

## **The International Pediatric Association Early Childhood Development Program**

### **Preamble**

Data about children's cognitive and social development show that among the 559 million children less than 5 years of age in developing countries, 156 million have stunted development. The development of older children is equally impaired. For every 10% increase in stunting of development, the percentage of children completing primary education drops by 7.9%. Early years of life are very critical in developing later intelligence, personality, social behavior and educational achievements. For example, in 12 African countries, 57% of children who complete their primary education have not achieved minimum reading abilities. Many international organizations, such as UNICEF, World Bank and WHO, recognized the gravity of the problem and the importance of addressing it. These organizations have created programs to enhance the development of children. Such programs, have had some but so far limited success as they have so far reached only a small percentage of young children. These programs, while aiming to target parents and caregivers give little if any role to pediatricians or to pediatric nurses. Pediatricians primary care providers, and pediatric nurses if engaged can play an important role in the detection and prevention of developmental delay given that they are intimately involved in the care of these children. The many problems that are facing the above detection and intervention programs including the limited ability to reach all young children to educate, could be to a large extent at least partially addressed by developing strategies that include pediatricians and pediatric nurses.

### **Description of the Program:**

This is the 11<sup>th</sup> Program for Global Child Health that the IPA has established. It concentrates on empowering pediatricians to enhance childhood development in their daily practice as well as to be leaders in training other health professionals and families of young children in all communities, rich or poor. It features a program committee and a panel of consultants all of whom are world renowned experts in the field. It also relies on close partnerships with international organizations such as WHO and UNICEF.

To address the above problems, we rely on a strategy of a three tier approach. Tier one goal is to allow pediatricians pediatric nurses and primary care givers to better screen for developmental delay and to introduce interventions at the most basic level that can benefit all screened children. This would include familiarizing pediatricians and pediatric nurses in performing easy to use instruments and programs such as the Care for Child Development Program of UNICEF and WHO and in acquiring the ability and skills to provide parents, and caregivers, simple guidelines and instructions on how to stimulate their children's development. Pediatricians and pediatric nurses would attend one day workshops which designed to allow them to acquire the needed skills and in which relevant educational material will be also distributed. Tier two is to allow pediatricians and pediatric nurses to perform more in depth evaluations and interventions and to potentially be certified in the above skills. This would include the acquisition of skills achieved for tier one and in addition to understand and coordinate rehabilitation services for children with developmental impairment. This can be accomplished by attending three day workshops in care for child development programs and or on relevant physical, occupational, speech, and psychomotor therapies with the goals of acquiring more in depth skills in care for child development and or of learning which

therapies are to be used in which patient and for how long. The curriculum of these three day workshops will be designed to allow them to achieve these levels. As part of these workshops the attendees will also be provided with relevant educational material. Tier three is to allow selected Pediatricians and Pediatric nurses to become trainers themselves and to be able to intervene in complex cases at the highest level. The ultimate goal is to have tier one done in as many countries as possible by pediatricians who are part of their national pediatric societies. The aim for tier two is to be completed at the regional level or by the regional pediatric societies. The curricula for all tiers and educational material will be developed by the IPA in collaboration with concerned societies and organizations and would be distributed to local IPA chapters as part of continuing education programs. Tier three is more ambitious and would usually be done at the regional and international level such as around the International Pediatric Conference activities or in specially planned course. It also could include development of longer lasting programs of excellence and training.

#### **ECD Program Committee**

Mohamad Mikati MD (USA,Chair)  
Chok-wan Chan MD (co-chair, Hong Kong)  
Zulfiqar Bhutta MD (Pakistan)  
Lama Charafeddine MD (Lebanon)  
Ilgı Ertem PhD (Turkey)  
Brian Neville MD (UK)  
Linda Richter PhD (South Africa)  
Robert Armstrong MD (Kenya)  
Sergio Cabral MD (Brazil)  
Fernando Dominguez-Dieppa MD (Cuba)

#### **Consultants:**

Harold Alderman PhD (World Bank)  
Meena Cabra de Mello PsyD (WHO)  
Jane Lucas PhD (International and UNICEF Consultant)  
Oliver Petrovic PhD (UNICEF)  
Nurper Ulkuer PhD (UNICEF)

Assistant to Program Committee Chair:  
Aravindhyan Veerapandiyam MB

#### **Time line with Description of Program Related Activities:**

***August 2007-March 2009: Initiation of the program.*** By the time it held its August 2007 meeting the IPA through its activities and then ten existing global health programs the IPA had been engaged in many activities concentrating on ECD. Among these are the studies of Dr. Zulfiqar Bhutta on the effects Care for Child Development and nutrition and Dr. Hussein Bahaeddine on programs to enhance early childhood cognitive development. However a program which is exclusively dedicated was still lacking. In the meeting of the IPA Standing Committee in Athens August 2007 Dr. Mohamad Mikati proposed initiation of a program on ECD by the IPA. He was asked by the Committee to prepare a position paper

and a proposal for a program which he completed and about that which was submitted to the Committee on February 3 2008 in time for it to be approved by both the Standing and Executive committees in their Johannesburg meetings that year. Further approval of the details of the program by both committees occurred in their March 2009 meeting in Saint Mary's College Oxford, England.

***July 13-17 2009: The WHO UNICEF Sri Lanka training meeting on promoting early childhood development in South East Asia.*** Dr. Mikati made contact with Dr. Meena Cabral de Mello of the Department of Child and Adolescent Health and Development-WHO to explore avenues of collaboration between WHO and the IPA and this led to Dr. Mikati participating in the WHO-UNICEF 2009 Sri Lanka meeting on promoting early childhood development in South East Asia. Among the invited Faculty were in addition to Drs. De Mello, Nurper Ulker, of the Early Childhood Development Unit at UNICEF, and Mikati, were several other representatives from UNICEF, WHO, and Dr. Jane Lucas, ECD consultant, UNICEF. The Faculty all contributed to the training of health care workers from South East Asia in acquiring skills for Care for Child Development and discussed strategies and made plans for future activities in 2010 including ones in New York (April) and Johannesburg (August) .

***April 19-21, 2010: The UNICEF New York City Head Quarters Global Consultation on ECD research agenda April 19-21.*** This meeting was convened by the UNICEF in New York City and included several international organizations (UNICEF, WHO, World Bank), academicians, NGOs, donors, and other stakeholders to make recommendations regarding the research agenda in ECD. Issues discussed included approaches to achieve the following goals: (1) Gain new knowledge about challenges of operational research especially during the implementation phase. (2) Map out the strategic ECD research needs and opportunities and identify the main data gaps on early childhood in developing countries. (3) Agree on priority future research and ensure commitment of partners on roles and responsibilities in the research agenda. Early Childhood Development Unit Dr. Mikati participated in those discussions and one of the outcomes was setting up collaboration between IPA and the World Bank (Dr. Harold Alderman, Development Research Group, World Bank) to perform a study on the cost effectiveness of ECD interventions.

***May 1-7, 2010: The International Congress of Child Neurology, Cairo, Egypt.*** In May 2010 the International Child Neurology Association held its World Congress in Cairo Egypt. This congress featured prominent focus on developmental issues with marked contribution of the IPA membership. Dr. Chok-wan Chan president of IPA gave a key note address on children's developmental and neurological problems in the opening ceremony. Dr. Hussein Bahaeddine, member of the IPA executive committee, organized and chaired a symposium on interventions that lead to increased cognitive power. Dr. Mohamad Mikati, liaison officer between the IPA and ICNA, member of the standing committee of the IPA and chair of the IPA ECD program, lectured on the devastating effects of war on the neuropsychology of children.

***August 3-7, 2010: Activities during the IPA Congress:*** Meeting of members of the program committee to lay out the strategies and plans for developing curricula for CME credits and congresses, and for medical school use (meeting planned to be held during the IPA congress). The goal is to provide curricula on three levels: 1) ECD workshop participant 2) ECD provider, 3) ECD trainer. Formation of a working group for the above specific goals is also planned. Discussion with the Standing Committee and with the prospective 2013 IPA congress leadership regarding a more in depth workshop (to achieve level 2 or 3) in

the Australia meeting that would build on the first experience in the first workshop in the current congress (planned for meetings of SC Aug 3 and Aug 10, 2010). Meeting of regional ECD interest group/s to plan specific activities in specific regions (planned for August 4, 2010 at 4 pm). In addition agreement has been achieved with Harold Alderman, of the Development Research Group at the World Bank, to perform an analytical study on the cost effectiveness of developmental interventions similar to what has been done for nutritional interventions before. This study should help in the advocacy and planning for ECD programs.

***IPA-UNICEF-WHO Workshop on Childhood Development in Johannesburg, highlights a Major Interest of Pediatrician in the New IPA Program on Early Childhood Development (ECD):*** This was the inaugural activity of the IPA Program on Early Childhood Development (ECD) held during the IPA congress on August 5. The workshop provided participants with additional skills to allow them to better screen for developmental delays and intervene to enhance early childhood development. It was attended by a full capacity crowd of over two hundred forty pediatricians and many had to be turned down because the workshop was fully booked well in advance. Dr. Mohamad Mikati, the IPA Standing Committee member who is heading the Program organized the workshop which featured distinguished international faculty lead by Dr. Jane Lucas who moderated the working group sessions and by Drs. L. Charafeddine, A. D'Aprano, I. Ertem, M. Herran, and O. Petrovic who lectured and contributed to the trainings sessions. The other goal of workshop that the workshop achieved was to distribute related educational material including CDs (containing the slides of the presentations, educational videos, illustrations, and rich background material and resources), as well as handouts, all free of charge. The attendees and representatives of the national and international pediatric societies received the above educational material to use later in their countries to enhance the awareness and practice of developmental screening and interventions. Given the marked interest and substantial global needs in this field of child health uncovered during the workshop the IPA ECD program has ambitious plan: Developing in collaboration with WHO and UNICEF as well as with other organizations curricula for CME credits and congresses at the national regional and international level, and for medical school use. The goal is to provide curricula on three levels: 1) ECD workshop participant 2) ECD provider, 3) ECD Trainer/Mater trainer and to track and record such activities and to include them in the IPA/program website. In addition, there are plans to collaborate with the World Bank, to perform an analytical study on the cost effectiveness of developmental interventions similar to what has been done for nutritional interventions before. Most importantly, the plans are to collaborate with the national and regional societies to push the activities of this program at the national and regional level.

***Beirut Activities (Sante Sud Seminair Beirut October 29, 2010.*** Drs. Lama Charafeddine and Durriyah Sinno organized a workshop ECD in the Sante Sud Conference held in Beirut October 29, 2010. This was attended by Lebanese pediatricians and primary care providers and included material from the Care for Child Development UNICEF and WHO program to help develop ECD enhancement skills of Lebanese primary care providers. The Workshop also included the following related sessions: Dépistage Précoce: Comment Engager Pédiatres et Parents Pour une Intervention Précoce Idéale? Santé Sud Séminaire 'le diagnostic et l'intervention précoces '

***Partnership for Maternal, Newborn and Child Health (PMNCH) Forum and Board Meeting:*** This meeting was held on 15th November 2010 and was well attended and was followed the next day

by its Board meeting. IPA represented by Dr. Zulfiqar Bhutta and Chok-wan Chan. The global strategies and advance related to Maternal and Child health, including ECD, were presented and discussed. The Board reviewed activities and actions since the last meeting in Dhaka, Bangladesh. The commitments from Health Care Professional Association” were also discussed and this was accompanied by adoption of the Delhi Declaration 2010 entitled: “From Pledges to Actions and Accountability”

***The Consultative Group on Early Childhood Care and Development (CGECCD) meeting November 29-December 3, 2010.*** The Consultative Group on Early Childhood Care and Development (CGECCD) held its Annual 2010 meeting in Zanzibar Tanzania November 29-December 3, 2010. The Group which is a conglomerate of about 40 International organizations (like WHO, UNICEF and UNESCO), NGOs, Donors, and other civil society stake holders, aimed in this meeting to design a global campaign of early childhood, discuss and priorities solutions to address ECD, explore emerging possibilities for strengthening links with health and nutrition sectors, and agree upon strategies to support advancement of ECD within the various regions of the world. Dr. Mohamad Mikati, member of the Standing Committee of the International Pediatric Association (IPA) and liaison officer between the IPA and International Child Neurology Association was an invited speaker in this meeting. He gave three presentations. The first was about the advances in understanding neurobiology of brain development and how this understanding is supporting the importance of ECD interventions and shaping the underlying strategies. The second talk was about the IPA program on ECD which Dr. Mikati leads. He presented the activities of this program that include workshops, resource material, training in Care for Child Development skills, studies, review articles, and a book on developmental interventions. An oversubscribed IPA-WHO-UNICEF workshop in the August IPA Congress in Johannesburg was a landmark activity of the program and a similar and even more advanced workshop is one of the aims to accomplish in the 2013 Melbourne Congress. The third talk was to present the results of an analysis of cost effectiveness of ECD interventions that demonstrated the economic benefits of ECD programs not to mention ethical and social benefits. Other talks centered on inequities in ECD opportunities in many countries in the world and how to correct them, about financing of ECD interventions, progress reports of national and regional programs, Education For All initiative, the Lancet Series on Childhood Development. Discussions centered on these topics and on the four cornerstone principles of the Consultative Group (starting early, providing new opportunities, making school ready for children, and ensuring development of appropriate policies) and how to use them to shape the agenda and future activities in ECD interventions. Final discussions centered on planning for a global campaign for ECD and on strengthening the relationship between various organizations in the Consultative Group and with other stake holders such as the Health and Education Sectors and NGOs like the ICNA and the IPA.

### **Resource Material**

See relevant link to ECD workshop and support material

### **Relevant Publications:**

1. Lancet. 2007 Jan 20;369(9557):229-42.

## **Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world.**

**Engle PL, Black MM, Behrman JR, Cabral de Mello M, Gertler PJ, Kapiriri L, Martorell R, Young ME; International Child Development Steering Group.**

UNICEF, New York, NY, USA. Penge@calpoly.edu

This paper is the third in the Child Development Series. The first paper showed that more than 200 million children under 5 years of age in developing countries do not reach their developmental potential. The second paper identified four well-documented risks: stunting, iodine deficiency, iron deficiency anaemia, and inadequate cognitive stimulation, plus four potential risks based on epidemiological evidence: maternal depression, violence exposure, environmental contamination, and malaria. This paper assesses strategies to promote child development and to prevent or ameliorate the loss of developmental potential. The most effective early child development programmes provide direct learning experiences to children and families, are targeted toward younger and disadvantaged children, are of longer duration, high quality, and high intensity, and are integrated with family support, health, nutrition, or educational systems and services. Despite convincing evidence, programme coverage is low. To achieve the Millennium Development Goals of reducing poverty and ensuring primary school completion for both girls and boys, governments and civil society should consider expanding high quality, cost-effective early child development programmes.

PMID: 17240290 [PubMed - indexed for MEDLINE]

### **2. Lancet. 2007 Jan 13;369(9556):145-57.**

#### **Child development: risk factors for adverse outcomes in developing countries.**

**Walker SP, Wachs TD, Gardner JM, Lozoff B, Wasserman GA, Pollitt E, Carter JA; International Child Development Steering Group.**

Poverty and associated health, nutrition, and social factors prevent at least 200 million children in developing countries from attaining their developmental potential. We review the evidence linking compromised development with modifiable biological and psychosocial risks encountered by children from birth to 5 years of age. We identify four key risk factors where the need for intervention is urgent: stunting, inadequate cognitive stimulation, iodine deficiency, and iron deficiency anaemia. The evidence is also sufficient to warrant interventions for malaria, intrauterine growth restriction, maternal depression, exposure to violence, and exposure to heavy metals. We discuss the research needed to clarify the effect of other potential risk factors on child development. The prevalence of the risk factors and their effect on development and human potential are substantial. Furthermore, risks often occur together or cumulatively, with concomitant increased adverse effects on the development of the world's poorest children. PMID: 17223478 [PubMed - indexed for MEDLINE]

### **3. *Pediatr Neurol* 2011 in press**

#### **Care for child development: Basic science rationale and effects of interventions.**

**Kozitza RL, Mikati MA.**

The past few years have witnessed increasing interest in devising programs to enhance early childhood development. We review current understandings of brain development, recent advances in this field, and

their implications for clinical interventions. An expanding body of basic science laboratory data demonstrates that several interventions, including environmental enrichment, level of parental interaction, erythropoietin, antidepressants, transcranial magnetic stimulation, transcranial direct current stimulation, hypothermia, nutritional supplements, and stem cells, can enhance cerebral plasticity. Emerging clinical data, using functional magnetic resonance imaging and clinical evaluations, also support the hypothesis that clinical interventions can increase the developmental potential of children, rather than merely allowing the child to achieve an already predetermined potential. Such interventions include early developmental enrichment programs, which have improved cognitive function; high-energy and high-protein diets, which have increased brain growth in infants with perinatal brain damage; constraint induced movement therapy, which has improved motor function in patients with stroke, cerebral palsy, and cerebral hemispherectomy; and transcranial magnetic stimulation, which has improved motor function in stroke patients.

### **Links to Partner organizations and other relevant links:**

**WHO:** [www.who.int/](http://www.who.int/)

**International Child Neurology Association:** [www.icnapedia.org/](http://www.icnapedia.org/)

**Consultative Group on Early Childhood Care and Development:** [www.ecdgroup.com/](http://www.ecdgroup.com/)

**UNICEF:** [www.unicef.org/](http://www.unicef.org/)

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

### **How can you get involved?**

1. If you are a health care worker/provider and wish to be trained or participate in activities of this program you can check periodically this IPA website for upcoming course and workshops, usually planned in IPA regional and international congresses.
2. If you are a donor wishing to support the program to help train health care workers/providers then you can contact the IPA treasurer through the IPA administrative office email: [adminoffice@ipa-world.org](mailto:adminoffice@ipa-world.org)

## WHO-UNICEF Meeting on Promoting Early Childhood Development



**Colombo - Sri Lanka**

13-17 July 2009

Participants in the WHO-UNICEF 2009 Sri Lanka meeting on promoting early childhood development in South East Asia. Among the invited participants, Dr. Mohamad Mikati representing IPA, Dr. Meena Cabral De Mello representing WHO and Dr. Jane Lucas, ECD consultant, UNICEF.





# Workshops

## IPA 2010 Workshops

### Wednesday, August 4, 2010

Hours	Workshop	Hall
08:30 - 12:00	W01: IPA-GAELI UNICEF Workshop on National Pediatric Champions in Immunization and Malaria <i>by invitation only</i>	Hall D
08:30 - 17:15	W02: <b>FULLY BOOKED</b>	Hall E
08:30 - 16:30	W03: Helping Babies Breathe - Newborn Resuscitation <i>by invitation only</i>	Hall B
08:30 - 19:00	W04: Children's Health and the Environment International Pediatric Association	Hall F
08:30 - 16:30	W05: Caring for Severely Malnourished Children as a Core Competency	Hall C

### Thursday, August 5, 2010

Hours	Workshop	Hall
08:30 - 18:00	W06: IPA WHO UNICEF <b>FULLY BOOKED</b> Early Childhood Development	Hall F
14:00 - 17:00	W07: Better Medicines for Children: Session on Paediatric Medicines Focusing on Developing World and Particularly Africa	Hall G
18:00 - 17:30	W08: Drug Motion: Deaths from Poorly Bacterial Infections and Research Agents	Hall C

### Friday, August 6, 2010

Hours	Workshop	Hall
08:30 - 17:30	W09: Accessing Grants: ICA/UNICEF Introduction to the <b>FULLY BOOKED</b> Session on Grant Writing	Hall G

### Saturday, August 7, 2010

Hours	Workshop	Hall
08:30 - 17:30	W10: Fetal Alcohol Syndrome	Hall F
08:30 - 17:30	W11: IPA WHO Adolescent Resource Kit	Hall G

### Sunday, August 8, 2010

Hours	Workshop	Hall
14:00 - 15:00	W12: <b>FULLY BOOKED</b> Paediatric Anthropometry	Hall D
14:00 - 15:00	W13: Quality of Care Improvement	Hall G

The 26<sup>th</sup> International Pediatric Association Congress of Pediatrics  
Johannesburg, South Africa August 4-8, 2010



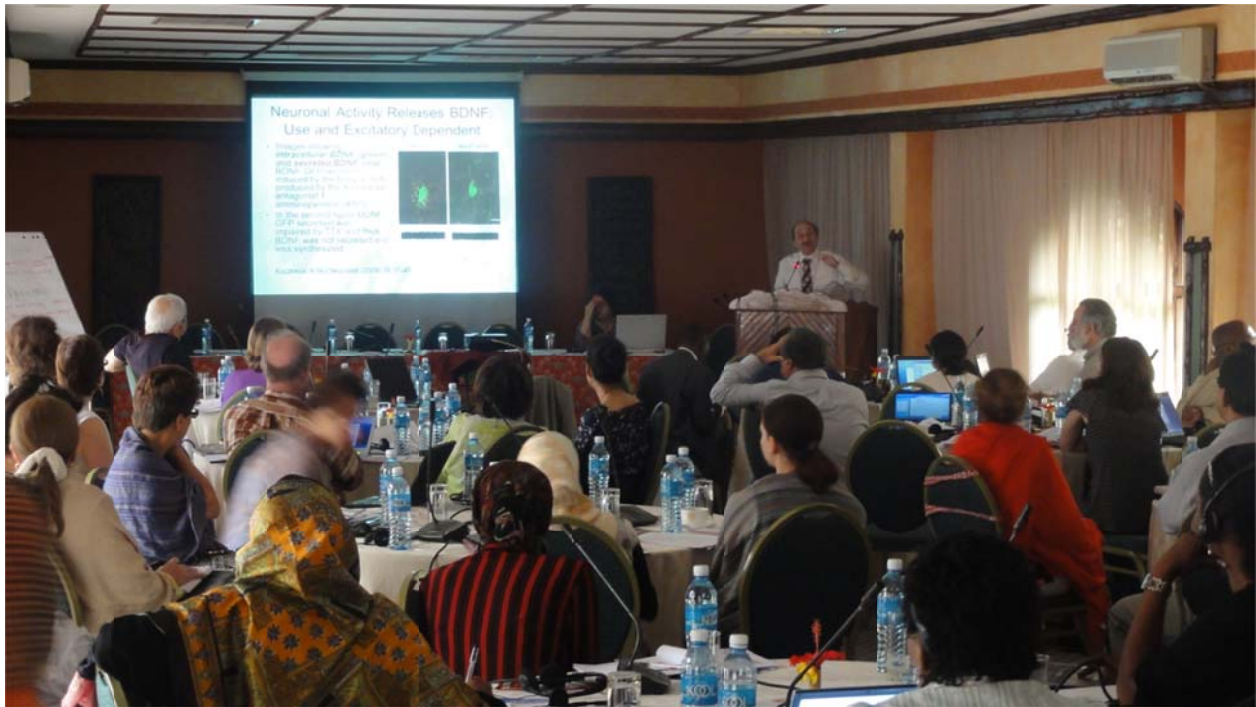
Dr. Jane Lucas and Dr. Mohamad Mikati ECD workshop organizers next to the “Sold Out” sign of the oversubscribed workshop on August 5, 2010.



Dr. Lama Charafeddine lecturing on culturally sensitive developmental screening in the August 5 Johannesburg workshop.



Drs. Elizabeth Mason, Charif Rahimi, Chok-won Chan, William Keenan, and Zulfiqar Bhutta, during the Partnership for Maternal, Newborn and Child Health (PMNCH) Forum and Board Meeting, Delhi, India, November, 15 2010



Dr. Mohamad Mikati lecturing on the effect of stimulation on early childhood brain development in the Meeting of the Consultative Group on Early Childhood Care and Development in Zanzibar, December 1, 2010.



Dr. Youssef Hajjar (right), President and Louise Zimanyi, Director of the Consultative Group on Early Childhood Care and Development with Dr. Ghassan Issa (left) Head of the ARC (Arab Resources Collaborative) during the Group's Meeting in Zanzibar, November, 29-December 3, 2010.