

EDITOR'S NOTE

This issue of the Abstract Digest brings together global and regional research that highlights the multi-faceted nature of the child undernutrition problem, the complexity involved in addressing it, and some lingering knowledge gaps. Complex interactions between the environment, immune system, intra- and inter-generational effects, and specific nutrient deficiencies influence undernutrition (Ahmed et al. 2014). Socio-cultural effects, especially gender dimension, add to the complexity of undernutrition as demonstrated by Raj and colleagues (2014) in their study, where being a girl among male siblings heightened the risk of acute malnutrition among girls in South Asia. A multi-faceted problem requires a comprehensive approach and political economy is inherent to it. Nisbett et al. (2014) argue that political considerations define the space for purposeful nutrition actions and affect their effectiveness. Fox and colleagues (2014) present a theory-based rapid assessment approach to examine the countries' level political commitment to food and nutrition to identify strategies to advance the nutrition agenda. But commitment isn't enough, and interventions must be implemented effectively to reach the populations; in their paper, therefore Menon et al. (2014) present a framework to inform the development of implementation research on the delivery and utilization of nutrition interventions.

Some other global articles featured in this issue discuss severe acute malnutrition in Asia (Ahmed et al. 2014, yes, another one from the same group mentioned above) and salt iodization and global burden of iodine deficiency disorders (Shrivastava et al. 2014). Of the two India-based studies, one study discusses how the Indian National Food Security Act can become a significant step toward the battle against undernutrition and food insecurity (Varadharajan. 2014) while the other (Jee, 2014) demonstrates the feasibility of implementing a successful and inclusive vitamin A supplementation program.

Warm regards,

Dr. Rasmi Avula

PEER-REVIEWED LITERATURE

An evolving perspective about the origins of childhood undernutrition and nutritional interventions that includes the gut microbiome

Ahmed, T., D. Auble, J. A. Berkley, R. Black, P. P. Ahern, M. Hossain, A. Hsieh, S. Ireen, M. Arabi, and J. I. Gordon. 2014. *Annals of the New York Academy of Sciences*. doi: 10.1111/nyas.12487.

<http://onlinelibrary.wiley.com/doi/10.1111/nyas.12487/pdf>

The Sackler Institute for Nutrition Science and the World Health Organization (WHO) have worked together to formulate a research agenda for nutrition science. Undernutrition of children has profound effects on health, development, and achievement of full human capacity. Undernutrition is not simply caused by a lack of food, but results from a complex interplay of intra- and intergenerational factors. Representative preclinical models and comprehensive well-controlled longitudinal clinical studies are needed to further understand the contributions and the interrelationships among these factors and to develop interventions that are effective and durable. This paper summarizes work on mechanisms underlying the varied manifestations of childhood undernutrition and discusses current gaps in knowledge and challenges to our understanding of undernutrition and infection/immunity throughout the human life cycle, focusing on early childhood growth. It proposes a series of basic and clinical studies to address this global health challenge.

Severe acute malnutrition in Asia

Ahmed, T., M. Hossain, M. Mahfuz, N. Choudhury, M. M. Hossain, N. Bhandari, M. M. Lin, P. C. Joshi, M. R. Angdembe, P. V. Wickramasinghe, M. S. M. Hossain, M. Shahjahan, S. E. Irianto, S. Soofi, Sajid, and Z. Bhutta. 2014. *Food & Nutrition Bulletin* 35 (1): 14S-26S.

<http://www.ncbi.nlm.nih.gov/pubmed/25069289>

Severe acute malnutrition (SAM) is a common condition that kills children and intellectually maims those who survive. Close to 20 million children under the age of 5 years suffer from SAM globally, and about 1 million of them die each year. Much of this burden takes place in Asia. Six countries in Asia together have more than 12 million children suffering from SAM: 0.6 million in Afghanistan, 0.6 million in Bangladesh, 8.0 million in India, 1.2 million in Indonesia, 1.4 million in Pakistan, and 0.6 million in Yemen. This article is based on a review of SAM burden and intervention programs in Asian countries where, despite the huge numbers of children suffering from the condition, the coverage of interventions is either absent on a national scale or poor. Countries in Asia have to recognize SAM as a major problem and mobilize internal resources for its management. Screening of children in the community for SAM and appropriate referral and back referral require good health systems. Improving grassroots services will not only contribute to improving management of SAM, it will also improve infant and young child feeding and nutrition in general. Ready-to-use therapeutic food (RUTF), the key to home management of SAM without complications, is still not endorsed by many countries because of its unavailability in the countries and its cost. It should preferably be produced locally from locally available food ingredients. Countries in Asia that do not have the capacity to produce RUTF from locally available food ingredients can benefit from other countries in the region that can produce it. Health facilities in all high-burden countries should be staffed and equipped to treat children with SAM. A continuous cascade of training of health staff on management of SAM can offset the damage that results from staff attrition or transfers. The basic nutrition interventions, which include breastfeeding, appropriate complementary feeding, micronutrient supplementation, and management of acute malnutrition, should be scaled up in Asian countries that are plagued with the burden of malnutrition.

Gendered effects of siblings on child malnutrition in South Asia: Cross-sectional analysis of demographic and health surveys from Bangladesh, India, and Nepal.

Raj, A., L.P. McDougal, and J.G. Silverman. 2014. *Journal of Maternal and Child Health*. doi:10.1007/s10995-014-1513-0.

<http://link.springer.com/article/10.1007/s10995-014-1513-0>

This study examines the effects of number and sex of siblings on malnutrition of boys and girls under-5 in South Asia. Cross-sectional analyses were conducted on Demographic and Health Surveys data on children under-5 in Bangladesh (N = 7,861), India (N = 46,655) and Nepal (N = 2,475). Data were pooled across countries, and multinomial logistic regression was used to assess the relationship between number and sex of siblings and malnutrition outcomes (wasting, stunting, underweight; based on anthropometric data), adjusting for country and key social and maternal-child health indicators in sex stratified analyses. Number of brothers increased the odds for severe wasting [1 vs. 0 brothers adjusted odds ratio (AOR) = 1.31, 95 % CI = 1.11, 1.55; 2 vs. 0 brothers AOR = 1.36, 95 % CI = 1.07, 1.73] for girls but not boys. Having more male siblings and more female siblings increased the odds of stunting for boys and girls, but effect of 3+ sisters on severe stunting was significantly stronger for girls than boys (girls- 3+ vs. 0 sisters AOR = 2.25, 95 % CI = 1.88, 2.70; boys- 3+ vs. 0 sisters AOR = 1.37, 95 % CI = 1.13, 1.67). For underweight, three or more sisters increased the odds for severe underweight for girls (AOR = 1.27, 95 % CI = 1.04, 1.57) but not boys. Having brothers heightens girl risk for acute malnutrition (wasting), where having multiple sisters increases girl risk for chronic malnutrition (stunting/underweight). Boy malnutrition is less affected by siblings. Findings suggest that issues of son preference/daughter aversion may affect child malnutrition in South Asia.

Identifying determinants of effective complementary feeding behaviour change interventions in developing countries.

Fabrizio, C.S., M.V. Liere, and G. Pelto. 2014. *Maternal and Child Nutrition*. doi:10.1111/mcn.12119.

<http://onlinelibrary.wiley.com/doi/10.1111/mcn.12119/abstract>

As stunting moves to the forefront of the global agenda, there is substantial evidence that behaviour change interventions (BCI) can improve infant feeding practices and growth. However, this evidence has not been translated into improved outcomes on a national level because we do not know enough about what makes these interventions work, for whom, when, why, at what cost and for how long. Our objective was to examine the design and implementation of complementary feeding BCI, from the peer-reviewed literature, to identify generalizable key determinants. We identified 29 studies that evaluated BCI efficacy or effectiveness, were conducted in developing countries, and reported outcomes on infant and young children aged 6–24 months. Two potential determinants emerged: (1) effective studies used formative research to identify cultural barriers and enablers to optimal feeding practices, to shape the intervention strategy, and to formulate appropriate messages and mediums for delivery; (2) effective studies delineated the programme impact pathway to the target behaviour change and assessed intermediary behaviour changes to learn what worked. We found that BCI that used these developmental and implementation processes could be effective despite heterogeneous approaches and design components. Our analysis was constrained, however, by the limited published data on how design and implementation were carried out, perhaps because of publishing space limits. Information on cost-effectiveness, sustainability and scalability was also very limited. We suggest a more comprehensive reporting process and a more strategic research agenda to enable generalisable evidence to accumulate.

Iodine deficiency disorders: Public Health measures to mitigate the global burden.

Shrivastava, S.R.B.L., P.S. Shrivastava, and J. Ramasamy. 2014. *Journal of Health and Research* 1 (2): 119-122. doi:10.4103/2348-3334.134280.

<http://www.cjhr.org/article.asp?issn=2348-3334;year=2014;volume=1;issue=2;spage=119;epage=122;aulast=Lal>

Iodine is an essential micronutrient required for the synthesis of the hormones - thyroxine and triiodothyronine. Iodine insufficiency is prevalent throughout the world, and is rated as one of the most significant public health concern in more than 125 countries. An optimal intake of dietary iodine during pregnancy, lactation and early childhood period is crucial for ensuring proper development of the brain of the fetus/newborn. During the course of implementation of the strategy of universal administration of the iodized salt, a wide gamut of challenges has been identified. In order to combat the same and simultaneously enhance the coverage of universal administration of the iodized salt, many measures have been proposed, namely formulating clear plan with time-based targets; encouraging coordination amongst all stakeholders; strengthening of the existing infrastructure; and increasing consumer awareness and demand for adequately iodized salt. To conclude, iodine has a crucial role in ensuring the normal growth and development of the child. However, to expand the coverage of the universal iodized salt to the vulnerable population, sustained political commitment and transparent monitoring and evaluation mechanism is the need of the hour.

A review of the vitamin A supplementation program in India: Reasons for success in the states of Bihar and Odisha

Jee, R. H., R. Houston, B. D. Mohapatra, S. S. Kumar, F. Saiyed, S. Bhattacharjee, V. M. Aguayo. 2014. *Food & Nutrition Bulletin* 35 (2): 203-210.

<http://www.ingentaconnect.com/content/nsinf/fnb/2014/00000035/00000002/art00007>

Background. Preventive vitamin A supplementation (VAS) is an essential child survival intervention. In India, VAS program coverage has remained relatively low, with wide interstate variation. **Objective.** To review the VAS program in India, particularly in Bihar and Odisha, the two states that have had the most successful VAS programs, to define best practices and identify critical success factors. **Methods.** A thorough review of existing relevant literature was carried out, supplemented by field visits and interviews with selected partners. **Results.** Both states have adopted a biannual approach to reach out to children 1 to 5 years of age with VAS every 6 months, while infants below 1 year of age receive their first VAS dose with the measles immunization at 9 months. The critical success factors for the VAS program in the two states include strong leadership and ownership by the state government; close coordination between the two departments that are involved in the VAS program; effective microplanning prior to each biannual round; flexible dosing mechanisms that enhance coverage in hard-to-reach areas; a stable procurement and distribution mechanism to ensure an adequate, timely, and sustainable supply of VAS; intensive social mobilization and communication; and appropriate training and supervision of staff. **Conclusions.** The governments of Bihar and Odisha have demonstrated that it is feasible to implement a successful and inclusive VAS program in India. The challenge now is to reach out to the remaining 30% to 40% of children who are undoubtedly the hardest to reach and potentially the most vulnerable.

The Indian National Food Security Act, 2013: A commentary

Varadharajan, K. S., T. Thomas, A. Kurpad. 2014. *Food & Nutrition Bulletin* 35 (2) : 253-265.

<http://www.ingentaconnect.com/content/nsinf/fnb/2014/00000035/00000002/art00012>

The National Food Security Act (NFSA) 2013, passed recently by the Indian Parliament, aims to ensure food security in India, chiefly by providing cereals at subsidized prices through the Targeted Public Distribution System (TPDS) for about two-thirds of households. The predominant line of criticism of the NFSA has been the costs of such an ambitious rights-based approach in the context of decelerating economic growth and growing fiscal deficits. We argue that the food subsidy has been increasing through the last few decades and is set to climb even higher with this act but that the incremental costs, at about 0.2% of gross domestic product, are not as high as claimed. Further, recent evidence of increasing utilization of the TPDS and decreasing corruption add credence to the act's premise that significant income transfers to poor households can be achieved, thereby promoting food security as well as dietary diversity. Several concerns remain to be addressed in the design and implementation of the act, including its proposed coverage, a cereal-centric approach, the identification of beneficiaries, and its adaptability at the state level. If these are resolved effectively, the act can prove to be a significant step forward in India's long-drawn-out battle against undernutrition and food insecurity. Finally, the NFSA also provides a fresh opportunity to reform and strengthen the TPDS, which has been an integral component of India's strategy to achieve food security at the national level.

Scaling-up access to family planning may improve linear growth and child development in low and middle income countries

Fink, G., C. R. Sudfeld, G. Danaei, M. Ezzati, and W. W. Fawzi. 2014. *PLOS One* 9 (7): 119-122. doi: [10.1371/journal.pone.0102391](https://doi.org/10.1371/journal.pone.0102391).

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0102391>

Background: A large literature has indicated a robust association between birth spacing and child survival, but evidence on the association of birth timing with physical growth in low and middle income countries (LMICs) remains limited. **Methods and Results:** Data from 153 cross-sectional Demographic and Health Surveys (DHS) across 61 LMICs conducted between 1990 and 2011 were combined to assess the association of birth timing with child stunting (height-for-age z-score <-2). A total of 623,789 children of birth order 1–5 contributed to the maternal age analysis, while the birth spacing dataset consisted of 584,226 children of birth order 2 and higher. Compared to 27–34 year old mothers, maternal age under 18 years was associated with a relative stunting risk of 1.35 (95% CI: 1.29–1.40) for firstborn children, whereas the relative risk was 1.24 (95% CI: 1.19–1.29) for mothers aged 18–19 years. The association of young maternal age with stunting was significantly greater for urban residents and those in the top 50% of household wealth. Birth intervals less than 12 months and 12–23 months had relative risks for stunting of 1.09 (95% CI: 1.06–1.12) and 1.06 (95% CI: 1.05–1.06) as compared to a 24–35 month inter-pregnancy interval, respectively. The strength of both teenage pregnancy and short birth interval associations showed substantial variation across WHO region. We estimate that 8.6% (6.9–10.3%) of stunted cases in the South Asian DHS sample would have been averted by jointly eliminating teen pregnancies and birth intervals less than 24 months, while only 3.6% (1.5–5.7%) of stunting cases would have prevented in the Middle East and North Africa sample. **Conclusions:** Postponing the age of first birth and increasing inter-pregnancy intervals has the potential to significantly reduce the prevalence of stunting and improve child development in LMICs.

Why worry about the politics of childhood undernutrition?

Nisbett, N., S. Gillespie, L. Haddad, and J. Harris. 2014. *World Development* 64: 420-433. doi: 10.1016/j.worlddev.2014.06.018.

http://ac.els-cdn.com/S0305750X14001776/1-s2.0-S0305750X14001776-main.pdf?_tid=d87b3e56-39ed-11e4-87c5-00000aacb35e&acdnat=1410465623_6ea3b18c12a64f5022c2819b2e8cfb19

Undernutrition affects over 2 billion people; but most of the global policy focus has been on technical solutions rather than an understanding of nutrition politics. This paper reviews existing literature on nutrition politics and policy. We identify a number of recurring themes surrounding knowledge; politics, and capacities. While the literature on nutrition politics and policy is growing; we demonstrate how there are a number of gaps in our understanding that might be addressed from wider development scholarship on politics and related issues such as power and the state, participation, and accountability.

Measuring political commitment and opportunities to advance food and nutrition security: piloting a rapid assessment tool

Fox, A.M., Y. Balarajan, C. Cheng, and M.R. Reich. 2014. *Health Policy and Planning*: 1-13. doi:10.1093/heapol/czu035.

<http://heapol.oxfordjournals.org/content/early/2014/06/05/heapol.czu035.abstract>

Lack of political commitment has been identified as a primary reason for the low priority that food and nutrition interventions receive from national governments relative to the high disease burden caused by malnutrition. Researchers have identified a number of factors that contribute to food and nutrition's 'low priority cycle' on national policy agendas, but few tools exist to rapidly measure political commitment and identify opportunities to advance food and nutrition on the policy agenda. This article presents a theory-based rapid assessment approach to gauging countries' level of political commitment to food and nutrition security and identifying opportunities to advance food and nutrition on the policy agenda. The rapid assessment tool was piloted among food and nutrition policymakers and planners in 10 low- and middle-income countries in April to June 2013. Food and nutrition commitment and policy opportunity scores were calculated for each country and strategies to advance food and nutrition on policy agendas were designed for each country. The article finds that, in a majority of countries, political leaders had verbally and symbolically committed to addressing food and nutrition, but adequate financial resources were not allocated to implement specific programmes. In addition, whereas the low cohesion of the policy community has been viewed a major underlying cause of the low-priority status of food and nutrition, the analysis finds that policy community cohesion and having a well thought-out policy alternative were present in most countries. This tool may be useful to policymakers and planners providing information that can be used to benchmark and/or evaluate advocacy efforts to advance reforms in the food and nutrition sector; furthermore, the results can help identify specific strategies that can be employed to move the food and nutrition agenda forward. This tool complements others that have been recently developed to measure national commitment to advancing food and nutrition security.

Strengthening implementation and utilization of nutrition interventions through research: a framework and research agenda

Menon, P., N.M. Covic, P.B. Harrigan, S.E. Horton, N.M. Kazi, S. Lamstein, L. Neufeld, E. Oakley, and D. Pelletier. 2014. *Annals of the New York Academy of Sciences*. 1-21. doi: 10.1111/nyas.12447.

<http://onlinelibrary.wiley.com/doi/10.1111/nyas.12447/abstract?deniedAccessCustomisedMessage=&userIsAuthenticated=false>

Undernutrition among women and children contributes to almost half the global burden of child mortality in developing countries. The impact of nutrition on economic development has highlighted the need for evidence-based solutions and yielded substantial global momentum. However, it is now recognized that the impact of evidence-based interventions is limited by the lack of evidence on the best operational strategies for scaling up nutrition interventions. With the goal of encouraging greater engagement in implementation research in nutrition and generating evidence on implementation and utilization of nutrition interventions, this paper brings together a framework and a broad analysis of literature to frame and highlight the crucial importance of research on the delivery and utilization of nutrition interventions. The paper draws on the deliberations of a high-level working group, an e-consultation, a conference, and the published literature. It proposes a framework and areas of research that have been quite neglected, and yet are critical to better understanding through careful research to enable better translation of global and national political momentum for nutrition into public health impact.

NON PEER-REVIEWED LITERATURE

What can community-based SAM treatment learn from other public health interventions to improve access and coverage?

Rogers, E., and S. Guerrero. 2014. *Access for All: 1-11. Coverage Monitoring Network. London, UK.*

<http://www.coverage-monitoring.org/wp-content/uploads/2014/04/Access-for-All-Volume-3.pdf>

In little over four decades, SAM treatment has gone from a small-scale clinical endeavour to a global public health service reaching over two million cases a year. Much of this scale-up has occurred in the last decade following the introduction of community-based SAM treatment approaches. Since the rapid-scale up of such community-based approaches, however, there have been few overarching reviews of their performance over time. The first volume of this three-part series, offers a comparative assessment of the performance and effectiveness of the model during two distinct periods of its development: from 2001-2006 when the majority of community-based treatment projects were implemented by NGOs; and from 2007-2013 when many community-based treatment programmes were integrated by ministries of health into regular health services. For each period, three components of the community-based treatment model are assessed: the capacity of treatment services to successfully cure SAM cases, their capacity to reach the highest proportion of the affected population (coverage) and their cost-effectiveness. Volume two looks more closely at the issues affecting the coverage of community-based SAM treatment services and what prevents SAM cases from reaching treatment services. Volume Three explores possible programmatic and policy changes to make SAM treatment more accessible and discusses what we can learn from other public health interventions about overcoming these barriers.

Understanding resilience for food and nutrition security.

Hoddinott, J. 2014. *Building Resilience for Food And Nutrition Security: Understanding Resilience For Food And Nutrition Security*. IFPRI 2020 Conference Paper 8. Washington, DC: International Food Policy Research Institute.

<http://www.ifpri.org/sites/default/files/publications/2020resilienceconfpaper08.pdf>

This paper provides a structured overview of the concept of resilience for use in discussions surrounding food security and nutrition. It defines resilience as the capacity that ensures adverse stressors and shocks do not have long-lasting adverse development consequences. It links the discourse on resilience to earlier work on vulnerability, noting both common features and differences, and discusses implications of the conceptualization of resilience for measurement and for policy and practice.

Food price subsidies and nutrition: Evidence from state reforms to India's Public Distribution System.

Krishnamurthy, P., V. Pathania, and S. Tandon. 2014. *Food Price Subsidies and Nutrition: Evidence from State Reforms to India's Public Distribution System*. AAEA Annual Meeting Selected Paper. Minneapolis, MN. Agricultural & Applied Economics Association.

http://ageconsearch.umn.edu/bitstream/169753/2/Tandon_PDS.pdf

We investigate whether food price subsidies affect household nutrition using a dramatic expansion of the availability of subsidized rice in the Indian state of Chhattisgarh in the early 2000's. Households in Chhattisgarh increased their consumption of pulses, animal-based protein, and produce relative to households in districts bordering the state as the availability of subsidized rice expanded. This increase is driven by households eligible for rice subsidies, and we do not find evidence that ineligible households changed their diet. These results contrast with recent studies suggesting that food subsidies have little effect on nutrition.

Non-food coping strategies in response to the World Food Price Crisis: Evidence from education in India.

Tandon, S. 2014. *Non-food Coping Strategies in Response to the World Food Price Crisis: Evidence from Education in India*. AAEA Annual Meeting Selected Paper. Minneapolis, MN.

http://ageconsearch.umn.edu/bitstream/169751/2/Tandon_crisis.pdf

World grains prices dramatically increased between 2007 and 2008, but rice prices especially surged. Utilizing the much larger spike in rice prices than in wheat, this article compares the response of Indian households consuming rice as the staple grain to households consuming wheat. Households worse affected by the crisis sacrificed diet diversity, spent less on labour-saving durable goods, sent fewer children to school, and increased the amount of children performing domestic work. These results demonstrate a direct link between food insecurity and human capital investments, and suggest significant non-health costs to the rising food prices of the past two decades.

What are the factors enabling and constraining effective leaders in nutrition? A four country study

Nisbett, N., E. Wach, L. Haddad and S. E. Arifeen. 2014. *IDS Working Paper 2014 (447)*. Brighton, UK.

<http://mobile.opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/4121/Wp447.pdf?sequence=1>

Leadership has been identified as a key factor in supporting action on nutrition in countries experiencing a high burden of childhood undernutrition. This study of individuals identified as influential within nutrition in Bangladesh, Ethiopia, Kenya and India examines why particular individuals champion nutrition policy, and how they operate in the wider policy and political environments of their countries. Based on analysis of 89 interviews, we consider how individual (adult development) capacities, knowledge and motivations, and wider political economy considerations structure the ability of these leaders to think and act. We argue that only by locating individuals within this wider political economy can we begin to appreciate the range of strategies and avenues for influence (or constraints to that influence) that individual leaders employ and face. We review the literature in this area and suggest a number of ways in which we may support, nurture and develop nutrition leadership in future.

UPCOMING EVENTS

Together for Nutrition 2014

POSHAN (Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India) and Transform Nutrition are pleased to announce the conference *Together for Nutrition 2014: Working Across Sectors to Improve Nutrition in India*, which will serve as an important platform for learning and facilitating discussion around the challenging task of bringing diverse sectors together to improve maternal and child nutrition in India. The conference is intended to bring together evidence that can inform and support current policy and program initiatives for nutrition that require cross-sectoral action by two or more sectors. Attendees will have the opportunity to explore how decisions and actions in different sectors can influence nutrition, and how effective cross-sectoral actions can be planned, implemented and assessed.

Where: New Delhi, India

When: October 29-30, 2014

For more information: <http://poshan.ifpri.info/2014/09/11/together-for-nutrition-2014-is-fast-approaching/>

Postgraduate Diploma in Public Health Nutrition (PGDPHN)

The program aims to provide comprehensive training in PHN in a global setting, covering a number of topics and in a range of contexts. It encompasses dietary, epidemiological, public health, social and biological aspects of nutritional science. Special topics include biostatistics, maternal and child nutrition, food policy, nutrition program planning, monitoring and evaluation, and nutritional epidemiology. This area of study is particularly suitable for professionals such as health workers, medical practitioners, dietitians, pharmacists, nurses, health educators and teachers, who are associated nutrition either directly or indirectly. Further, it is aimed at facilitating those who wish to avail themselves of contemporary ideas in human nutrition.

When: January-December, 2015.

Application deadline: October 31, 2014

For more information: www.phfi.org

Transforming Nutrition in India: Ideas, Policies and Outcomes

This five-day course will present recent evidence concerning nutrition and other determinants of health and efforts to increase uptake of nutrition services, to move nutrition up the political agenda and to ensure increased funding for improving nutrition. The faculty includes eminent Indian and international leaders in nutrition research and policy. This course is run in partnership with the Centre for Chronic Disease Control and Public Health Foundation of India, applications are invited now.

Participation is especially encouraged of policy and decision makers, nutrition program coordinators, central/state government officials, NGO representatives, and academicians working in the area of nutrition policy and programs and researchers addressing key nutrition issues in India.

Where: New Delhi, India

When: November 3-7, 2014

Application deadline: October 10, 2014

For more information: http://www.transformnutrition.org/files/2014/08/TN_ChronicDisease_A4Flyer_Online.pdf

Second International Conference on Nutrition (ICN2)

The Second International Conference on Nutrition (ICN2), an inclusive inter-governmental meeting on nutrition jointly organized by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO), in cooperation with the High Level Task Force on the Global Food Security Crisis (HLTF), IFAD, IFPRI, UNESCO, UNICEF, World Bank, WFP and the WTO, will be held at FAO Headquarters, in Rome, 19-21 November 2014. It will be a high-level ministerial conference which will propose a flexible policy framework to address today's major nutrition challenges and identify priorities for enhanced international cooperation on nutrition.

Where: Food and Agriculture Organization of the United Nations, Rome, Italy

When: November 19-21, 2014

For more information: <http://www.fao.org/about/meetings/icn2/en/>

Led by IFPRI 

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One World South Asia

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Coalition for Sustainable Nutrition Security in India

Save the Children, India

Public Health Resource Network (PHRN)

Vatsalya

Centre for Equity Studies

ABOUT POSHAN

Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India (POSHAN) is a 4-year initiative that aims to build evidence on effective actions for nutrition and support the use of evidence in decisionmaking. It is supported by the Bill & Melinda Gates Foundation and led by IFPRI in India.

ABOUT ABSTRACT DIGEST

In each issue, the POSHAN Abstract Digest brings you some of the new and noteworthy studies on maternal and child nutrition. It focuses on India-specific studies and also brings to you other relevant global or regional literature with broader implications for maternal and child nutrition. The Abstract Digest is based on literature searches to identify selected studies that we think are most relevant to nutrition issues in India and to Indian programs and policies. We share with you a collection of abstracts from articles published in peer-reviewed journals, as well as selected non peer-reviewed articles by researchers in reputed academic and/or research institutions and which demonstrated rigor in their research objectives, methodology, and analysis. The abstracts in this document are reproduced in their original form from their source, and without editorial commentary about specific articles.

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