PERSPECTIVE

An Uphill Task for POSHAN Abhiyan: Examining the Missing Link of 'Convergence'

Rajib Dasgupta[1], Susrita Roy[2] and Monica Lakhanpaul[3] For the PANChSHEEEL Project Team

From [1]Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi, and [2]Save the Children India, Gurgaon, Haryana, India; and [3]Integrated Community Child Health, UCL Great Ormond Street Institute of Child Health, London, UK.

Correspondence to: Dr Rajib Dasgupta, Professor, Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi 110 067, India. dasgupta.jnu@gmail.com

The Participatory Approach for Nutrition in Children: Strengthening Health, Education, Engineering and Environment Linkages (PANChSHEEEL) project is a collaboration between University College London, Save the Children India, Jawaharlal Nehru University and Indian Institute of Technology Delhi to develop a socio-culturally appropriate, tailored, integrated and interdisciplinary intervention in rural India and test its acceptability for delivery through Anganwadi Centre (AWCs) and schools. Recognizing the socio-ecological determinants of under-nutrition, the POSHAN Abhiyan (POSHAN Mission) adopts a multi-sectoral approach to achieve five goals, of which two are directly related to children. The POSHAN Abhiyan resonates with the conceptual framework of the PANChSHEEEL study in its interdisciplinary scope and focus on local linka ges. This paper draws upon empirical evidence from the PANChSHEEEL Project in Banswara (one of the POSHAN mission districts), Rajasthan to help understand linkages between policy and practice, specifically the challenges of operationalizing 'convergence', the core strategy of the Abhiyan.

Keywords: *Co-designing, Complementary feeding, Intervention, Under-nutrition.*

The Sustainable Development Goals (SDG) shifted the focus from reducing mortality to ensuring healthy living and wellbeing [1]. The Global Strategy for Women's, Children's and Adolescent's Health 2016-30 called for a transformative change from the MDGs to the SDGs, advocating a continuum of survive (ending preventable deaths) – thrive (realizing health and rights in all settings) – transform (people centered movement for comprehensive change) [2]. Were, *et al*. [3] flagged three key essential child-nutrition related issues: (*i*) exclusive breastfeeding for six months and continued breastfeeding up to at least two years, with appropriate complementary feeding from six months; (*ii*) monitoring and care for child growth and development; and, (*iii*) ensuring food security for the family. Acknowledging the prevailing challenges of poverty, poor nutrition and insufficient access to clean water and sanitation as well as quality health services, the WHO called for a 'grand convergence' to make this transition [4]. An analysis of nutrition governance in India by the Institute of Development Studies pointed to three core roadblocks to achieve convergence: (*i*) lack of horizontal coordination; (*ii*) siloed, bureaucratic vertical articulation; and, (*iii*) inadequate financial outlays [5].

The NITI Aayog (National Institution for Transforming India) launched the National Nutrition Strategy in September 2017 [6] with five specific monitorable targets to be achieved by 2022 of which the first two focus on children below six years: (*i*) prevent and reduce stunting in children (0-6 years) by 6% at the rate of 2% per annum and (ii) prevent and reduce under-nutrition (underweight prevalence) in children (0- 6 years) by 6% at the rate of 2% per annum [7]. In December 2017, the National Nutrition Mission (NNM) subsequently approved a multi-ministerial convergence mission to monitor, supervise and fix targets, and guide nutrition related interventions [8]. It was renamed as the POSHAN (Prime Minister's Overarching Scheme for Holistic Nourishment) Abhiyan/ Mission (henceforth PM/PA) on 8 March 2018 [9]. The PM is guided by two policy documents, the National Nutrition Strategy and the Administrative Guidelines of the NNM across three core themes: (*i*) determinants of complementary feeding; (*ii*) convergence as the core strategy; and, (*iii*) IT enabled approach to monitoring.

This paper draws upon empirical evidence from our PANChSHEEEL study (that fosters collaboration between our interdisciplinary research team, local schools, frontline health workers and communities using schools and Anganwadi Centers as new innovation hubs to develop an integrated system that links health, education, engineering and environmental solutions for

optimization of ICYF) in Banswara District (one of the PA districts), Rajasthan to help understand linkages between policy and practice in the PA since its inception. This mixed methods study was conducted from April 2017 to July 2019 to obtain data on Infant and Young Child Feeding (IYCF) and care practices across domains of nutrition, health, water, sanitation and hygiene (WASH) as well as education, and create a multi-dimensional intervention package through a participatory health settings approach tailored to community needs.

The study was conducted across nine villages (selected on a set of consensus criteria) of Banswara District [five in Ghatol (canal irrigated) and four in Kushalgarh (semi-arid) blocks, respectively]. Community profiling and social mapping was conducted in each village with the help of Community Researchers. Qualitative data (Phase 1) was collected using two methods – key informant interviews (49 interviews) and focus group discussions (17 FGDs), with the help of pre-tested guides in local language. Quantitative data (Phase 2) comprised of household (445 households in the nine villages with children below the age of 24 months) and maternal time use surveys (in a sub-sample of 90 households). The household survey collected data on demographic, socio-economic (under the broad domains of health, education and WASH) and IYCF indicators.

RELEVANCE OF COMPLEMENTARY FEEDING

The conundrum of improvement in anthropometric indicators and decline in complementary feeding indicators in the National Family Health Survey 4 (NFHS4) makes a compelling argument for a dedicated focus on the issue of complementary feeding (CF), the first monitorable target of PA that is relatively neglected in policy, programmatic and academic discourse. IYCF practices encompass two age groups of children: 0-6 months and 6-24 months; with the latter being more critical as undernutrition sets in during this age due to lack of adequacy and diversity of foods as well as infection. Supplementary feeding interventions, infection prevention and curative measures are most effective in reducing malnutrition and promoting growth and development of a child [10].

NFHS4 data indicates a continued trend of improvement in breastfeeding practices in the first age group, but a 9.9 percentage point decline (NFHS 3: 52.6%; NFHS 4: 42.7%) in IYCF indicators [11]. Merely 9.6% children aged 6-23 months received an adequate diet including 14.3% of non-breastfeeding children and 8.7% of breastfeeding children. The declining trend is also noticeable in another indicator – children 6-8 months receiving solid or semi-solid food and breast milk.

The PA policy documents acknowledge the association of multiple factors with CF, identifying *nutrition sensitive* and *nutrition specific* factors such as access to maternal and child nutritional and health related services, drinking water, household food security, livelihood, girls' education and interventions for vulnerable communities [12-17]. **Box 1** summarizes factors that affect IYCF practices broadly classified into three levels: household, community and governance.

These factors are complexly intertwined both within and across categories; *eg,* one of the key emergent reasons for inadequate complementary feeding was lack of mother's time to feed young children.

The formative phase (triangulated qualitative and quantitative data) confirmed that IYCF indicators were dismally poor across both blocks in terms of introduction of semi-solid food during the previous day, minimum dietary diversity, minimum meal frequency, minimum acceptable diet and consumption of iron-reach food. Analysis of maternal time use confirmed a crisis of care (mean time allocated to caregiving was 76.9 and 65.7 minutes in villages of Ghatol and Kushalgarh blocks, respectively) with children aged 12-24 months receiving significantly less time allocated to caregiving than those aged 0-5 months. In short our formative phase confirmed

BOX 1 Levels of IYCF Determinants

Household

- Maternal time constraint, dwindling family size, mother's age and education
- Lack of adequate knowledge
- Poor uptake of existing nutritional services
- Child targeted market with wide availability and consumption of ready-to-eat market food items

Community

- Social and economic context
- Feminization of agriculture
- Fragile food security/seasonal food paucity due to less focus on food crops and vegetables
- Dwindling livestock – especially milk producing animals
- Low connectivity to remote locations
- Migration
- Exposure to media

Governance

- Inadequate and unresponsive ICDS (Integrated Child Development Services) and health care system
- Paucity of technical knowledge among service providers regarding IYCF

the determinants and processes summarized in ***Box 1***, and the evidence used to design and co-create an integrated intervention package. The syncretic model was constructed through synthesis of five interlinked processes: (*i*) data from formative phase; (*ii*) discussion with community groups; (*iii*) collation of NGO experiences; (*iv*) review of national and state policies and programs; and (*v*) expert group advice. The output of the intervention phase consists of a series of packages with its unique set of three aims (improving breastfeeding practices from first hour of childbirth to 6 months of age; increasing minimum acceptable diet for children aged 6-24 months; and, enhancing child care practices associated with growth and development of children below 24 months), relevant facilitators and barriers, and specific components – in terms of target recipient, function, content and channel.

To its credit, the PA approach recognizes the multiple determinants affecting undernutrition in general and some of these are relevant for IYCF practices as evident from our empirical data. The chosen programs for addressing these diverse determinants have been there for long with little demonstrable effect on the indicators in the 6 months to 2 years age-band. The Integrated Child Development Services (ICDS) is a case in point; it offers little for these children except the Take Home Ration (THR); growth monitoring is a weak component and infection prevention is hardly on the agenda. The supply of THR in our study areas was regular but consumption was erratic. While most mothers did not know the correct way to cook it, some mothers also did not have time to cook separately for the children and feed them. Inadequate capacity of the frontline health functionaries, high workload, and dissatisfaction about remuneration along with shortage of managerial staff for supportive supervision resulted in their inability to respond to utilization gaps.

To reiterate the relevance of the three cross-cutting PA core intervention themes: (*i*) the determinants of IYCF are complex and as exemplified above, the ICDS in its present siloed form shall continue to be ill-equipped to deliver a multi-dimensional package of interventions; (*ii*) the IT enabled approach is essentially designed to replace the registers and streamline monitoring and there is no scope (in its present vision) to engage with indicators from other sectors (that the convergent approach seeks to address); and (*iii*) convergence as the core strategy is thus intended to be the game-changer.

CONVERGENCE: THE CORE STRATEGY, AND THE WEAKEST LINK OF ALL

The PM correctly recognizes that a multi-dimensional problem like undernutrition requires multi-sectoral intervention; hence the centrality of convergence as the key strategy. Besides convergence at the political level, there will be a Committee of Secretaries from various ministries at central and state levels. Committees at district and block levels will draw up Convergent Action Plans (CAP). At the community level this is envisaged through the Village Health Sanitation and Nutrition Committees (VHSNC). Recent evaluations of VHSNCs revealed low awareness among members about their role and only few specified functions for decentralized planning and action were actually undertaken [18,19]. The PA documents call for a joining of forces by converging resources, skill and knowledge and outlines elements of engagement and specific contributions of a wide range of 'line departments' through the CAPs which is in sync with the WHO's call for 'grand convergence'. In order to do so needs assessment at village/Anganwadi Center (AWC) levels across related sectors have to be conducted jointly by frontline WCD (Women and Child Development) staff and supervisors and Panchayat (local self-government) members. Each 'line department' shall, on the basis of these needs, prepare 'action plans' that will be collated as Block Convergent Action Plans (BCAPs); and upwards to district (DCAPs) and state (SCAPs) levels.

Our extensive interactions (during the preparatory phase of the current CAPs) with block and district level officials of Banswara District point to several key challenges:

(*i*) The 'planning' process is limited to filling up templates circulated by the Technical Support Units; key specifications include: Year 1 (numeric) targets, activities/interventions, relevant departments and budget provisions.

(*ii*) There was little or no orientation to this process for staff at various levels.

(*iii*) Targets were arbitrarily specified by the officials at respective levels.

(*iv*) Actions/interventions were cursory and unimaginative at best; *eg* "organizing proper counseling of complementary feeding for a period of 15-20 minutes"; "maintenance of proper distribution of THR to the actual beneficiaries as per schedule"; "promotion of toilet use with less water and reuse of dysfunctional toilets"; or, "ensure tablets (iron and folic acid) are available at AWCs, Sub Centres, Primary Health Centres and Community Health Centres".

(*v*) CAPs are silent on 'how to' issues – the most challenging of all.

(*vi*) Budgetary provisions were not specified.

In contrast, our own community workshops adopted an integrated approach to formulate a package that was grounded on the core principles of: co-designing interventions that are flexible, feasible; acceptable, adaptable, accessible; sustainable, scalable; tailored and targeted; effective; resource efficient (Co-De FASTER) [personal communication-Lakhanpaul M 2019]. Co-De FASTER captured *emic* views from individual, household, community, organizational and governmental levels and were able to formulate a well-rounded package of interventions (in contrast to the CAPs prepared this year) that addressed aspects of target recipients, channels, content as well as barriers and facilitators than (***Box 2***). Policy makers need integrated evidence and support from academia that may act as 'policy entrepreneurs' and the PANChSHEEEL evidence provides a glimpse of that.

Convergent planning as envisioned by the PA is a multi-sectoral governance challenge and faces several key barriers, the first of which is political, not technical: how an issue is framed and the extent to which this resonates with high-level political agenda [20]. The extent to which an actor (departments, program managers or technical leads) engages with a problem reflects a match between the nature of the problem and their own nature. There is thus a difference in levels of participation by the different actors; bringing all actors out of their 'silos' requires collaborative and distributive leadership that entails trust, accountability, analysis of networks, and scope of mutual learning and fostering the ability to manage conflicts; the PM documents are silent on these vital aspects of governance. For the success of such a complex mission, it is therefore important to align all the departments to these core values.

BOX 2 The 8-step Approach to Co-designing an Integrated Intervention in the PANChSHEEEL Project

Step 1: Analysis of the formative research

Step 2: Creating a joint understanding about the Settings Approach

Step 3: Sharing the framework with the Community Champions for views about modifiability of these factors, validate findings, stakeholder mapping

Step 4: Intensive co-designing exercise with the community in one village in each block; consultations with teachers and School Management Committee members of all nine villages

Step 5: Mapping responses of the community and experiences of the partners and evidence from national and global programmes to formulate a consolidated Intervention Package 1 (IP1)

Step 6: Discussions related to IP1 with the Block and District officials of the relevant departments to formulate IP2

Step 7: Refinement (acceptability) workshops; IP2 shared with key members from all nine villages; based on the feedback/iteration; IP3 prepared

Step 8: Obtain inputs on IP3 from state and national policy makers to prepare a final IP4.

CONCLUSION

Windows of convergence open (and close) by the coupling (or de-coupling) of three streams: problems, policies and politics [21]. There is a need to focus on the relative roles of each department with respect to the commitment and motivation, funding, administration, organization and service delivery [22]. The PA is highly ambitious in aiming for a targeted reduction of key malnutrition indicators by 2022, and needs to meticulously address the emerging crisis of declines in IYCF indicators. Convergent Action Plans (CAP) is the capstone of this Abhiyan; and a lot rests on its systematic operationalization, and demonstrating a public health imagination. Effective convergence mechanisms, as visualized in the PA documents and emergent in our co-designing exercises, are crucial for breaking free of business as usual. PA recognizes the criticality of inter-departmental convergence for this multi-sectoral issue, but the implementation framework does not provide an adequate roadmap; without that CAPs are reduced to merely filling up templates with (numeric) targets. This reductionist framing of the CAPs, and the lack of well-rounded action plans, point to a lost opportunity as far as the first year of this Abhiyan is concerned. Building capacities across sectors and levels of government fast enough is an up-hill task that ought to be foregrounded in order to be able to rise to the challenge in the next planning cycle. Policy implementation is most likely when there is a 'synthesis of plausible evidence, political vision and practical strategies' [23]. At stake is the ambitious 2022 deadline, with little evidence in the first year that demonstrates convergence as the core strategy.

Contributors: The authors drafted the manuscript on behalf of the PANChSHEEEL Project. All project team members reviewed the manuscript and approved the final version.
Funding: Global Challenges Research Fund and funded by the MRC, AHRC, BBSRC, ESRC and NERC.
Competing Interests: None stated.

REFERENCES

1. United Nations. Sustainable Development Goal 3, The Sustainable Development Goals Report; 2018. Available from: *https://sustainabledevelopment.un.org/sdg3*. Accessed February 24, 2019.
2. World Health Organization., The Global Strategy for Women's, Children's and Adolescent's Health (2016-2030). Geneva, Switzerland: WHO; 2015. Available from: *http://www.who.int/life-course/partners/global-strategy/globalstrategyreport2016-2030-lowres.pdf*. Accessed February 20, 2019.
3. Were WM, Daelmans B, Bhutta Z, Duke T, Bahl R, Boschi-Pinto C, *et al*. Children's health priorities and interventions. BMJ. 2015;351. Available from: *https://www.bmj.com/content/351/bmj.h4300*. Accessed January 11, 2019.
4. Costello AM and Dalglish SL on behalf of the strategic review study team. Towards a grand convergence for child survival and health: A strategic review of options for the future building on lessons learnt from IMNCI. World Health Organisation, 2016. Available from: *https://www.who.int/maternal_child_adolescent/documents/strategic-review-child-health-imnci/en/* . Accessed January 28, 2019.
5. Mohamand SK. Policies Without Politics: Analysing Nutrition Governance in India. 2012. Available from: *https://www.ids.ac.uk/files/dmfile/DFID_ANG_India_Report_Final.pdf.* Accessed March 01, 2019.
6. Niti Aayog, GOI. NITI Aayog calls renewed focus on Nutrition, launches the National Nutrition Strategy, New Delhi; 2017. Available from: *http://pib.nic.in/newsite/PrintRelease.aspx?relid=170549*. Accessed March 12, 2019.
7. Niti Aayog, GOI. National Nutrition Strategy. New Delhi; 2017. Available from: *http://niti.gov.in/writereaddata/files/document_publication/Nutrition_Strategy_ Booklet.pdf*. Accessed March 12, 2019.
8. Government of India. Cabinet approves setting up of National Nutrition Mission. New Delhi; 2017. Available from:*https://www.icds-wcd.nic.in/nnm/NNM-Web-Contents/UPPER-MENU/AboutNNM/PIB_release_NationalNutritionMission.pdf.* Accessed March 12, 2019.
9. Government of India. PM launches National Nutrition Mission, and pan India expansion of Beti Bachao Beti Padhao, at Jhunjhunu in Rajasthan. New Delhi; 2018. Available from: *http://pib.nic.in/newsite/PrintRelease.aspx? relid=177166*. Accessed March 14, 2019.
10. Imdad A, Yakoob MY, Bhutta ZA. Impact of maternal education about complementary feeding and provision of complementary food on child growth in developing countries. BMC Public Health. 2011;11:S25.
11. Dasgupta R, Chaand I, Rakshit Barla K. The slippery slope of child feeding practices in India. Indian Pediatr. 2018;55:284-6.
12. Chaturvedi S, Ramji S, Arora NK, Rewal S, Dasgupta R, Desmukh V. Time-constrained mother and expanding market: Emerging model of under-nutrition in India. BMC Public Health. 2016;16:632.
13. Komatsu H, Malapit HJL, Theis S. Does women's time in domestic work and agriculture affect women's and children's dietary diversity? Evidence from Bangladesh, Nepal, Cambodia, Ghana, and Mozambique. Food Policy. 2018;79:256-70.
14. Balakrishnan R. Rural women and food security in Asia and the pacific: prospects and paradoxes. Food and Agricultural Organization (FAO) of the United Nations. 2005. Available from: *ftp://ftp.fao.org/docrep/fao/008/af348e/af348e00.pdf*. Accessed February 19, 2019.
15. Kulwa KB, Kinabo J L, Modest B. Constraints on good child care practices and nutritional status in urban Dar-es-Salaam, Tanzania. Food Nutr Bull. 2006;27:236-44.
16. Mittal A, Singh J, Ahluwalia SK. Effect of maternal factors on nutritional status of 1-5 year old children in urban slum population. Indian J Community Med. 2007;32:264-7.
17. Connelly R, DeGraff DS, Levison D. Women's employment and child care in Brazil. Econ Dev Cult Change. 2007;44:619-56.
18. Srivastava A, Gope R, Nair N, Rath S, Rath S, Sinha R, *et al*. Are village health sanitation and nutrition committees fulfilling their roles for decentralized health planning and action? A mixed methods study from rural eastern India. BMC Public Health. 2016;16:59.
19. Semwal V, Jha SK, Rawat CMS, Kumar S, Kaur A. Assessment of village health sanitation and nutrition committee under NRHM in Nainital district of Uttarakhand. Indian Journal of Community Health. 2013;25:472-9.
20. Rasanathan K, Bennett S, Atkins V, Beschel R, Carrasquilla G, Charles J, Dasgupta R, *et al*. Governing multisectoral action for health in low- and middle-income countries. PLoS Med. 2017;14:e1002285.
21. Kingdon J. Agendas, alternatives and public policy. Boston: Little. 1995, 204.
22. Austen A, Zacny B. The role of public service motivation and organizational culture for organizational commitment. Management. 2015;19:21-34.
23. Nutbeam D. Getting evidence into policy and practice to address health inequalities. Health Promotion International. 2004;19:137-40.

PANChSHEEL RESEARCH TEAM

Principal Investigator: Monica Lakshanpaul, UCL Great Ormond Street Institute of Child Health.

Co-investigators: Marie Lall, Institute of Education, UCL; Priti Parikh, Civil Environmental and Geomatic Eng, UCL; Lorna Benton UCL, Great Ormond Street Institute of Child Health; Rajib Dasgupta, Jawaharlal Nehru University; Virendra Kumar Vijay, Indian Institute of Technology Delhi; Rajesh Khanna, Save the Children, India; Hanimi Reddy, Save the Children, India; Logan Manikam, UCL Great Ormond Street Institute of Child Health.

Save the Children: Sanjay Sharma, Susrita Roy, Neha Santwani, Satya Prakash Pattanaik, Priyanka Dang, Hemant Chaturvedi, Pramod Pandya, Tol Singh.

Indian Institute of Technology: Namrata Agrahari.