Policy Brief

Social and Behaviour Change Interventions for Promoting



Statement of Issue

An estimated 165 million children are stunted worldwide due to the combined effects of poor nutrition, repeated infection and inadequate psychosocial stimulation. The complementary feeding period, generally corresponding to age 6–24 months, represents an important period of sensitivity to stunting with lifelong, possibly irrevocable consequences (Stewart et al., 2013). The period 6-23 months is critical as this is the age when the child is most vulnerable to the vicious cycle of undernutrition, disease/infection and resultant disability, affecting growth and development. After the child reaches 2 years of age, it is difficult to reverse the effects of undernutrition (Victoria et al., 2008).

Child undernutrition in India is severe and is a major underlying cause of child mortality despite substantial increase in political discourse about the challenge of undernutrition leading to stated commitments from many stakeholders. Poor feeding practices, coupled with infections are the two main causes of undernutrition among children below 3 years of age. Only 50 per cent of children aged 6-8 months are given complementary food (RSOC, 2013-14). Same data source shows that 29.4 per cent of children aged 0-59 months are underweight and 38.7 per cent are stunted.

To improve the nutritional status of children, the Government of India Guidelines for Enhancing Optimal Infant and Young Child Feeding Practices (2013), has recommended the following optimal complementary feeding practices for children 6-23 months: *continue*

Methodology

Under Call to Action, Population Council in partnership with UNICEF and USAID key social and behaviour change (SBC) strategies and health outcomes supporting child survival in the South Asia region, especially in India. More than 7605 articles on Maternal and Child Health published during the last 10 years (2002-2015) were scanned after database searching, and of these, 151 intervention studies were selected for analysis. On Complementary feeding behaviour, a total of 492 articles were identified and screened, 177 abstracts were read, 29 articles were downloaded and reviewed and 19 were selected for final review. The outcome of the review was a Report, "Evidence Review on Population Level Social and Behaviour Change in South Asia for Enhancing Child Survival and Development" on which this policy brief is based. In addition, a technical group in UNICEF India has enhanced the findings and recommendations with new literature and relevant evidence.







breastfeeding for 2 years or beyond; age appropriate complementary feeding ensuring variety, diversity, frequency and hygiene; active feeding for children during and after illness.

At the individual and household level the behavioural barriers to the adoption of appropriate complementary feeding practices could include (1) Lack of knowledge among women and elders regarding the correct age for initiating complementary feeding, (2) Perception among women that the child has been adequately fed and that the child cannot eat more, (3) Giving food to the child when elders themselves are eating rather than separately and proactively feeding the child, (4) Lack of knowledge among women/caregivers regarding the quantity, diversity, frequency and types of food to be fed, (5) Lack of skills in actively feeding a child.

Studies have also identified key system-level barriers such as (1) lack of knowledge of frontline health workers on complementary feeding, (2) absence/poor use of communication/counselling aids, (3) limited efforts by frontline health workers to counsel women on complementary feeding and (4) lack of knowledge on complementary feeding among village-level private practitioners.

(Population Council, 2011. Shaping Demand and Practices to Improve Family Health Outcomes in Northern India: A Framework for Behaviour Change Communication)

Literature Review: Key Findings

The results of the evidence review indicate that the following interventions could lead to timely and appropriate complementary feeding practices.

1.Build capacity of government community health workers to promote improved complementary feeding practices through interpersonal communication. A huge contrast exists between the workers' knowledge and their ability to apply this in formal counselling sessions with caregivers. Inability to empathetically engage with caregivers, disregard for taking the feeding history of children, poor active listening skills and inability to provide need-based advice are the main gaps during counselling. Thus to ensure enhanced interaction between the Anganwadi Workers and caregivers on infant and young child feeding practices, a paradigm shift in training is required, making communication processes and counselling skills central to the training. In the interventions reviewed, quality training of community health workers (CHWs) played a critical role in success. A nutrition education package including flip charts, cards related to healthy feeding practices, counselling guide on solving common feeding problems and growth charts were used in the training. Regular home visits (at least 10 and at most 40 from birth to 14 months) by CHWs was found to increase the effectiveness of the intervention.

(Bhandari et al., (2004; 2005), Vazir et al., 2012, Chaturvedi, et al., 2014.)

 Implement community-based initiatives through government systems (ICDS centres, VHNDs). At the individual and household level, interpersonal communication through CHWs, mothers as peer educators as well as community members acting as volunteers, have a positive impact on improving complementary feeding practices. At the community level, mobilising community by counselling small groups of mothers (6-8) leads to improved feeding practices at periodic intervals (once a week for 6-9 months, then once in 2 weeks for next 9-12 months).

• To counsel on complementary feeding VHND is a good platform since actual users are seeking services like supplementary food, immunisation, micronutrient supplements and antenatal care. At this site, mothers, caregivers can be counselled on correct complementary feeding practices.

- Enables long-term and large-scale implementation of interventions, crucial to improving children's health status.
- Mothers who have seen the improvement in their children's health become strong advocates for change in feeding practices.

• NGOs can play an important role in mobilising the women and adolescent girls for small group meetings at AWC and community for attending the VHND.

(Intervention by CARE India, 2008, Roy et al., 2007; Vistaar Evidence Review Series, 2007a, b, c, d)

3. Provide timely counselling to promote complementary feeding practices. The intervention studies reviewed show that 3 or more quarterly visits from birth to 18 months were more effective than one or two to increase mean energy intake among children aged nine and 18 months. Counsel men and key family members on a monthly basis to create awareness and play a supportive role. A study conducted in Lalitpur district of Uttar Pradesh demonstrated a significant improvement in IYCF practices when pregnant and lactating mothers were supported with skilled counselling. The project interventions were also effective in increasing the initiation of breastfeeding within one hour of birth of baby, exclusive breastfeeding for 6 months, and appropriate start of complementary feeding.Provision of appropriate complementary food and maternal nutritional counseling leads to significant increase in weight and height in children 6-24 months of age.

(Roy et al., 2007, Kushwahaet al., 2014, Imdad et al., 2011)

4. Supportive supervision of community health workers (Anganwadi workers, ANMs). The literature review reveals that in addition to high quality training, ensuring adequate supervision through mentoring and support in the field, timely delivery of supplies and services and regular monitoring are critical to enhance complementary feeding.

(Intervention by CARE India, 2008, Palwala et al., 2009)

Policy Recommendations

- 1. Improve Governance for Nutrition: The Nutrition Mission formed in Maharashtra in 2005 focuses on the proven nutrition interventions for children (aged under-two) and their mothers by tapping the 1000 days window of opportunity. The mission is an autonomous body with political sanction at the highest level to coordinate inter-sectoral response to reduce prevalence of child under-nutrition in the State. The work of the mission resulted in reducing prevalence of stunting in children from 39 per cent in 2006 to 22.8 per cent in 2012. A systematic, evidence-based collaborative approach can facilitate the design of comprehensive IYCF programs. Programs should also embed design flexibility to enable changes as new challenges and opportunities arise.
- 2. Enhance counselling at individual level: The review showed three main routes for counselling at the individual level by government CHWs, non-government field workers and community volunteers, positive deviants and early adaptors as peer educators. But large-scale interventions were demonstrated with government CHWs. However, positive deviants and early adaptors were also effective change agents and could be involved in interventions implemented at the community level.

Providing counselling aids like flip charts, cards and leaflets showing feeding schedule and feeding practices and training CHWs on how to use them were key elements of the intervention. The evidence also showed that involving family members like husbands, mothers-in-law and fathers-in law was effective in increasing awareness.

- Frequency of contacts: Three or more contact of CHWs with mothers/caretakers showed higher intake of energy dense food as compared to 1-2 contacts. Further, innovative tools like a simple checklist for fieldworkers to assess adoption of favorable behaviour for reinforcement revealed to be a good practice.
- 4. Regular weighing and use of growth chart as communication aid: Motivation to follow the change in feeding practices increases when the mothers are able to visualize the improvements in the health of the infant after following the correct behaviours. Further they also act as facilitators for others to follow the practice. Therefore, periodic weighing and use of growth charts enable mothers and family members to visualise the growth of their children and motivate them to practice comprehensive complementary feeding.
- 5. Capitalize on Positive Deviants and early adopters: The community mobilization approaches, mainly including group education and dialogue-based programmes and communication through demonstrations, are effective for promoting feeding practices. Programmes focusing on positive deviants and early adopters of correct complementary feeding practices have a cascading effect in mobilising other non-adopters to change behaviours.

Sources

Aboud, F.E., Moore, A.C., & Akhter, S. (2008). Effectiveness of a community-based responsive feeding programme in rural Bangladesh: a cluster randomized field trial. *Maternal and Child Nutrition*, *4*(4), 275-286. doi: 10.1111/j.1740-8709.2008.00146.x.

Aboud, F.E., Shafique, S., & Akhter, S. (2009). A responsive feeding intervention increases children's self-feeding and maternal responsiveness but not weight gain. *Journal of Nutrition*, 139(9), 1738-1743. doi: 10.3945/jn.109.104885. Epub 2009 Jul 8.

Aruldas, K., Khan M.E., and Hazra A. (2010). Increasing appropriate complementary feeding in rural Uttar Pradesh. *The Journal of Family Welfare*, 56, Special issue; 51-56.

Bhandari, N., Bahl, R., Nayyar, B., Khokhar, P., Rohde, J.E., &Bhan, M.K. (2001). Food supplementation with encouragement to feed it to infants from 4 to 12 months of age has a small impact on weight gain. *Journal of Nutrition*, *131*(7), 1946-1951.

Bhandari, N., Mazumder, S., Bahl, R., Martines, J., Black, R.E., Bhan, M.K., & the other members of the Infant Feeding Study Group. (2004). An educational intervention to promote appropriate complementary feeding practices and physical growth in infants and young children in rural Haryana, India. *Journal of Nutrition*, 134(9), 2342-2348.

Bhandari, N., Mazumder, S., Bahl, R., Martines, J., Black, R.E., Bhan, M., & other members of the Infant Feeding Study Group. (2005). Use of multiple opportunities for improving feeding practices in under-twos within child health programmes. *Health Policy and Planning*, *20*(5), 328-336.

CARE-India. (2008). Women and Child Health at Scale - Engaging Communities to Improve Health and Nutrition Outcomes:The Role of Community Volunteers in INHP. Working Papers Series No. 4 (Unpublished). New Delhi: RACHNA, CARE India.

Chaturvedi A, Nakkeeran N, Doshi M, Patel R, Bhagwat S. Capacity of frontline ICDS functionaries to support caregivers on infant and young child feeding (IYCF) practices in Gujarat, India. Asia Pac J ClinNutr. 2014;23Suppl 1:S29-37. doi: 10.6133/apjcn.2014.23.s1.04.

Dubowitz, T., Levinson, D., Peterman, J.N., Verma, G., Jacob, S., & Schultink, W. (2007). Intensifying efforts to reduce child malnutrition in India: An evaluation of the Dular program in Jharkhand, India. *Food and Nutrition Bulletin, 28*(3), 266-273.

Government of India (GOI). (2004). National Guideline on Infant and Young Child Feeding, Retrieved from http://wcd.nic.in/ national_guidelines.html/

Imdad A1, Yakoob MY, Bhutta ZA. Impact of maternal education about complementary feeding and provision of complementary foods on child growth in developing countries. BMC Public Health. 2011 Apr 13;11Suppl 3:S25. doi: 10.1186/1471-2458-11-S3-S25.

IntraHealth International. (2007 a; b; & c). Vistaar Evidence Review Series. Retrieved from http://www.intrahealth.org/resources/education-training/vistaars-evidence-review-briefs

Kapur, D., Sharma, S., & Agarwal, K.N. (2003). Effectiveness of nutrition education, iron supplementation or both on iron status in children. *Indian Pediatrics*, 40(12),1131-1144.

Kilaru, A., Griffiths, P.L., Ganapathy, S., & Ghosh, S. (2005). Community-based nutrition education for improving infant growth in rural Karnataka. *Indian Journal of Pediatrics*, 42(5), 425-432.

Kushwaha KP1, Sankar J2, Sankar MJ2, Gupta A3, Dadhich JP4, Gupta YP5, Bhatt GC1, Ansari DA1, Sharma B1.Effect of peer counselling by mother support groups on infant and young child feeding practices: the Lalitpur experience. PLoS One. 2014 Nov 4;9(11):e109181. doi: 10.1371/journal.pone.0109181. eCollection 2014.Levinson, F.J., Barney, J., Bassett, L., &Schultink, W. (2007). Utilization of positive deviance analysis in evaluating communitybased nutrition programs: an application to the Dular program in Bihar, India. *Food and Nutrition Bulletin, 28*(3), 259-265.

Palwala, S., Sharma, S., Udipi, S.A., Ghugre, P.S., Kothari, G., & Sawardekar, P. (2009). Nutritional quality of diets fed to young children in urban slums can be improved by intensive nutrition education. *Food and Nutrition Bulletin*, 30(4), 317-326.

Roy, S.K., Fuchs, G.J., Mahmud, Z., Ara, G., Islam, S., Shafique, S., Akter, S.S., & Chakraborty, B. (2005). Intensive nutrition education with or without supplementary feeding improves the nutritional status of moderately-malnourished children in Bangladesh, *23*(4), 320-330.

Roy, S.K., Jolly, S.P., Shafique, S., Fuchs, G.J., Mahmud, Z., Chakraborty, B., & Roy, S. (2007). Prevention of malnutrition among young children in rural Bangladesh by a food-health-care educational intervention: a randomized, controlled trial. *Food and Nutrition Bulletin*, 28(4), 375-383

Sethi, V., Kashyap, S., & Seth, V. (2003). Effect of Nutrition Education of Mothers on Infant Feeding Practices. *Indian Journal of Pediatrics*, 70(6), 463-466.

Stewart CP, lannotti L, Dewey KG, Michaelsen KF, Onyango AW. (2013). Contextualising complementary feeding in a broader framework for stunting prevention. Mat. & Child Nutr. 2013; 9(S2):27-45 doi: 10.1111/mcn.12088.

Thomas D1, Sarangi BL2, Garg A3, Ahuja A4, Meherda P3, Karthikeyan SR4, Joddar P2, Kar R2, Pattnaik J2, Druvasula R2, DemboRath A2. Closing the health and nutrition gap in Odisha, India: A case study of how transforming the health system is achieving greater equity. SocSci Med. 2015 Nov;145:154-62. doi: 10.1016/j.socscimed.2015.06.010. Epub 2015 Jun 12.

Vazir, S., Engle, P., Balakrishna, N., Griffiths, P.L., Johnson, S.L., Creed-Kanashiro, H., Rao, S.F., Shroff, M.R., & Bentley, M.E. (2012). Cluster-randomized trial on complementary and responsive feeding education to caregivers found improved dietary intake, growth and development among rural Indian toddlers. *Maternal and Child Nutrition*, doi: 10.1111/j.1740-8709.2012.00413.x

Victora, C.G., Adair, L., Fall, C., Hallal, P.C., Martorell, R., Richter, L., & Harshpal Singh Sachdev, S.S. (2008). Maternal and child undernutrition: consequences for adult health and human capital. *The Lancet*, *371*(9609), 340-357.

Zaman, S., Ashraf, N.R., & Martines, J. (2008). Training in complementary feeding counselling of healthcare workers and its influence on maternal behaviours and child growth: A cluster randomized controlled trial in Lahore, Pakistan. *Journal of Health, Population and Nutrition,* 26(2), 210-222.

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