatment before the disease can cause further loss.

WAY FORWARD

Current pilot in Baran district confirms the conviction that 'Mothers Use And Can' do it – MUAC, which also represents 'Mother's Unique Affection & Care'. Our experience suggests to:

- Scale and replicate Mother-MUAC model across project geographies
- Empower vulnerable tribal mothers to identify malnutrition in its early stages and seek appropriate care services
- Engage community leaders, young adolescent boys, and girls, men as fathers and heads of households, grandmothers, and mother-in-law to use MUAC and unite in the fight against malnutrition
- Collaborate with local service providers and civil society organizations to adopt evidence-based practices like Mother-MUAC
- Promote low cost and sustainable community caregiver model forging effective care-seeking at individual household and community level to easing referral access to appropriate healthcare services



A motivated mother volunteer spends her spare time screening children with MUAC and offers guidance on child care to tribal women from her neighborhood



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