

Managing Childhood Under-Nutrition

Role and Scope of Health Services

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This study provides insights to some of the key functions of the Integrated Child Development Scheme and health services in the management of childhood under-nutrition in six key empowered action group states. It explores the underlying process and determinants of under-nutrition and the manner in which these two key services are playing out their role and scope in contributing to the management. Despite the recent emphases on management of under-nutrition, the health services are yet to respond to the enormous challenges in a significant manner.

The study was conducted from the INCLN executive office, New Delhi. We thank the Ministries of Health and Ministries of Family Welfare and Departments of Women and Child Development of the Governments of India and Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Orissa, and Jharkhand for supporting the study. We would also like to thank the World Health Organisation (India) and MCHSTAR-USAID for funding the study. The authors are solely responsible for the views expressed herein.

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As the Eleventh Five-Year Plan draws to a close the phenomenon of the “south Asian enigma” (characterised by relatively higher levels of childhood under-nutrition compared to poverty, food production and death rates) continues to challenge policymakers, planners, programme managers and activists in finding appropriate and sustainable solutions (Ramalingaswami et al 2006). Sundararaman and Prasad (2006) attributed this to relatively higher levels of gender inequity. The modest decline of under-nutrition levels between the last two rounds of the National Family Health Survey is well known and India continues to remain off-track from the Millennium Development Goal (MDG-1) target. Prevalence of under-weight children increased in eight states (Assam, Arunachal Pradesh, Bihar, Haryana, Jharkhand, Madhya Pradesh and Mizoram), remained stagnant in another seven states and decreased in the remaining states.

We share the findings from a qualitative study undertaken in six states that sought to unravel some of the complexities around the “enigma” touching upon the intersections of the child, mother and the family (both rural and urban poor households) on one hand and the opportunities available in services (the Integrated Child Development Scheme (ICDS) and health) on the other for addressing the enigma. The focus was on six empowered action group (EAG) states (one district each): Bihar (Samastipur), Jharkhand (Gumla), Orissa (Sonepur), Madhya Pradesh (Tikamgarh), Rajasthan (Chittorgarh) and Uttar Pradesh (Mathura). State Hunger Indices (computed for 17 major states) for all these states fall among the “alarming” category except Madhya Pradesh which is labelled as “extremely alarming” (Menon et al

2009). These states are also ranked among the lowest in the Multidimensional Poverty Index (MPI) of 22 states recently released by the United Nations Development Programme (UNDP) (Alkire and Santos 2010). The prevalence of under-nutrition according to the District Level Health Survey (DLHS-2) among under-five children in the districts selected from these states ranged between 50.7% and 65.2%. Significantly, for all these six states the proportion of rural population with low Standard of Living Index (SLI) went up by about 1% between DLHS 2 and 3, except Rajasthan; in contrast the corresponding indicator in these districts went up by 10% or more, except Gumla (a decline by about 3%).

Recognising Under-Nutrition

Despite the important position that poverty and under-nutrition occupies in the political and administrative agenda, it was revealing that nearly half the state and district-level technical officers (of the departments of women and child development and health) and district magistrates grossly underestimated the prevalence of child malnutrition in their respective districts. A higher proportion of block-level officials underestimated the prevalence; they put it to about 10%, perhaps referring only to the level of severe under-nutrition. The panchayat leaders and private practitioners were similarly ignorant.

Mothers distinguished between an undernourished and a well nourished child by the “physical appearance”. Half the respondent households had children with moderate under-nutrition and the other half had children with mild under-nutrition/normal weight for age (children were weighed during the survey). Mothers of both the groups misclassified their children, unable to distinguish between normal and undernourishment.

The provision of periodical monitoring of children’s weight (monthly for children under two years and quarterly for two to six years) under the ICDS is aimed at addressing corrections at the local level. Monitoring involves periodical weighing and comparing serial records with reference charts of weight-for-age,

identifying the undernourished and their management. Management of anganwadis includes nutrition counselling for parents of undernourished grades I and II children and additional supplementary feeding for grades III and IV, referral to nearest health facility and follow-up of the child for sustained actions to prevent any reversion. In contrast, the health department has the mandate of assessing children's weight at birth and at every contact thereafter at home or at the facilities when the child is brought for any illness. This would enable them to identify under-nutrition and take appropriate remedial measure at every such encounter with the child and their family.

ICDS: Tough Challenges

It emerged from the triangulation that feeding programmes at the anganwadi centres (AWC) was well received by the community though they expected quality and variety of supplementary nutrition. About half the respondent mothers reported preschool education being imparted for children of 24-59 months and nearly all the mothers reported provision of immunisation and micro-nutrient (iron-folate tablets and Vitamin A) supplementation. Surprisingly, two block-level officials did not consider food supplementation as a major concern. Most anganwadi workers (AWW) mentioned weighing children at least once a month, or more frequently. Maintenance of weighing scales was a significant task and weights were not taken when the scales were out of order; repairs were not a smooth process either. Our own observations put the proportion of functioning scales at about 25%. A majority of mothers reported that children had been weighed, one to three times. Almost all mothers were aware of the relevance of weighing, as a marker of growth and development. Mothers of about half of the sampled children were informed, after weighing, that their children were undernourished. Those with severely undernourished children were advised to seek healthcare from a doctor. Food-related counselling was given to those with mild and moderate under-nutrition and many children showed

some improvement. The growth curve, its interpretations and explanations, were not shared by the AWW with mothers; most of the advice was about hygiene and sanitation, thus limiting the usefulness of the exercise. One-third of the AWW were not able to interpret the graphs, leave alone explaining to the mothers.

The district and sub-district level supervisory officials pointed out the challenges of running the supplementary nutrition programme: staff shortages, bad roads and mobility problems, delayed release of funds and banking problems particularly during the end/beginning of the financial year. The supplementary feeding was not available for nearly 15-20% of the expected number of feeding days (200/year). In practical terms this means the children get supplementary feeding for only about 50% of the total days in a year. The AWW reported that the constraints included difficulties in distribution of food, poor cooking infrastructure, inadequate space, lack of drinking water and living up to the expectations of the communities who demand better quality services. All categories of respondents agreed about the underutilisation of the ICDS services; the most important causes included: perception that this is a service for the poor, lack of awareness of the AWC and

its services and mushrooming of private playschools in peri-urban and rural areas. Thus, a sizeable proportion of those vulnerable for under-nutrition (under two years) did not get the benefit of supplementary feeding.

Utilisation of the services by backward castes was constrained by the location of the AWC and the fact that most mothers left home early for work or seasonally migrated making it difficult for young children to be reached to the AWC. It was reported that there were less class differences among pregnant women beneficiaries than among children.

Starting additional AWCs and mini-AWCs in areas with poor (geographical and social) access was a means to increase the reach of the programme. Most of the AWWs reported that they visited less than 10 houses a week; several AWWs claimed that they visited houses according to a predetermined schedule. However, a majority of mothers reported that there were no home visits within the recall period of three months. Lack of home visits is a key constraint in children under two. Of those visited, interviews revealed that the advisories covered a range of issues including rest, immunisation and micro-nutrients for pregnant mothers and feeding, hygiene and immunisation for infants and children. Health and nutrition sessions were



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being organised regularly, generally once a month; often on the day of distribution of take-home rations or in conjunction with meetings of the *mahila mandals*. The messages were generic (giving good food, maintaining food hygiene) but not child specific to address under-nutrition.

Health Services: Serious Gaps

Most state-level officers were aware that guidelines on under-nutrition issued by national programmes and technical bodies were available but many could not specify them. The ambiguity of guidelines were triangulated by the district medical officers; most denied having any such guidelines at the facility level.

About half the surveyed districts did not have a specialised unit for management of undernourished children (nutrition rehabilitation centre-NRC) though all state- and district-level officers opined the need for such units at the district level. Some community health centres (CHCs) had NRC while many children were also referred to the district level both by the ICDS staff and the health staff practising Integrated Management of Neonatal and Childhood Illness (IMNCI). Currently, no such facilities are available at the primary health centre (PHC) level though the National Rural Health Mission (NRHM) and Reproductive and Child Health (RCH) programme managers spoke of strengthening this level. Private sector health providers had no such units and referred children to the NRCs or hospitals. Most Accredited Social Health Activists (ASHAs) reported that the auxiliary nurse midwives (ANMs) were advising mothers on feeding and referring the undernourished to health facilities. Medical officers and private practitioners were asked to describe the methods for assessment of nutritional status of children. A majority of them mentioned weight, height and skin-fold thickness. A few private practitioners mentioned using the Indian Academy of Paediatrics (IAP) charts; only a few practitioners were using laboratory tests to assess nutritional status.

There was a perception among some senior supervisory levels that communities

were not aware of the services available at the health facilities and that explained low utilisation. Also, under-nutrition was not considered a health problem and care-seeking was therefore low. A majority of state- and district-level programme managers and heads of hospitals were however of the view that inadequate human resources, poor quality of services, lack of laboratory support and poor timings were barriers to efficient utilisation of services. Inadequate referral transport facilities, loss of wages of poor parents and social barriers of class and caste were additional critical barriers.

Infections in undernourished children complicated the management. Most severely undernourished children (grades III and IV) were admitted with complications such as refusal to feed, diarrhoea, pneumonia and rapid weight loss. Though there was a compensation of Rs 30 per day for those admitted in the NRCs some parents found it difficult to sustain the long period of nutritional rehabilitation. The doctors reported that follow-up services were conspicuous by their absence. The ANMs and ASHAs were reported to follow-up to some extent.

Observations of health facilities brought out some serious shortcomings. Only two district hospitals had kitchens equipped to provide special diets for undernourished children. Tube feeding was not available in about a sixth of the district hospitals and half of the private hospitals and CHCs. A quarter of all health facilities did not have weighing scales and 40% did not have measuring tapes. One hundred and thirty children each (in the age groups of six months to two years and two to five years) were observed across different categories of health facilities. Weights were not recorded for 75-80% of ambulatory patients and height not recorded for 99%; no attempt was made to plot their weights for age on a chart and infer on nutritional status. In about half the children a clinical assessment of anaemia was made. Two-thirds of the physicians questioned mothers of children between six months and two years about breastfeeding and only 10% of the physicians probed about complementary feeding. In the case of

older children 80-90% of the physicians did not enquire about patterns of feeding altered by the current illness.

Discussion

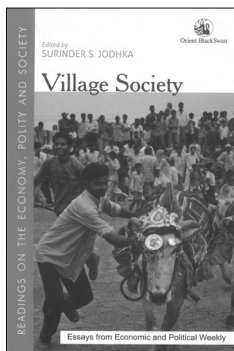
"Nutrition dynamics" ought to be seen over the life course and across generations. Between the National Family Health Surveys (NFHS) 2 and 3, stunting declined in all states while the proportion of underweights went up in Bihar, Jharkhand and Madhya Pradesh; an indicator of periods of acute scarcity affecting large number of children.

The ICDS has its job cut out in the face of chronic poverty and food shortages. The failure of the Integrated Rural Development Project, most marked in Madhya Pradesh (and a few other states) and the lack of microfinance institutions (it has its critiques though) in the area could propel a large number of families into debt traps and a downward spiral of chronic poverty (Kabeer and Subrahmanian 1999). The proposed rejuvenation of the ICDS-IV is thus keenly awaited and shall be closely watched (<http://wcd.nic.in/ICDS4gl.pdf>, viewed on 11 May 2011). Centralised kitchens and efficiently managed freshly cooked food distribution systems could be a good business model as well as ensure variety with quality. The decision in May 2011 to make ICDS services available to children of migrant and temporary residents is a positive step, brought about by relentless advocacy. This has implications for the vast majority of children of migrant workers in the construction industry, brick kilns, agriculture and other sectors; a right that was being denied to them since the inception of the scheme. Running crèches (for under the under-three year olds) for childcare with the help of elderly women in the villages (paid under MNREGS) may be a value-added service under the ICDS.

The performance of the health services left a lot to be desired. Village Health and Nutrition Days (VHND) have been in operation for some time now and serious evaluation is in order. Many district-level officers expressed reservation about the quality of its implementation, agreeing that the concept was good but its operationalisation was inadequate.

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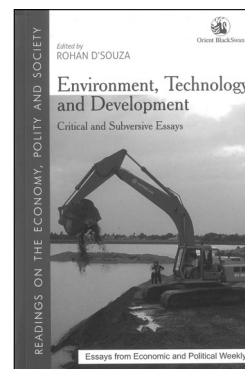
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The poor clinical diagnostic approaches in a hospital setting holds up little hope even when a child has reached a health facility despite the barriers of access. The health service system needs to gear up to respond to these systemic failures. A concerted action of ICDS and health services, suitably backed by interventions for the social determinants can

make some impact on the management and prevalence of under-nutrition.

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