

A short course on Transforming Nutrition in India: Ideas, Policies and Outcomes

3 – 7 November, 2014
New Delhi - India

Organizers

Centre for Chronic Disease Control (<http://www.cdcindia.org/>)

Public Health Foundation of India (<http://www.phfi.org/>)

Transform Nutrition Consortium (<http://www.transformnutrition.org/>)

Course Directors

Prof. Lawrence Haddad (USA)

Prof. Aryeh Stein (USA)

Dr. Purnima Menon (India)

Dr. Shweta Khandelwal (India)



The 4th International Seminar/short course on Transforming Nutrition in India: Ideas, Policies and Outcomes was conducted from 3rd-7th November 2014 at Country Inn Suites, Gurgaon (NCR) India. This seminar was jointly organized by Centre for Chronic Disease Control (CCDC) and Public Health Foundation of India (PHFI) and Transform Nutrition Consortium. The short course focused on presenting 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 included eminent Indian and international leaders in nutrition research and policy.

The week long course was attended by 44 participants representing organizations Children's Investment Funds Foundation (CIFF), IPE Global, IIPH-G, AIIMS, Care India, NAANDI Foundation, Narotam Sekhsaria Foundation, BTAST, UNICEF, Digital Green, FSSAI, SNEHA, PATH, Child Health and Nutrition Mission, MOHFW, WCD, Bill and Melinda Gates Foundation, Project Concern International India, ICDDR-B, YASHADA, Nutrition Convergence & Integration. A detailed list of the participants and organization is given in the annexures.

The lectures at seminar were delivered by 17 faculty members in total, from Emory University (USA), Centre for Chronic Disease Control, Public Health Foundation of India, International Food Policy Research Institute (IFPRI), Delhi University and All India Institute of Medical Sciences (AIIMS).

By the end of the course the participants were expected to be better able to contribute to accelerating issues related to nutrition in their spheres of influence by a greater appreciation of:

- The three pillars of nutrition research for tackling under nutrition
- The differences between undernutrition, malnutrition, food insecurity, hunger and hidden hunger
- The causes, consequences and distribution of both under- and over-nutrition
- What works in addressing malnutrition at the intermediate, underlying and basic levels and why
- How to assess what works and why
- How to contribute to creating an enabling environment of malnutrition reduction

Proceedings of the Course

Day 1: The five day course was convened with welcome remarks from Prof. D. Prabhakaran and Prof. Ramanan Laxminarayan.

This was followed by lectures delivered by the faculty addressing various issues. The details of these are given below:

Current trends and challenges in nutrition delivered by Prof. Laxminarayan discussed the challenges faced by India considering the rate at which income per capita is increasing. He discussed how India lags behind in Child survival when compared to its neighbors (Nepal, Bangladesh, and Indonesia). Various economic growth and human growth indicators such as under-five mortality rate, maternal mortality rate etc. were compared. Prof. Ramanan put forth and discussed data displaying how over the years the crop yield has increased whereas the calorie intake has gone down which has led to the problem of stunting. This suggested that child malnutrition is not strongly associated with food insecurity. Also, stunting and its overall effect on human development was discussed.

Course overview and introduction to three pillars of nutrition by Prof. Lawrence Haddad: The purpose of the five day course was broadly discussed as to how the available evidence will be marshaled in order to accelerate nutrition reduction in India specifically. Also the course aimed at giving the participants with a new reference group outside of workplace. This was followed by a brief introduction of the participants with their expectations out of the course. Dr. Haddad kick started the talk with the definition of nutrition and shift in the global nutrition landscape from 2008 to 2014 followed by the shift in the Indian scenario. Also, a course overview was presented.

Nature of the problem and conceptual background by Dr. Purnima Menon and Prof. Lawrence Haddad: Dr. Menon discussed the undernutrition causal frameworks which included UNICEF (1990) causal model of the causes of malnutrition, Lancet Nutrition series 2013: frameworks for actions to achieve optimum fetal and child nutrition and development. She also talked about undernutrition's immediate, underlying and basic causes, IYCF practices in India 2005-06. Also, some light was shed on causes of overweight. Overweight and obesity causal frameworks and how it is linked with undernutrition during early years.

The role of nutrition-specific interventions- Conceptual framework, distribution of problems by Dr. Purnima Menon: Discussion on how nutrition specific interventions are supposed to improve maternal and child diet quality and reduce infections. Also, this is supposed to address the immediate causes of undernutrition. Everyone was introduced to e-Lena (e-library for evidence nutrition actions) and how WHO categorizes recommendations. Evidence informed nutrition specific interventions for maternal and child nutrition were put forth with framework for delivering direct interventions. Direct interventions for pregnant and women of reproductive age, neonates, infants and children and disease prevention and management were talked about.

The role of nutrition-sensitive interventions-an overview [emphasize gender and nutrition] by Prof. Stuart Gillespie: The Lancet series framework was discussed and how 34 countries account for 90% of global burden of malnutrition. Light was shed on nutrition-sensitive programmes and interventions and how increase in GDP/cap is associated with reduction in stunting and increase in overweight and obesity in women. Also, the 3 broad sectors contributing to improving the nutrition status globally were discussed. Conclusion from recent evidence review on relation between women's empowerment and nutrition was put forth. Key messages from the paper were delivered and ways to increase the nutrition-sensitivity were enumerated.

Elements of enabling environments for nutrition - an overview by Prof. Lawrence Haddad: Discussed six elements that will make it easier for everyone to contribute to improving nutrition.

An overview of NCDs: A ticking time bomb which starts in the womb! By Prof. Aryeh Stein: Prof. Stein discussed the global burden of disease, Years of Life Loss (YLL) due to diabetes and obesity prevalence, relation between birth weight and premature CVD mortality and importance of prenatal nutrition. Also, data from the consortium of health orientated research in transitioning societies (COHORTS) study was presented.

Group Interactive Session: The talks were followed by group interactive session wherein the participants were broadly divided into 5 different categories based on state-wise division. This included Andhra Pradesh, Bihar, Delhi, Maharashtra and Orissa. The members of each group were provided with fact sheets for the respective states and then asked to address nutrition related issues in their state with its impact on overall human development. It was a weeklong process with a step by step approach adopted for the five days.



Welcome Dinner- Invited talk - “Building research capacity for public health in India - national and international perspectives.” By Prof. Venkat Narayan and Prof. Nikhil Tandon. Both Prof. Venkat and Prof. Tandon spoke at length about their personal career trajectory and how they got into their respective field of choice in the first place. They also emphasized on the fact that in India the education system needs to be more application based and innovative.

Day 2:

Fetal, infant, childhood nutrition and chronic diseases: The first 1000 days and beyond by Prof. D. Prabhakaran: The framework for nutrition and adult onset of CVD outlining the theory behind the fetal origin of adult diseases explaining Barker's hypothesis was presented. This was supported with appropriate evidence. He concluded the session by speaking on how poor fetal growth or stunting during first 2 years of life can lead to irreversible damage and prevention of maternal and child undernutrition is a long term investment.

Economics of moving nutrition up the development agenda by Prof. Ramanan Laxminarayan and Dr. Neha Raykar: Dr. Raykar discussed data on the following-income and happiness across countries, intergenerational transfer of nutritional status, and estimation of productivity costs of malnutrition. Also, measuring the long-term effects of early childhood interventions on cognition and other health outcomes, services provided by ICDS, methodological challenges in evaluating ICDS were discussed. Some light was also shed on the Hyderabad Nutrition trial and its outcomes.

[Program/Policy] Implications of jointly handling the dual burden of under nutrition and NCDs: In this session Prof. Stein mainly discussed the dual burden of undernutrition, the statistical issues and the timing issues. Paralleled programs or targeted approaches were also discussed. Dual burden household with overweight mother and stunted child was dwelled upon. Also, he discussed at length whether the intervention make a difference or not with proper evidence.

Women's empowerment by Prof. Lawrence Haddad: Prof. Haddad explained how women play a crucial role in nutrition-sensitive programmes and interventions, association of women's status with stunting and child nutrition. This was followed by enumeration of targets for the empowerment of women.

Governance and accountability: what works? Prof. Haddad started with defining governments and its common elements, governance indicators with its association with nutrition status. This was followed by a focus on the common elements namely: commitments, transparency, accountability and responsiveness.

Nutrition and CVD by Prof. D Prabhakaran: The major drivers of CVD risk across life span presenting cross country evidence were explained.

Group Interactive Session: Day 2 involved the groups analyzing the issue being addressed-what is holding back the progress of their respective state and why?

Day 3:

Maternal and pediatric anemia by Dr. Amy Webb Girard: Dr. Girard kick started Day 3 with the questions put up by the participants which were to be addressed during the talk. She explained what exactly anemia is and when is it actually considered a public health problem, the situation globally and in India. This was followed by a clear explanation on anemia's effect during pregnancy on both women and child's health and economic status. Finally she discussed anemia control and prevention methods.

The role of program evaluation in transforming nutrition actions by Dr. Purnima Menon: Dr. Menon explained the importance of program evaluation in transforming nutrition actions, typical evaluation objectives with levels of inference. This was followed by a discussion on the impact assessment methods, RCTs and econometric methods. Finally she concluded by enumerating the five key actions on implementation research.

Infant and young child feeding (IYCF) by Drs. Purnima Menon and Amy Webb Girard: IYCF technical recommendations and their evidence base were explained. This was followed by considerations for monitoring and evaluating IYCF programs, present situation in India and interventions and their effectiveness.

Agriculture and nutrition [re-emphasize gender pathways by Dr. Stuart Gillespie: Dr. Gillespie explained how agricultural growth does not guarantee improvements in nutritional status. He also discussed the pathway from agriculture to nutrition, pathways between agriculture and nutrition, nutritional impact of the agricultural interventions designed to have an impact on nutrition. He also spoke at length about the Indian disconnects (research, data and policy) and what does an enabling environment for nutrition-sensitive agriculture look like?

Economic development and NCDs: Key issues (media, advertising, packaging) by Prof. Aryeh Stein: Prof. Stein spoke about the issues in NCDs such as economic transition, dietary changes, physical inactivity, metabolic changes and cancer. He made a comparison between the old and the new nutrition comparing the number of obese people from different parts of the world. He also discussed about the factors influencing behaviors, societal factors related to onset of obesity and strategies for prevention of overweight and obesity.

Group Interactive Session: Day 3 of the interactive session included addressing the question- What needs to be done? What is the plan?

Day 4:

Severe acute malnutrition by Dr. Amy Webb Girard: Dr. Girard discussed severe acute malnutrition, its definition, scope of the problem, causes and mitigators and finally the effective treatment options.

Food security and panel discussion about the Food Security bill: The panel consisted of Dr. Avinash Kishore, Mr. Biraj Patnaik and Dr. Seema Puri. A discussion on the public distribution system and its effect on nutrition.

Politics and commitment for nutrition by Dr. Purnima Menon: Dr. Menon discussed the politics of reducing malnutrition, shifts in nutrition landscape from 2008 to 2013, tools for improving commitment, accountability and responsiveness, stakeholder landscapes, actors involved in nutrition. She also shed some light on the sources that influence the landscape, and the processes that inform policy decisions.

Water, sanitation and hygiene by Dr. Purnima Menon and inputs from Dr. Dean Spears: Dr. Menon started with explaining the effect of water and sanitation interventions on diarrhea, latest updates on WASH on nutrition status from the Lancet series 2013 and link between WASH and Nutrition. Also, she spoke about environmental enteric dysfunction (EED). She also discussed how open defecation can be a threat to human development with findings from the SQUAT survey.

Issues in fetal growth and childhood undernutrition by Prof. Vinod K. Paul: Prof. Paul discussed the current situation in India with respect to neonatal and child health and how childhood undernutrition is a grave problem which needs to be addressed.

Group Interactive Session: Day 4 of the course involved addressing the question- Who are the key factors who need to be influenced to support the plan? What are the best ways of communicating and presenting the plan?

Day 5

Stakeholder engagement: lessons for nutrition by Dr. Laxmikant Palo: Dr. Palo started with explaining the 4 C's of stakeholder engagement, stakeholder management processes and stakeholder prioritization. This was followed by enumeration of the challenges faced in stakeholder management and coalition for food and nutrition security (CFNS) and lessons learned in nutrition coalition.

Building capacity in public health nutrition by Dr. Shweta Khandelwal: Dr. Khandelwal started by discussing how the human capacity can be strengthened to scale up nutrition via academic research. Public health nutrition was defined with the four pronged strategy. Dr. Shweta also discussed and presented findings from different work being conducted which include: Situational Analysis-Public Health Nutrition in India, 2010, on qualitative interviews of PHN Indian experts, qualitative FGDs, curriculum analysis, nutrition research in India: underweight, stunted or wasted?

Moving from science to policy: Global initiatives and Indian challenges by Prof. K. Srinath Reddy: Prof. Reddy spoke about a myriad of issues ranging from the double burden of diseases, CVDs and challenges from international and national perspectives on NCDs.

Presentations by participants: On the last day of the course all the five groups that were formed on the first day got the opportunity to present a compiled result of their discussions over the five days (group-wise). The five states included Andhra Pradesh, Odisha, Delhi, Bihar and Maharashtra.



Valedictory Function: The five day long course was concluded with certificate distribution followed by a Q & A round wherein the participants were free to ask questions from the faculty or give suggestions for potential improvement in the course, the next time around.

Feedback of participants

Features enjoyed by the participants

- The participants enjoyed the talk given by Dr. Amy Webb Girard on maternal & child anemia, IYCF, SAM and found it to be engaging. N=23
- Group interactive sessions was a good idea and a great learning experience! N= 27
- All the faculty members were knowledgeable, well-informed and approachable. N=24
- The course was well organized and the organizers were hospitable. N=12
- Dr. Purnima's talks were good as she presented lot of evidence with practical examples. N=3
- Enjoyed Prof. D. Prabhakaran's talk on nutrition and CVD. N=2
- Talk delivered by Profs. Haddad and Aryeh Stein were interesting and insightful. N=3

Suggestions for Improvement

- Involve more Indian academicians in the course=2
- Usage of acronyms during the session and in the slides was not always explained which posed great difficulty for those coming from non-nutrition background. N=2
- Repetitiveness on issues and slides. N=4
- Should be more India specific and get more stakeholders at the National and State level involved. N=3
- Need to make the sessions more interactive by throwing in some more group activities in between the long lectures. N=5
- Resource material and slides should be shared with the group beforehand or as handouts. This could be used as a pre-read and for reference during the presentation. N=9