

## 2nd International Conference on Early Childhood Development

Early Childhood Development in Uncertain Times: From Awareness and Evidence to Commitment and Action

# CONFERENCE PROGRAMME AND ABSTRACTS

November 7-9, 2017 – Serena Hotel, Dar es Salaam, Tanzania

An interdisciplinary conference for researchers, practitioners, policy makers, programme designers, students, governmental and non-governmental agencies, and civil society leaders.

#### **ABOUT AKU**

Aga Khan University was established in 1983 as an international university with an objective to promote human welfare in general, and the welfare of people in the countries in which it operates, by disseminating knowledge and providing instruction, training, research and service in the health sciences, education and such other branches of learning as the University may determine.

As an international institution, the University has 11 campuses and teaching sites spread over 8 countries in Asia, Africa and Europe.

AKU is a non-denominational institution open to all, irrespective of religion, ethnicity, gender or national origin. It has a diversified workforce of over 10,000 employees worldwide.

#### **ABOUT IHD**

The Institute for Human Development is a system-wide research and development entity encompassing AKU and the wider Aga Khan Development Network. Its vision is to build capacity and drive innovation in research and higher education, to produce and disseminate new knowledge on human development that advances the quality of individual lives and contributes to the building of successful pluralistic societies, with a particular focus on resource-poor regions of the world.

IHD's four-fold mission is to generate new knowledge through basic and applied research; apply knowledge from research to inform programmes, services, and practices; influence policy formulation and implementation in ways that reap the benefits of the systematic research produced at the institute and elsewhere; and deliver education programmes at multiples levels of study to prepare a wide range of human development specialists and professionals.

## MESSAGES FROM AGA KHAN UNIVERSITY LEADERSHIP

#### **President Firoz Rasul**



The Institute for Human Development at Aga Khan University is the result of the vision of His Highness the Aga Khan that quality of life is predicated on understanding and supporting early human development. The late Dr. Fraser Mustard, a former Aga Khan University Trustee, was a pioneer in this field of human development and also a leading force in the establishment of this Institute. Harnessing and advancing the knowledge of human development, particularly the earliest years of a child, are vital to improving the living standards in the developing world and, in doing so, helping to build successful pluralistic societies, something that is much needed in today's world. I know this conference, which brings together some of the leading scholars and professionals in this endeavor, will move us towards fulfilling the vision for this Institute. I hope the ideas you voice, the research findings you generate, and the dialogue that you engage in will lead to tangible improvements in societies everywhere. On behalf of Aga Khan University, I welcome you to the Institute of Human Development's Second International Conference on Early Childhood Development.

#### Dr. Carl Amrhein, Provost



The Institute for Human Development held its inaugural conference in February 2015 in Nairobi, Kenya. This year's conference is driven by the same vision, namely, to position both the Institute and the University as a custodian of excellence in research and a visible global hub for knowledge dissemination, particularly for countries in Africa and central Asia confronting rapidly changing social and economic conditions. The breadth and depth of this year's scientific programme, the impressive slate of outstanding world class researchers and other professionals delivering papers, and the sheer number of countries represented here assure me, and the entire AKU leadership, that this young Institute is already delivering on the vision I have noted above. I know the impact of this conference will be far reaching across the realms of policy, advocacy, programme design, and research capacity. It gives me great pleasure, as the Provost of Aga Khan University, to welcome you to this important conference.

#### Dr. Kweku K. Bentil, Vice Provost



The Aga Khan Development Network has long championed Human Development around the world through several initiatives. The establishment of the Institute for Human Development (IHD) at the Aga Khan University (AKU) is one of the outcomes of AKDN's commitment and investment to help improve lives. In the last couple of decades, significant gains have been made in human development, through programmes and policies designed to provide opportunities, for people to develop to their full potential. However, many challenges still remain (especially in the area of early childhood development) and particularly in developing countries. In that regard, it is my hope that outcomes from this conference would lead to policies, strategies, and initiatives, which if appropriately implemented, would help address some of the remaining challenges. It is also my hope that the proceedings from this conference would serve as inspiration to all those who are engaged in research, policy making and implementation and/or other aspects of the important subject of human

#### Associate Vice Provosts for Research & Graduate Studies



Professor Anjum Halai, Research (Social Sciences, Humanities & the Arts



Professor Fauziah Rabbani, Research (Health sciences)

We wish you a warm welcome to the second international conference of the Aga Khan University Institute for Human Development. The title of the conference is timely and relevant especially in the context of low income and conflict affected countries. Changing demographics due to war on terror, migration, food and water shortage, climate change and other factors create uncertain times for child development raising new and complex questions for early childhood development. These questions are best addressed through an interdisciplinary approach to understand child development from physical, psychological, social, moral, and other perspectives. I am confident that the conference will bring together experts from a wide range of perspectives and create a platform for change. Enjoy the conference!

#### Dr. Joe Lugala, Director, Institute for Educational Development, East Africa



It gives me great pleasure to welcome you to the Second International Conference on Early Childhood Development, in my capacity as the Director of Aga Khan University's Institute for Educational Development, East Africa. Tanzania is a very friendly nation, and Dar es Salaam is a warm and beautiful city with a rich array of social and cultural assets. It is remarkable that the speakers and participants of this conference come from more than 25 countries spread across at least four continents. As an educator, I can assure you that the knowledge and professional experiences brought here from such a large number of nations can only enhance your own professional development. I know you will enjoy your short stay with us. Please sit back and make this conference one more of your natural classrooms and, at the end of it all, carry home the extremely important message that "our children are our future".

#### Dr. Kofi Marfo, Foundation Director, Institute for Human Development



We have a lot to celebrate in our field. Attention to issues affecting the lives of children everywhere, but especially in the Majority World, is growing. Child survival rates are improving in many countries. I see much welcome recognition that attending to survival is important but not sufficient because children who survive must also thrive. I see explicit valuing of interdisciplinary, cross sector, and systems approaches to the design and delivery of programmes. All around us, we see exciting developments in the donor space marked by unparalleled commitment to partnership building toward concerted action. A sense of the imperative to move from knowledge to action now delightfully pervades our collective consciousness. This is my view of the state of the field as the Institute welcomes another opportunity to fulfill its knowledge dissemination mission through this conference. It is an optimistic view in which I see our work not just as one of solving the problems that impede the well being of children but also as one of recognizing and enhancing the strengths and resilience of children. We are fortunate to have allies without whom it would be difficult, if not impossible, to organize an international conference of this nature. Thus, as the Institute welcomes you to this conference, it does so in partnership with its generous donor partners: the Conrad N. Hilton Foundation, Aga Khan Foundation USA, Aga Foundation Canada, and Global Affairs Canada. May you leave this conference enriched and further inspired to work on behalf of children, families, and communities!

# SPECIAL CONFERENCE NOTES FOR PARTICIPANTS

Please read the following notes carefully; they provide critical guidance to ensure smooth running of the conference schedule.

#### Special note on scheduling of sessions

Because presentation times vary across session categories, the timing of sessions could not be standardized to fall on the hour or half-hour. Start and ending times for coffee/tea breaks, lunch, and sessions do not occur predictably across the 3 days of the conference. This requires that you rely closely on the programme book, checking it at the end of each session/activity to ascertain the start time for the next session/event.

#### Length of the conference day

The conference does not end at the same time each day. Please make note of the variable times provided below to help you manage your time for events/activities outside the conference:

DAY 1 (Tuesday): 17:50 hours DAY	AY 2 (Wednesday): 18:15 hours	DAY 3 (Thursday): 17:30 hours

#### **Badge enforcement policy**

To be fair to everyone who has registered for the conference (and to the conference host), we require that you wear your badge at all times. You will need your badge to attend every session and event. We are assigning ushers to ensure that everyone entering a session is appropriately registered. Please help make this process easy and bearable for everyone.

#### Guidance on the selection of parallel and concurrent sessions

To help you make the best of the content provided by the conference, this programme book contains the abstracts of almost all the papers presented in the various sessions. Please take advantage of the abstracts to select sessions that best meet your professional needs.

#### Following-up on presentations after the conference

To make it easier for participants to reach presenters for additional material on their presentations after the conference, each abstract has an e-mail address for the lead author.

#### **Evaluation**

We value your feedback on this conference because we want the next one to be even better. Please do complete and turn in your evaluation.

## CONFERENCE SCHEDULE

## DAY 1, TUESDAY NOVEMBER 7, 2017

07:30-08:30	Registration
08:30-09:15 Garden Marquee	<ul> <li>Greetings &amp; Welcoming Remarks:</li> <li>Dr. Kweku Bentil, AKU Vice Provost;</li> <li>Dr. Joe Lugala, Director, AKU Institute for Educational Development-East Africa;</li> <li>Dr. Kofi Marfo, Foundation Director, AKU Institute for Human Development</li> <li>Mr. Amin Kurji, AKDN Representative, Tanzania</li> <li>Dr. Leonard Akwilapo, Permanent Secretary, Ministry of Education, Technology &amp; Vocational Training</li> </ul>
09:15-09:55 Garden Marquee	PLENARY 1.1, KEYNOTE ADDRESS Chair: Dr. Aisha Yousafzai  Nurturing young brains, transforming human futures, Dr. Pia Britto, Global Chief & Senior Advisor, Early Childhood Development UNICEF, New York
	Nurturing care for early child development: Introduction to a framework for launch at World Health Assembly, Dr. Bernadette Daelmans, Team Coordinator, Maternal, Newborn, Child and Adolescent Health, WHO, Geneva, Switzerland
10:00-10:40 Garden Marquee	PLENARY 1.2, KEYNOTE ADDRESS Chair: Dr. Greg Moran
	Early childhood socialization in a pluralistic world: Addressing uncomfortable truths, Dr. Judi Mesman, Professor of interdisciplinary study of societal challenges & Dean, Leiden University College, Leiden University, The Netherlands
10:45-11:05	Tea/Coffee Break
11:05-12:25 Garden Marquee	PLENARY 1.3, ROUND TABLE ON PLURALISM Moderator: Dr. Kofi Marfo  • Ms. Caroline Arnold, Education Director, Aga Khan Foundation-Geneva • Mr. Khalil Shariff, CEO, Aga Khan Foundation-Canada • Dr. Greg Moran, Academics Without Borders, Canada • Dr. Azim Nanji, Special Advisor to the Provost, Aga Khan University
12:30-13:05	PARALLEL SESSIONS 1.4
	1.4.1 Assessing early childhood vulnerabilities in Pakistan. Dr. Ghazala Rafique, Associate Professor & Director, Human Development Program, Aga Khan University-Karachi Room: Kivukoni 1; Chair: Dr. Tina Malti
	1.4.2 The Science of Early Child Development as a living curriculum: Past, present, and future, Janet Jamieson, Consultant, AKF-USA; Nafisa Shekhova, Aga Khan Foundation—Geneva; Jan Sanderson, Research Chair, Red River College, Manitoba, Canada Room: Kivukoni 2; Chair: Sarah Vahora
	1.4.3 Effectiveness of a youth led early childhood care and education programme in Rural Pakistan: A cluster-randomised controlled trial, Dr. Aisha K. Yousafzai, Harvard University, Muneera Rasheed (presenter) with Fariha Shaheen, Dr. Liliana A Ponguta & Dr. Chin R Reyes and Emily E. Franchett Room: Kivukoni 3; Chair: Dr. Mark Tomlinson

13:05-13:55	LUNCH
14:00-15:30 Garden Marquee	PLENARY 1.5, FOUNDATIONS/DONORS ROUND TABLE CONVERSATION
1	Moderator: Dr. Greg Moran
	AGA KHAN FOUNDATION
	Mr. Aleem Walji, CEO, AKF USA
	CONRAD N. HILTON FOUNDATION
	Ms. Lisa Bohmer, Senior Program Officer, International Programmes
	KAYS FOUNDATION
	Mr. Khilen Nathwani, Founder
	OPEN SOCIETY FOUNDATIONS
	Ms. Maniza Ntekim, Senior Programme Officer, Early Childhood Programme, London
	THE WORLD BANK
	Ms. Amanda Devercelli, Global Lead for Early Childhood Development & Education
15:30-15: 50	Tea/Coffee Break
15:50-16:50	CONCURRENT SESSIONS
	1.1 ECD/DDECCHOOL INDEDVENITION OF DECOMES

#### 1.1. ECD/PRESCHOOL INTERVENTION OUTCOMES

Room: Garden Marquee; Chair: Asifa Nurani

- 1.1.1 Impact of the Kenya Tayari School Readiness Programme: Catalyzing government systems to improve the quality of pre-primary provision, *Benjamin Piper (RTI International) with Evangeline Nderu*
- 1.1.2 ECCD centre quality and child cognitive and language development over 12 months in Nyanza, Kenya, Mark Tomlinson (Stellenbosch University) with Christina Laurenz, Sarah Skeen (presenter), Caroline Ruoro, Yussuf Omondi & Mark Sweikhart
- 1.1.3 Preschool healing classrooms for Somali and Eritrean refugee children: A case study with highlights from implementation research, Shewaye Tike (International Rescue Committee) with Katie Maeve Murphy

#### 1.2. ECD INTERVENTIONS IN HOME AND OUT-OF-HOME SETTINGS

Room: Kivukoni 1; Chair: Pauline Samia

- 1.2.1. Teachers' preferred methods of teaching reading in early childhood settings of early childhood grades in Dagoretti and Westlands divisions, Nairobi County, Kenya, Esther Marima, (St. Pauls University)
- 1.2.1. From research to practice: Enabling caregivers in low-income communities to make a difference in the first three years of a child's life, Patricia Kitsao-Wekulo (African Population and Health Research Centre) with Moses Ngware, Elizabeth Kimani-Murage & Joan Njagi
- 1.2.2. Daily school attendance: A challenge to effective assessment of early childhood primary school children's performance in rural Zimbabwe, *Emily Ganga (Great Zimbabwe University) with Samuel Masome*

#### 1.3. INTERVENTIONS IN LOW-INCOME COMMUNITIES

Room: Kivukoni 2; Chair: Almina Pardhan

- 1.3.1. A holistic approach to nurturing care for babycare settings: An implementation model by AKF(EA) in Ruaraka constituency, Nairobi, Stella Ndugire- Mbugua (Aga Khan Foundation) with Joyce Wesonga, Musa Juma & Ruth Muendo
- 1.3.2. Quality of caregiving environment of baby care centres in Nairobi's informal settlements after a 1 year intervention by Kidogo Early Years, Ruth Muendo, James Mwangi, (Kidogo Early Years) & Sabrina Habib.

1.3.3. Service delivery system for the provision of quality care at a University-based early childhood Centre: Issues from the Pakistan context, Zahra Virani (Aga Khan University) with Amber Shahzad, Almina Pardhan, Ghazala Rafique & Yuling Liu Smith

#### 1.4. COGNITIVE, NEURO-COGNITIVE & MENTAL HEALTH OUTCOMES

Room: Kivukoni 3; Chair: Linlin Zhang

- 1.4.1. Improving child development and maternal mental health A cluster randomized controlled trial (ROSHNI), Batool Fatima (Aga Khan University) with Nusrat Husain, Tayyeba Kiran, Meher Husain, Hina Fayyaz, Farah Lunat, Nancy Cohen, Farhat Jafri, Shehla Naeem & Nasim Chaudhry
- 1.4.2. Early child development risk factors and HIV-associated neurocognitive disorders across the life span in Africa, Michael Boivin (Michigan State University/University of Michigan)
- 1.4.3. Altered cerebrovascular perfusion in near term fetuses of mothers with hyperglycemia in pregnancy, Nuruddin Mohammed (Aga Khan University) with Rozina Nuruddin, Syed Iqbal Azam Akbar, Shoukat Ali1 & Sadia Khan

#### 1.5. CHILDREN WITH DEVELOPMENTAL DISABILITIES

Room Kivukoni 4; Chair: Beatrice Matafwali

- 1.5.1. Managing inappropriate behaviors of pupils with cognitive disabilities in selected inclusive public primary schools, Changamwe sub-county, Mombasa County, Kenya, Vincent Macmbinji (Pwani University) with Daniel Mbirithi Mange
- 1.5.2. When the child is deaf... An integrated approach to ECD of the deaf or hard of hearing child, Maria Brons (Royal Dutch, Kentalis Academy International Department, Netherlands)
- 1.5.3. Child disability: Insights from research on autism spectrum disorder and epilepsy in Eastern Africa, Pauline Samia (Aga Khan University Medical College-Nairobi) with Arwen Barr, Kirsty Donald, Jo Wilmshurs, Charles Newton & Christy Denckla

#### 16:50 - 17:50 **POSTER & MEDIA PRESENTATIONS**

Room: Garden Marquee

#### **POSTERS**

#### Theme: Meeting the needs of vulnerable and disadvantaged populations

- 1. Psychosocial attachment in orphaned children under orphanage care in Tanzania Agnes Cyril Msoka (Aga Khan University)
- 2. School safety: A challenge in preschools in informal settlements

  Teresa Mwoma (Kenyatta University)with Catherine Murungi & Nyakwara Begi

#### Theme: Community and Family strengthening ECD Interventions

- 3. Care for Child Development- roll out initiative in Tanzania: Partnership between Ministry of Health and ECD implementing partners

  Aline Villette (AKF Tanzania) with Josephine Ferla
- 4. Role of Catholic Sisters in Early Childhood Development in programming to greater equity for children in Malawi, Kenya and Zambia

  Bertha Mpepo Phiri (Catholic Relief Services) with Fidelis Chasukwa Mgowa & Tobias Opiyo
- 5. Improving parental care and stimulation through community-run play groups Alison Naftalin (Lively Minds)
- 6. Strengthening families so young children thrive: Evaluation findings from a Zambian Early Childhood Development program for children affected by HIV/AIDS
  Abiy Seifu (Episcopal Relief & Development, New York) with Felicia Sakala & Dawn Murdock

- 7. Promoting school readiness through community based early childhood programs

  Tamara Chansa (University of Zambia) with Beatrice Matafwali
- 8. Impact of an ECD home-visiting programme in deep rural villages in southern Mozambique Glynis Clacherty (University of the Witwatersrand) with Sergio Chiale (Presenter)

#### Theme: Reflections on service delivery systems/models

- 9. Early Childhood Resource Centre (ECDRC): A replicable model for initiating and sustaining ECD programs in remote and scattered mountainous communities,

  Shahnaz Gul (Aga Khan Education Services)
- Kidogo: A case study for providing high-quality, holistic early childhood care & education in Nairobi's urban informal settlements Sabrina Habib (Kidogo Early Years)
- 11. A qualitative assessment of an integrated Early Childhood Development programme in Tanzania

  Kate McAlpine (Fielding Graduate University)

#### Theme: Early learning

- 12. Assessment of pre-primary science learning environment and pre-primary school children's performance in science process skills in Ibadan, Nigeria

  Eileen Akintemi (University of Ibadan) with Esther Oduolowu
- 13. Increasing the developmental potential of pre-primary aged children in Tanzania through improving the quality of early childhood education

  Magdalena Massawe (RTI International) with Ray Harris

#### Theme: Parenting practices and child development

- 14. Parenting practices, childcare and family structure in rural Uganda as reported by parents and children: A cross sectional survey

  Daniel Wight (University of Glasgow) with Godfrey Siu, Flavia Zalwango, Carol Namutebi & Rebecca Nsubuga
- 15. Are parenting practices associated with the same child outcomes in Sub Saharan African countries as in high income countries? A systematic review Daniel Wight (University of Glasgow) with Alison Devlin
- 16. The impact of child rearing practices on young children's holistic development in Chivi district, Zimbabwe

  Rose Mugweni (Great Zimbabwe University) with Melody Matsvange

#### Theme: Neuroscience/Cognitive/Neurocognitive issues

- 17. Neurocognitive functioning of HIV positive children attending the Comprehensive Care Clinic at Kenyatta National Hospital: Exploring neurocognitive deficits and psychosocial risk factors
  - Otsetswe Musindo (University of Nairobi)
- 18. Neurocognitive deficits and psychosocial adjustment among HIV positive and HIV negative children aged 7 to 12 years in Gaborone, Botswana: A comparative analysis Tshephiso Teseletso (University of Nairobi) with Muthoni Mathai & Manasi Kumar
- 19. A partnership for training caregivers to prevent Konzo disease from toxic cassava and enhance neurodevelopment in very young Congolese children

  Michael J. Boivin (Michigan State University/University of Michigan) with Desire Tshala-Katumbay & Esperance Kashala-Abotnes

#### Theme: Capacity Building

- 20. Creating leaders from within the classrooms in an era of educational change: what they say v/s what we do in teacher preparation discourses

  Shelina Walli (Aga Khan University/University of Arizona)
- 21. Embedding career readiness within the holistic development of early childhood Juliana Seleti (North West University, Potchefstroom, South Africa) with Rosemary Cromarty
- 22. Global parent-child mental health program findings from China, Chile, Kenya and Peru: Cross-cultural capacity building at multi-sectoral levels for innovation and empowerment. Manasi Kumar (University of Nairobi) Guan Hongyan, Francisca Sofia Perez, Ines Bustamante, Paul Burns & Cecilia Brainbrauer.
- 23. Indigenizing early childhood training: Rethinking early childhood teacher preparation approach in Uganda.

Godfrey Ejuu (Kyambogo University, Uganda)

- 24. Strengthening the 21st century educator.

  Amina Mwitu (Madrasa Early Childhood Program-Kenya)
- 25. Capacity building interventions for child protection from sexual abuse. Ruth Walioli (Kenyatta University)

#### Theme Children with Developmental disabilities

- Clinical characteristics of children with epilepsy managed at an urban hospital in Africa: A
  retrospective study.
  - Pauline Samia (Aga Khan University) with Arwen Barr, Kirsty Donald, Jo Wilmshurst & Charles Newton
- 27. Childhood Autism: Description of an African cohort.

  Maureen Kanana (Aga Khan University) with Pauline Samia & Christy Denckla
- 28. Plasma carbonic anhydrase II levels in children with sickle cell disease.

  Charlotte Midiwo (Kenyatta University) with Daniel Okun, Samson Gwer, Gordon Ogweno
- 29. Social dimensions of Sickle Cell Disease-unmet palliative care need in Homa Bay, Kenya. Meshack Liru (Homa Bay District Referral Hospital) with Macharia William, Gaily Sealy, Omoroh Florence, Lynette John & Kasera Caren

#### Theme: Perspectives on Antenatal care, delivery and breastfeeding

- 30. Exploring perception and practices of mothers regarding exclusive breast feeding Sana Shamsher (Aga Khan University)
- 31. Perspectives regarding antenatal care, delivery and breast feeding practices of women from Baluchistan, Pakistan,
  - ${\it Ghazala\ Rafique\ (AKU) with\ Aneeta\ Khoso\ Ayesha\ Zahid\ Khan\ \&\ Sayeeda\ Amber\ Sayed}$

#### MEDIA PRESENTATIONS

#### Theme: Innovation

- 1. Social franchising models to improve early childhood in Nairobi's informal settlements, Sabrina Habib (Kidogo Early Years) with Stella Ndugire Mbugua & Ruth Muendo
- 2. Reaching Syrian refugee parents with VROOM brain-building activities through digital media, Katelin Wilton (International Rescue Committee Innovation) Marika Shioiri-Clark & Katie Murphy
- 3. Pioneer Class: A media presentation on the experiences of the first class of students to go through the first international residential masters programs in child development and infant mental health at the University of Haifa, Israel, Jane West, West Counselling, LLC & Two Lillies Fund, Colorado, USA

## DAY 2, WEDNESDAY NOVEMBER 8, 2017

07:30-08:20	Registration
08:20-08:30	Announcements/Housekeeping
08:30-09:10 Garden Marquee	PLENARY 2.1, DAY 2 KEYNOTE ADDRESS Chair: Dr. Bernadette Daelmans
	Promoting early child development through nurturing care: From science to action, Stephen J. Lye. Professor & Executive Director, Alliance for Human Development, Lunenfeld-Tanenbaum Research Institute, Toronto, Canada
09:15-10:15 Garden Marquee	PLENARY 2.2, SYMPOSIUM : CHILDREN WITH DISABILITIES Chair: Dr. Ghazala Rafique
	2.1.1 Overcoming barriers that impact the well-being of children with disabilities, Dr. Robert Armstrong, Professor & Foundation Dean, Medical College-Nairobi, Aga Khan University
	2.1.2 Optimising the potential of children with neurodevelopmental disorders in low resource areas, Professor Charles Newton, Research Scientist, Kenya Medical Research Institute
10:20-11:00 Garden Marquee	PLENARY 2.3, ADDRESS Chair: Professor Avi Sagi-Schwartz
	Co-constructing participation to enhance the value of developmental science in context: case studies of ECD interventions in Zambia, Dr. Robert Serpell, Professor of Psychology, University of Zambia, Lusaka
11:00-11:20	Tea/Coffee Break
11:20-12:35 Garden Marquee	PLENARY 2.4, SYMPOSIUM: INTEGRATION OF ECD INTERVENTIONS INTO CORE HEALTH SERVICES Chair: Matthew Frey
	2.4.1 Baseline findings indicate need and opportunity for providing early childhood development interventions through health services in Tanzania, Josephine Ferla, Gaspar Mbita, Beatrice Naike, Gretchen Antelman, Roland van de Ven (presenter), Elizabeth Glaser Pediatric AIDS Foundation
	2.4.2 Integrating Option B+ and early childhood development in rural antiretroviral therapy clinics in Malawi results in improved developmental outcomes for HIV-exposed children, Evelyn Udedi, Kathryn Dovel, Alan Schooley, Laurie Bruns, Thomas Coates, University of California, Los Angeles/Partners in Hope Malawi
	2.4 3 A health system-based approach to providing early childhood development services is feasible and acceptable to caregivers and service providers in Mozambique, Nami Kawakyu, Judite Pinto, Eunice Cunhete, Loida Erhard, Svetlana Drivdal, Matthew Frey, Debjeet Sen (presenter), PATH
12:35-13:25	LUNCH
13:30-14:10 Garden Marquee	PLENARY 2.5 SPECIAL ROUND TABLE Chair: Caroline Arnold
	Training professionals from developing countries: Telling lessons learned from an International MA program in Child Development  Dr. Avi Sagi-Schwartz, Professor of Psychology, University of Haifa, Israel with Jane West and Onesmo N. Itozya

#### 14:15-15:30 PLENARY 2.6 SYMPOSIUM ON SYSTEMS APPROACHES TO NURTURING CARE Garden Marquee Chair: Lisa Bohmer, Conrad N. Hilton Foundation Dr. Vichael Silavwe, Chief, Integrated Management of Childhood Illnesses, Ministry of Health, Lusaka, Zambia Dr. Natalia Beer, Director, Maternal and Child Health, Ministry of Health, Belize Ken Ondoro, Founder and Chief Executive Officer of African Research and Development Dr. Bernadette Daelmans, Team Coordinator, Maternal/Newborn, Child/Adolescent Health, World Health Organization, Geneva Dr. Aisha Yousafzai, Associate Professor of Global Health, Harvard University, USA 15:30-15:50 Tea/Coffee Break 15:50-16:30 PLENARY 2.7, ADDRESS Garden Marquee Chair: Dr.Amina Abubakar Ally How to bridge the scaling up gap using implementation science? Dr. Mark Tomlinson, Professor Psychology, Stellenbosch University 16:35-17:10 PARALLEL SESSIONS 2.8 2.8.1 Taking the Toxic stress Out of Early Childhood: We all Can Help! Jane West, West Counselling, LLC & Two Lillies Fund, Colorado, USA Room: Kivukoni 1; Chair: Aïchatou Cisse 2.8.2 Assessment of neurodevelopmental outcomes in infants and children born to diabetic mothers using Ages and Stages Questionnaires, Hina Aziz (Aga Khan University) with Rozina Nuruddin (presenter), Nuruddin Muhammed, Iqbal Azam, & Muneera Rasheed Room: Kivukoni 2; Chair: Charles Che 2.8.3 Promoting early literacy in Pakistan: An exploration of teachers blended learning, fieldbased professional development experiences, Dr. Almina Pardhan, (Aga Khan University) with Aien Shah & Salman Khimani Room: Kivukoni 3: Chair: Chiamaka Momah-Haruna 2.8.4 ECD workforce development using the science of early child development: Reflection on the promotion and delivery of SECD courses, seminars, and workshops in the field, Ms. Najma Rashid, Aga Khan Foundation & Mr. Leonard Falex, Aga Khan University Room: Kivukoni 4; Chair: Janet Jamieson 17:15-18:15 PLENARY 2.9, SPECIAL SESSION: CONSULTATION ON NURTURING CARE FRAMEWORK Room: Garden Marquee; Chair/Moderator: Dr. Bernadette Daelmans

Nurturing care for early childhood development: An opportunity to contribute to the guiding framework for action and results, Dr. Bernadette Daelmans (World Health Organization) with Dr. Pia Britto

#### CONCURRENT SESSIONS

#### 2.1. SYNTHESES OF INTERVENTION RESEARCH

Room: Kivukoni 1; Chair: Edward Kigenza

- 2.1.1. Promoting early childhood development in marginalized communities with embedded refugees: A systematic literature review of evidence-based intervention approaches, Linlin Zhang (University of Toronto) with Tina Malti, Marie-Claude Martin, Stephen Lye, Greg Moran, Amina Abubakar & Kofi Marfo
- 2.1.2 The effects of early childhood stimulation interventions on maternal parenting outcomes in low and middle-income countries: a systematic review and meta-analysis, Joshua Jeong (Harvard University) with Helen Pitchik & Aisha Yousafzai

2.1.3 Predictors of cognitive development in young adolescents in a low-middle income country, Sarah Skeen (Stellenbosch University) with Barak Morgan, Peter Cooper, Lynne Murray, Ben Rogers, Robert Weis & Mark Tomlinson

#### 2.2. PARENTING INTERVENTIONS

Room: Kivukoni 2; Chair: Eugenie Maiga

- 2.2.1. Combining agribusiness training and skillful parenting to reduce violence against children in impoverished communities in rural Tanzania: A small-scale cluster randomized controlled trial, *Jamie Lachman*, *University of Oxford*
- 2.2.2. Perceived program impact of a combined skillful parenting and economic strengthening intervention on parent-child interaction and child maltreatment: Implications for understanding processes of change in parenting interventions, Joyce Wamoyi (Tanzania National Institute for Medical Research) with Jamie Lachman, Jane Maganga, Aniseth, Gardner Frances & Danny Wight
- 2.2.3. First Steps towards quality Early Childhood Care and Development through holistic parenting Education: Randomized Control Trial in Ngororero District, Rwanda, Caroline Dusabe (Save the Children) Monique Abimpaye & Lauren Pisani

#### 2.3. GLOBAL PERSPECTIVES

Room: Kivukoni 3: Chair: Fitsum Mulugeta

- 2.3.1. Meeting the training needs of ECD cadres: Findings from a study of global expert perspectives, Emma Pearson (Bishop Grosseteste University) with Helen Hendry & Nirmala Rao
- 2.3.2. The beginning of life, an innovation in global advocacy for Early Childhood Development,
  Roberta Rivellino (Maria Cecilia Souto Vidigal Foundation)with Manuela Parisi
  (presenter)
- 2.3.3. Comparative Analysis of ECD Policies in Anglophone and Francophone African Countries, Hannah Ajayi (Obafemi Awolowo University) with Johnson Oludele and Victoria Olubola

#### 2.4. ISSUES OF GENDER, EQUITY & CHILD PROTECTION

Room: Kivukoni 4; Chair: Ibironke Oyatoye

- 2.4.1. Stimulating interest in early childhood development: Focus on role of fathers, Caroline Ruoro (Plan International) with Moth Pritchard
- 2.4.2. Teachers' quest for gender equity: Exploring the possibilities of transforming an early childhood classroom in Karachi, Pakistan, Nasima Zainulabidin (Aga Khan University) with Dilshad Ashraf
- 2.4.3. Child protection and very young children: Findings and next steps from an ethnographic study in Siaya County, Kenya, Damaris Wambua (ChildFund Kenya) with Eunice Kilundo & Ken Ondoro

#### DAY 3, THURSDAY NOVEMBER 9, 2017

07:30-08:15	Registration
08:20-08:30	Announcements/Housekeeping
08:30-09:10 Garden Marquee	PLENARY 3.1 DAY 3 KEYNOTE ADDRESS Chair: Dr. Robert Serpell
	Bringing up Children in an Uncertain World: Who's right? Whose rights?  Caroline Arnold, Education Director, Aga Khan Foundation, Geneva, Switzerland
09:15-10:30 Garden Marquee	PLENARY 3.2, SYMPOSIUM ON ADOLESCENCE Chair: Dr. Marie-Claude Martin
	• Paper 1: Adolescent sexual and reproductive health and rights, Dr. Marleen Temmerman, Medical College, Aga Khan University
	• Paper 2: The Adolescent Girls Initiative – Kenya: A randomized controlled trial testing multi- sectoral interventions for very young adolescent girls, Dr. Karen Austrian, Head, Population Council Projects to Empower Girls in East & Southern Africa
	• Paper 3: Adolescent mental health in Africa- A critical look at the role of the school environment, Dr. Amina Abubakar Ally, Associate Professor, Pwani University & Research Scientist, KEMRI
10:30-10:50	Tea/Coffee Break
10:50-11:25	PARALLEL SESSIONS 3.3
	3.3.1 Care for Child Development (CCD): Supporting responsive care and the child's development, Dr. Jane Lucas, Independent Consultant, New York Room: Garden Marquee; Chair: Ibrahima Giroux
	3.3.2 Critical issues in early care and education of Muslim children, Dr. Hasina Ebrahim, Professor of Early Childhood Education, University of South Africa Room: Kivukoni 1; Chair: Caroline Arnold
	3.3.3 Effect of caregiver training on neurodevelopment of HIV-exposed uninfected children and caregiver mental health: a Ugandan cluster randomized controlled trial, Michael J. Boivin (Michigan State University/University of Michigan) with Noeline Nakasujja, Itziar Familiar-Lopez, Sarah M. Murray, Alla Sikorskii, Jorem Awadu, Cilly Shohet, Deborah Givon, Horacio Ruiseñor-Escudero, Elizabeth E. Schut, Robert O. Opoka, & Judy K. Bass Room: Kivukoni 2; Chair: Ibrahima
11:25-12:25	PARALLEL SYMPOSIUM 3.4
	3.4.1 REFLECTING ON THE TENSIONS BETWEEN RESEARCHING AND SCALING A COMMUNITY-LED PEER SUPPORT PROGRAMME Room: Garden Marquee; Chair, Ifeyinwa Udo
	Panelists: Astrid Christoffersen-Deb (University of Toronto) with Julia Songok, Laura Ruhl, Justus Elung'at, Sheilah Chelagat & Jamie Lachman
	3.4.1.1 Increasing pregnancy health services uptake
	3.4.1.2 Malezi Mema: Building parents' capabilities to safeguard children's developmental potential
	3.4.1.3 Putting the cart before the horse? Negotiating tensions between the need for evidence and the demand for dissemination

## 3.4.2 DISASTERS AND CONFLICTS: HUMAN CONTRIBUTION TO AIDING AND IMPEDING

Room: Kivukoni 1; Chair, Janet David

- 3.4.2.1 Does child development drown during floods? Dr. Kausar Waqar, Human Development Programme, Aga Khan University-Karachi
- 3.4.2.2 Mental Health and adaptation of young Liberians in Post conflict Liberia: Key informant's perspective, Silvia Dominguez, Christina P.C. Borba, Batool Fatima, Deborah A. Gray, Gabrielle Murphy, Edward K.S. Wang, Benjamin L. Harris, David C. Henderson
- 3.4.2.3 Peacebuilding in the minds of young children, parents and teachers Voices from Pakistan, Seema Lasi & Kishore Shrestha, Aga Khan University--Karachi

## 3.4.3 INTERFACING TWO STRANDS OF MEASUREMENT & EVALIATION INNOVATION WITHIN AKDN

Room: Kivukoni 2; Chair, Nafisa Shekova

- $3.4.3.1 \ {\rm Transforming\ teaching\ and\ children's\ learning\ experiences}, Alison\ Joyner, Aga\ Khan\ Foundation, Geneva$
- 3.4.3.2 Teachers' perceptions of their quality of life, Marc Theuss, Aga Khan Development Network, Geneva
- 3.4.4 INTERVENTIONS IN VULNERABLE COMMUNITIES Room: Kivukoni 3; Chair: Tracey Evans
- 3.4.4.1 Profiling recipients, programme elements, and perceptions of a comprehensive HIV care initiative: The case of the SHOFCO project in Kibera, Ruth Muendo, Joyce Marangu, Rael Ogwari, Dr. Kofi Marfo & SHOFCO, Aga Khan University Institute for Human Development
- 3.4.4.2 Linking investments in Water, Sanitation and Hygience (WASH) for progress in Early Childhood Development outcomes, Asifa Nurani, Public Health Consultant, Calgary, Canada

#### 12:30-13:20 LUNCH

# 13:20-14:35 PLENARY SYMPOSIUM 3.5, NURTURING SOCIAL-EMOTIONAL DEVELOPMENT IN THE EARLY YEARS: NEW PERSPECTIVES IN A GLOBAL CONTEXT Room: Garden Marquee; Chair: Marie-Claude Martin

- 3.5.1 Social-Emotional Development in Young Children: Pathways to Health and Well-Being, Dr. Tina Malti, Professor of Psychology, University of Toronto, Canada
- 3.5.2 The nature and origins of attachment in infancy and early childhood: Constructing life's foundations, Dr. Greg Moran, Academics Without Borders, Montreal, Canada
- 3.5.3 Social Ontogenetic Theory: An African conceptualization of the ontogenesis of social selfhood, Dr. Bame Nsamenang, University of Bamenda, Cameroon & Human Development Resource Centre

#### 14:40-15:40 CONCURRENT SESSIONS

## 3.1. PARENTAL/CAREGIVER PERCEPTIONS ON ECD Room: Garden Marquee; Chair: Joel Kiendrebeogo

- 3.1.1. Sensitivity/Specificity of Parental Screening Tool for Evaluating Developmental Delays (PEDS; DM) among children under 5 years in Western Kenya, Japheth Adina (Moi University) with Christian B. Ochieng
- 3.1.2. Private nursery and primary school owners' Knowledge, Attitude and Practice of budgeting and implementation in Southwestern, Nigeria, Hannah Ajayi. Obafemi Awolowo University

#### 3.2. ECD IMPLEMENTATION REFLECTIONS

Room: Kivukoni 1; Chair: Moses Abiero

- 3.2.1. Sustainability of Early Childhood Education in Kenya: Where are we now at the close of the MDGs and the start of SDG agenda? Grace Jepkemboi (University of Alabama) with Rose Ruto-Koriri KEPT
- 3.2.2. Accelerating ECD Impacts in Kenya leveraging knowledge, innovation and collaborations through the SDG ecosystem, Arif Neky, UN Strategic Partnerships & SDG Philanthropy Platform; Dr. Anil Khamis, University of London Institute of Education

#### 3.3. INTEGRATED ECD AND LEADERSHIP DEVELOPMENT

Room: Kivukoni 2; Chair: Patricia Norolalao

- 3.3.1. Achieving positive child outcomes through Integrated ECCD in Cambodia, Andrew Hill (Plan International) with Emma Pearson, Sun Jin & Sok Uttara
- 3.3.2. The Role of an Integrated Early Childhood Care and Development program, Mussa Hussein Naib (Ministry of Education the State of Eritrea)
- 3.3.3. The Brazilian legal framework for early childhood and the executive leadership program on early child development developing process and public policies, Roberta Rivellino (Fundação Maria Cecilia Souto Vidigal) with Eduardo Marino & Maíra Souza (presenter)

#### 3.4. PARTNERSHIPS AND SERVICE DELIVERY

Room: Kivukoni 3; Chair: Stella Ndugire - Mbugua

- 3.4.1. Contribution of partnerships in ECD service delivery: The Madrasa Early Childhood Programme experience in East Africa, Shafique Ssekalala (Madrasa Early Childhood Program) with Amina Mwitu & Khamis Said
- 3.4.2. Building home-school partnerships: Constructing and implementing an innovative parentchild programme for children under 3 years in a school system in Pakistan, *Almina Pardhan* (Aga Khan University) with Aien Shah & Salman Khimani

15:40-16:00	Tea/Coffee Break
16:00-16:40 Garden Marquee	PLENARY 3.6, ADDRESS Chair: Dr. Stephen Lye
	Early Child Development programmes: What research is needed to support access, equity and quality? Dr. Aisha Yousafzai, Associate Professor of Global Health, T.H. Chan School of Public Health, Harvard University
16:45-17:15 Garden Marquee	PLENARY 3.7, DIRECTOR'S CLOSING PRESENTATION Chair: Dr. Aisha Yousafzai
	Positioning a Majority World Institute for regional and global impact, Dr. Kofi Marfo, Professor & Foundation Director, Institute for Human Development, Aga Khan University
17:15-17:30	PRESENTATION/READING OF CONFERENCE COMMUNIQUE

## PLENARY SESSION BIOGRAPHICAL SKETCHES

#### ALPHABETICALLY BY LAST NAME

## Dr. Amina Abubakar, Pwani University & Kenya Medical Research Institute (KEMRI)



Dr. Abubakar is an Associate Professor of Psychology and Public Health at Pwani University, Kenya, and a Research Scientist at the Kenya Medical Research Institute/ Welcome Trust Research Programme. She coleads the Neuroscience

research group at KEMRI-WTRP, a dynamic multidisciplinary research group interested in child and adolescent well-being. She is also an honorary fellow at the Department of Psychiatry, University of Oxford, UK. Her main interests are in the study of developmental delays and impairments among children exposed to various health problems such as HIV, malnutrition, sickle cell disease, and malaria. A key focus of her work is the development of culturally appropriate strategies for identifying, monitoring and rehabilitating at risk children and adolescents.

#### Dr. Robert Armstrong, Medical College/Faculty of Health Sciences, Aga Khan University - East Africa



In June 2010, Prof Armstrong joined the Aga Khan
University as the Abdul Sultan
Jamal Professor of Paediatrics and Foundation Dean of the
Medical College, in the Faculty
of Health Sciences, East
Africa, based
in Nairobi, Kenya. From 2000
to 2010 Dr. Armstrong

was Chair of the Department of Pediatrics at the University of British Columbia (UBC), Canada, and Chief of Pediatric Medicine at the British Columbia Children's and Women's Hospital. He attended Simon Fraser University (BSc), McMaster University (MD, MSc, PhD) and UBC (FRCPC). Dr. Armstrong's clinical and research interests are in the areas of childhood disability, development of population-based strategies for prevention of developmental disorders, and clinical and health services strategies for improving outcomes for children with disabilities. Professor Armstrong is Past President of the American Academy of Cerebral Palsy and Developmental Medicine and is on the Executive Committee of the newly established International Alliance of Academies of Childhood Disability (IAACD).

#### Caroline Arnold, Director of Education: Aga Khan Foundation (AKF), Geneva



Ms. Arnold is the Director of Education at the Aga Khan Foundation (AKF), based in Geneva overseeing the education and early childhood portfolio across 17 countries in South and Central Asia, Eastern and West Africa, the Middle-East and Europe. She

has been with the Aga Khan Development Network for over 13 years and has worked in Education for over three decades, spending two thirds of that time living and working in South Asia and East Africa. She has worked for UNICEF, International NGOs and Universities in London, East Africa, Asia and the Pacific. She contributes to multiple policy think tanks at national and international levels and is the author of numerous publications (research studies, policy articles, handbooks, training manuals) in the area of Early Childhood Development, Transitions, Children's Learning, Community-based Rehabilitation and Inclusive Education, and State/ Non- state partnerships.

## Ms. Lisa Bohmer, Conrad N. Hilton Foundation, USA



Lisa Bohmer is a public health professional with over 25 years of experience with programs, research and grant making in the areas of pediatric HIV/AIDS, OVC, maternal and child health, reproductive rights and the empowerment of women and girls. Lisa's background

includes five years living and working in Ethiopia and extensive work throughout Eastern, Southern and West Africa. Ms. Bohmer currently works at the Conrad N. Hilton Foundation as the Senior Program Officer for the Children Affected by HIV and AIDS Program. She works with implementing partners and other funders on integrated early childhood development approaches tailored to vulnerable young children's needs. Ms. Bohmer has held senior positions at Elizabeth Glaser Pediatric AIDS Foundation, UNICEF, Nike Foundation, the Pacific Institute for Women's Health and Ipas. She has consulted with organizations such as UNFPA, International Center for Research on Women and Engender Health. She has a Master's degree in Public Health from UCLA.

#### Dr. Pia Rebello Britto, UNICEF New York



Dr. Britto is Global Chief and Senior Advisor, Early Childhood Development at UNICEF Headquarters in New York . She was formerly Assistant Professor at Yale University. Dr. Britto is known for her work on developing, implementing and evaluating early childhood programmes

and policies around the world. In particular, she has strengthened the application of evidence to programming, promoted the role of governance and finance of national systems in achieving equity, access and quality, developed and evaluated models for implementation of quality early childhood services, supported the role of parents and caregivers, including women's economic empowerment and the association to peace building and social cohesion. Dr. Britto has been instrumental in the global movement towards establishing the transformative role of Early Childhood Development in the Sustainable Development Agenda. Dr. Britto is the recipient of several national and international grants and awards in recognition for her work and has published extensively.

#### Mr. Leonard Falex Chumo, Aga Khan University



Mr. Chumo is the Project
Manager, Aga Khan
University's Institute for
Human Development and
Conrad N. Hilton Foundation
partnership project. He
is a PhD student at Jomo
Kenyatta University of
Agriculture and Technology,
Kenya and holds MBA in

Strategic Management and a BA in Economics and Sociology (Double Major) both from the University of Nairobi. Prior to joining AKU IHD, Leonard served as the Country Director at International Child Resource Institute Africa where he extensively spearheaded programs supporting children and families. Leonard is a Global Leader for Young Children with World Forum for Young Children. He is the founding director for Master's Men Africa, a men leadership and mentorship initiative and a Cordes Fellow recognizing high impact, innovative, entrepreneurial for profit and nonprofit organization executives with a demonstrated commitment to economic justice and poverty alleviation. He currently oversees the implementation of the Partnership for ECD Workforce Development in Sub-Saharan Africa.

#### Dr. Bernadette Daelmans, World Health Organization, Geneva, Switzerland



Dr. Daelmans has a Medical Degree from the University of Utrecht Netherlands (1984) and a Master's Degree in Health Systems Management from the University of London. She started her career in international public health in 1987 in Botswana district hospital. Since she

joined WHO in 1992, she has been engaged with a range of issues related to maternal and child health including infant and young child feeding, integrated management of childhood illness, new-born health and early child development. Bernadette's affiliations include the Countdown to 2030: Maternal, newborn and child survival since inception in 2005; member of the global Every Newborn implementation working group; managed the secretariat of the Steering Team that prepared the Lancet series Advancing Early Childhood Development: from Science to Scale (2016). Currently facilitating WHO's support for nurturing care in the health sector through the development of global Nurturing Care Framework.

#### Dr. Hasina B. Ebrahim, University of South Africa



Dr. Ebrahim is the UNESCO Co-chair for Early Childhood Education, Care and Development at the University of South Africa and a Full Professor in the Department of Early Childhood Education. She has led numerous ECD projects and is actively involved in ECD policy, curriculum and teacher education.

She is currently a rated researcher with the National Research Foundation in South Africa and serves as the sector editor of the South African Journal of Childhood Education. She also serves on editorial boards of international journals such as the European Early Childhood Education Research Association Journal and Early Years. She served as the Deputy President and the President for the South African Research Association for Early Childhood Education. She has delivered numerous keynote addresses nationally and internationally in ECD. She has numerous publications and her latest book is on Early Education for Muslim Children in South Africa. Forthcoming books include ECD at the margins and ECD in Africa and its challenges.

#### Ms. Janet Jamieson, Red River College



Ms. Jamieson is an international consultant and recently retired Research Chair at Red River College, Manitoba, Canada Previously Janet was the Chair of Community Services managing Early Childhood Education, Disability and Community

Support, and Child and Youth Care Programs. Janet has had a long-standing interest in community partnerships and educational media. She has initiated and managed number of projects including: the Science of Early Child Development (SECD); a video documentary about the Educa a TuHIjo program in Cuba; a qualitative study of the effects of an Abecedarian intervention on parents and caregivers; a module synthesizing the work of the US Institute of Medicine Forum on Investing in Young Children Globally; and a preprimary teacher intervention in northern Bangladesh. Most recently Janet has been working with the Institute for Human Development, Aga Khan University, UNICEF China, the China Development Research Foundation, and Yangon University (Myanmar).

#### Alison Joyner, Aga Khan Foundation, Geneva



Alison has over 20 years of experience in teaching and education in Africa, Asia and Europe. She is currently responsible for ECD and Education Monitoring, Evaluation, Research and Learning for the Aga Khan

Foundation, leading MERL support to programmes in 16 countries in Africa and Asia. She manages a Global Education Management Information System to provide basic data on AKF's reach in ECD and Education, and provides advice on evaluation and research in each country. This includes supporting the development of assessment tools for social-emotional learning, and their use in research studies.

#### Dr. Austrian Karen, Population Council, Nairobi, Kenya



Dr. Austrian, , leads Population Council projects designed to empower girls in East and Southern Africa and is based in the councils Nairobi office. She develops, implements, and evaluates programs that build girls' protective assets, such as financial literacy, social safety nets and access to education.

Dr. Austrian is the principal investigator of two large, longitudinal, randomized trials evaluating the impact of multi-sectoral programs for adolescent girls, the Adolescent Girls Initiative Kenya and the Adolescent Girls Empowerment Program in Zambia. Dr. Austrian has provided technical assistance on girls' programs and policies to the World Bank, the UK Department for International Development (DFID), the Girl Hub, the Nike Foundation, and international, national, and community organizations. Before joining the Council in 2007, she co-founded and directed the BintiPamoja Center, a program to empower adolescent girls in the Kibera slum of Nairobi, Kenya.

## Dr. Stephen Lye, Tanenbaum Research Institute at Sinai Health System, Toronto



Professor Stephen Lye is Executive Director of the Alliance for Human Development based at the Lunenfeld Tanenbaum Research Institute at Sinai Health System, Toronto where he is also the Scotia

Bank Scientist in Child and Adolescent Health. Professor Lye's research is focused on mechanisms, diagnostics and therapeutics of pregnancy complications (including preterm birth and preeclampsia) as well as gene-environment interactions that impact the life-long health and wellbeing in children. He has published over 250 peer reviewed publications and holds over \$12 million in research funding from the Canadian Institutes of Health Research, International Development Research Centre, Genome Canada, March of Dimes Foundation and Burroughs Welcome Fund as Principal Investigator. Professor Lye is a Professor in the Departments of Obstetrics & Gynaecology, Medicine and Physiology at the University of Toronto.

#### Dr. Tina Malti, University of Toronto, Canada



Dr. Malti is Professor of Psychology at the University of Toronto. She is a Fellow of the Association for Psychological Science and the American Psychological Association (Division 7, Developmental Psychology). Trained as a developmental and clinical psychologist,

Dr. Malti is a renowned expert on the development of empathy and aggression in children. Her research has shown that concern for others and pro social orientations can help children reduce anger and decrease their engagement in behaviors that cause harm to others. Based on these findings, she creates intervention strategies to support social-emotional development and reduce exposure to violence in children facing multiple forms of adversity. She has published over 150 scientific articles and is an associate editor of Child Development. She currently serves as the Membership Secretary of the International Society for the Study of Behavioural Development.

#### Joyce Marangu, Aga Khan University



Joyce Marangu is a social and economic development professional with a specific interest in child development and wellbeing. She is currently a Research Associate at the Institute for Human Development, Aga Khan University. She

has previously held research assistantships at PLAAS and the Institute for Social Development, University of the Western Cape, and has undertaken various project coordination roles in non-profits and private consultancy firms in Kenya, South Africa and Germany. Her research interests are in social protection, child poverty, and child health and nutrition. Joyce holds an M.A in Development Studies from the University of the Western Cape and an M.A in Development Management from Ruhr University, Bochum, Germany. She is also a Go Africa Go Germany Fellow, and has previously been awarded the South African-German Centre for Development Research scholarship.

#### Dr. Kofi Marfo, Aga Khan University



Dr. Marfo is Professor and Foundation Director Institute for Human Development at Aga Khan University. He has held positions at the University of South Florida, Kent State University (USA), Memorial University (Canada), the University of Alberta (Canada), and the

University of Cape Coast (Ghana). He has interests in developmental science and childhood interventions, advancing a global interdisciplinary science of human development, and addressing philosophical issues in behavioral science and education research. He has published extensively on early child development, childhood disability, early intervention efficacy, parent child interaction, and behavioral development in children adopted into North America from China. He is a co-editor (with Professor Robert Serpell of the Wiley Volume "Child development in Africa: Views from inside." He has been a residential fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University, a U.S. National Academy of Education Spencer Fellow, and an Irving B. Harris Leadership Fellow. He was a founding member of the Biobehavioral and Behavioral Sciences Sub-committee of the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD-USA).

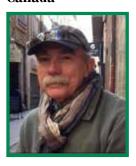
#### Dr. Judi Mesman, University of Leiden, Netherlands



Dr. Mesman is professor of the Interdisciplinary study of societal challenges at Leiden University, and Dean of Leiden University College. Dr. Mesman received her PhD in 2000 at the Erasmus University Rotterdam, and progressed from post-doc (2001) to full

professor (2009) at the Centre for Child and Family Studies at Leiden University. Her research focuses on the role of gender and culture in parenting and their influences on how children view themselves, others, and the wider world around them. Dr. Mesman has acquired more than 8 million Euros in competitive research grants, is an active PhD supervisor (16 completed, 20 ongoing) and won two teaching prizes. In addition Professor Mesman is active in societal outreach in the city of The Hague, working with families with a migrant background, and active as a founding member of Athena's Angels who aim to enhance equal opportunity for women and men in academia.

## Dr. Greg Moran, Academics Without Borders, Canada



Dr. Moran is a developmental psychologist who for more than three decades has pursued a better understanding of the nature, origins, and developmental consequences of the first relationship between an infant and his or her mother. He became the Executive Director of Academics Without

Borders in October 2017. Previously, he was the Director of Special Projects at the Higher Education Quality Council of Ontario and Provost of Aga Khan University. He spent 38 years at Western University in London, Ontario, Canada, where he served as Chair of Psychology, Dean of Graduate Studies, and for 10 years as Provost and Vice President (Academic). In addition to his work with Academics Without Borders he continues his research in early child development with AKU's Institute for Human Development.

#### Ruth Muendo, Aga Khan University



Ms. Muendo is a Research Associate with Aga Khan University's Institute for Human Development. She specializes in Early Child Development (ECD) research and implementation science. She has focused her research and implementation experiences on the quality of early caregiving environments

for vulnerable populations, the nexus between women's caregiving role and their participation in economic activities, informal settlement contexts, psychological wellbeing of caregivers and workplace support for parents in Majority World contexts. She has provided technical assistance and implementation support to Kidogo Early Years and Aga Khan Foundation East Africa, among other development organizations. She has also held project management roles nationally and regionally. Ms. Muendo is an advocate for development of policies and environments that foster quality care and development for young children. She holds a Bachelor of Arts degree ) and a Master of Arts in Development Studies from the Institute for Development Studies (IDS), University of Nairobi , Kenya.

#### Dr. Azim Nanji, Aga Khan University, Nairobi



Dr. Nanji currently serves as Special Advisor to the Provost at Aga Khan University and member of the Board's Academic and Student Affairs Committee of the university; Board of Trustees. He has served as Director of the Institute of Ismaili Studies in London and has held positions

at Stanford University's Abbasi Programme in Islamic Studies and the University of Florida (as Professor & Chair, Department of Religion). He has authored, co-authored and edited several books, including the Nizari Ismaili Tradition (1978); Building for Tomorrow (1994); The Muslim Almanac (1996); Mapping Islamic Studies (1997); Historical Atlas of Islam (with M. Ruthven, 2004); Penguin Historical Dictionary of Islam (with Razia Jinha Nanji, 2008); and Living in Historic Cairo (with F. Daftary and E. Fernea, 2010). He was Associate Editor for the revised Second Edition of The Encyclopaedia of Religion. He has received awards from the Rockefeller Foundation, Canada Council, and the National Endowment for Humanities. In 2010, he was appointed to the Founding Board of Directors of the Global Centre for Pluralism in Ottawa, Canada.

#### Mr. Arif Neky, Advisor UN Strategic Partnerships, Kenya, and Coordinator of the SDG Philanthropy Platform



Mr. Neky is the Advisor for Strategic Partnerships at the UN Resident Coordinator's Office in Kenya. He is also the National Coordinator in Kenya for the SDG Philanthropy Platform - the first country level launch that has now spread across multiple countries. Arif is also currently active in establishing a broader SDG Partnership Platform in

Kenya co-chaired between the Government and the UN to unlock \$1billion of SDG-aligned PPPs, commencing with primary health care. The blend of Arif 's extensive leadership across three continents in private sector, social development, and the UN system provides a valuable background to foster these exciting multi-stakeholder partnerships. Arif is a former Regional CEO of the Aga Khan Foundation (AKF) East Africa for over 13 years and previously the Regional Representative in Eastern Africa for the French & International Bank, Société Générale

#### Dr. Charles Newton, Kenya Medical Research Institute, Kilifi & University of Oxford, United Kingdom



Dr. Newton was born in Kenya, qualified in Cape Town, South Africa, with postgraduate training in Paediatrics in Manchester and London, United Kingdom. As a lecturer at University of Oxford, he returned to Kilifi Kenya in 1989, to help set up a unit to

study severe malaria in African children. Thereafter he spent 2 years as a Post doctoral fellow at Johns Hopkins, USA, studying mechanisms of brain damage in central nervous system infections. He completed his training in Paediatric Neurology at Great Ormond Street Hospital, UK. In 1998 he was awarded a Wellcome Trust Senior Clinical Fellowship at University College London, to return to Kilifi to study CNS infections in children. He conducts research on CNS infections in children; epidemiological studies of epilepsy and neurological impairment and tetanus, jaundice and sepsis in neonates. At present he is conducting studies of neuro developmental disorders and Epilepsy in Africa. In 2011 he took up the Cheryl and Reece Scott Professorship in Psychiatry at the University of Oxford to concentrate on mental illness and neurological disorders in children living in Africa.

#### The Late Dr. Bame Nsamenang, University of Bamenda, Cameroon & Human Development Resource Centre



Dr. Nsamenang is Professor of Psychology at the University of Bamenda, Cameroon, and the founding director of the Human Development Resource Centre (www.thehdrc.org), a research and service facility that is committed to Africa's future generations

of children and youth. His research interest is to conceptualize, generate and network to infuse Africentric psychological knowledge and educational theories into global knowledge systems. He is arguably one of Africa's foremost scholars who has published influential works on developmental psychology, education and early childhood care and education. He is the President Elect of PAPU (Pan African Psychology Union) and the President of the Cameroon Psychological Association (CPA). Dr. Nsamameng has held a residential fellowship at the Centre for Advanced Study in the Behavioral Sciences at Stanford University.

#### Ms. Asifa Nurani, Independent Public Health Consultant, Calgary, Canada



Ms. Nurani earned her Master's in Public Health from Yale University in 1997. In 2000, she joined Aga Khan Foundation (AKF), Kenya as the Country Manager and transitioned to the position of Regional Programme Manager, Health (East Africa). Her areas of programmatic

intervention include health systems strengthening and service delivery focussing on maternal and child health. Her passion and accomplishments revolve around the design of child care services that integrate health, nutrition and early childhood stimulation to enhance developmental outcomes on children aged 0-3 in rural areas and in urban informal settlements, especially in the context of rapid urbanization. Ms. Nurani also has over 17 years of experience in resource mobilization, programme development and management, provision of technical support to projects, dissemination of results and outcomes, identifying opportunities for policy analysis and knowledge generation aimed at raising government and donor interests. She recently immigrated to Canada and has established a public health consulting company.

#### Dr. Rozina Nuruddin, Aga Khan University Hospital, Karachi, Pakistan



Dr. Nuruddin is an Assistant Professor and Coordinator of PhD in Population and Public Health at the Aga Khan University, Karachi. She received her undergraduate medical education from the Dow University of Health Sciences, Karachi. Subsequently, she

obtained an MSc in Epidemiology and Biostatistics from McGill University, Canada, PhD in Epidemiology and Public Health from National University of Singapore and a Postdoctoral Research Fellowship in Nutritional Epidemiology from University of Barcelona, Spain. Her research focuses on child survival, nutrition, growth and development, Health care seeking behavior and m-health related nutritional intervention. She has published in international peer reviewed journals and has received funding for several research projects. She teaches basic and advanced epidemiology, designs graduate level curricula, supervises graduate level theses, and leads graduate level programs.

#### Dr. Almina Pardhan, Institute for Educational Development, Aga Khan University, Pakistan



Dr. Pardhan is Assistant Professor and Coordinator of Early Childhood Education and Development Programmes at the Aga Khan University Institute for Educational Development, Pakistan. Her doctorate, from the University of Toronto, Canada, looked

at gender issues in early childhood education in Pakistan. Her teaching and research interests are in early childhood education, early child development, and teacher education, with a focus on literacy, gender issues, family engagement, child assessments and research methods. Almina's teaching experience is through face to face, online and blended learning modes. She has led major research and development projects in Pakistan.. She has led in the design and implementation of innovative, contextually relevant, community based early years programmes for children, five years old and under, and their families in Pakistan and internationally. Almina serves on a number of national and international early childhood groups involved in strategic thinking on policies and programmes.

#### Dr. Ghazala Rafique, Aga Khan University, Karachi, Pakistan



Dr. Rafiqueis the Director of the Human Development Programme and Associate Professor with the department of Community Health Sciences at Aga Khan University, Karachi, Pakistan. Her research and teaching interests include early child development

(ECD), nutrition, developmental screening, children with disability and social determinants of health. Her particular interest is in developing and implementing ECD programmes in low resource settings combining health, nutrition and early childhood stimulation. She has worked on building capacities in ECD and aims to strengthen the weak links between research, advocacy, policy making and implementation of ECD programmes. Dr. Rafique has remained a member of the Steering and Executive Committees of Asian-Pacific Regional Network for Early Childhood (ARNEC) from 2012 to 2015.

#### Muneera A. Rasheed, Aga Khan University, Karachi, Pakistan



Ms. Rasheed is a faculty member in early childhood development and disability in the Department of Paediatrics and Child Health, Aga Khan University, Karachi, Pakistan. A clinical psychologist by profession, she has significant

experience with early childhood interventions for young children and families in community-based services. Her main research interests are the strengthening of early child development in existing health services in low and middle income countries through inclusion of family oriented parenting programs. She also has extensive experience with the training of child development assessors to ensure data collection of high quality in Armenia, Bosnia Herzegovina, Pakistan and Tanzania. Ms. Rasheed has published on child development assessments with a particular emphasis on high quality adaptation and training of community- based field teams.

#### Najma Rashid, Aga Khan Foundation, East Africa



Ms. Rashid is currently working with Aga Khan Foundation East Africa as the Early Childhood Development (ECD) Technical Advisor providing capacity building support to the Madrasa Early Childhood Programme and other AKF partners' technical team on ECD. She is a Regional Care for Child

Development Consultant and CCD facilitator. She holds a Bachelor of Education from Kenyatta University, an Advanced Diploma in Human Development, Early Child Development, from AKU, Karachi, and Post Graduate Certificate in Early Childhood Education from Froebel College of Education, Dublin and a Certificate in Curriculum implementation from High Scope Institute, UK. She has extensive experience in ECD, and was the Regional Programme Director, Madrasa Early Childhood Programme Regional Office, East Africa. She has provided technical leadership and ensured effective implementation of the Regional Programme.

#### Dr. Abraham Avi (Sagi) Schwartz, University of Haifa, Israel



Dr. Sagi Schwartz is Professor of Psychology and Child Development, Director of the Center for the Study of Child Development and Head of the MA Program, in Child Development for Developing Countries, University of Haifa. His published work includes contributions to edited

volumes and leading journals in psychology, psychiatry, pediatrics, social work, family, law, and human development. Prof. Sagi Schwartz's main research interests are in the area of socio-emotional development across the life span and adaptation under extreme life circumstances and experiences. He holds a BA degree in social work from the Hebrew University of Jerusalem, a master's in social work, a master's in psychology, and a Ph.D in developmental psychology and social work from the University of Michigan, Ann Arbor. Sagi Schwartz is the recipient of the 2007 Society for Research in Child Development Award for Distinguished International Contributions to Child Development. He is the 2015 Bowlby/Ainsworth Founder Award for attachment research, The New York Attachment Consortium.

#### Mr. Debjeet Sen, Regional Specialist in ECD and Nutrition for PATH, South Africa



Mr. Sen is a young, enthusiastic public health professional with nine years of professional and academic experience in designing, implementing, managing, and evaluating maternal and child health, nutrition, and ECD programs in low resource settings. During

his career, he has worked at all levels of the health system—from policy making to facility-based health service delivery to community level health promotion. Currently, he is a Regional Specialist in ECD and Nutrition for PATH, based in South Africa. In this capacity, he leads and supports multiple policy and programming initiatives in eastern and southern Africa including PATH's Conrad N. Hilton Foundation-funded integrated ECD work, where he is responsible for project design, strategic planning, materials development, M&E, capacity building and training, communications, documentation, technical research and writing, and linking field implementation to broader regional and international initiatives. He has Master's degrees in public policy, international relations, and molecular biology.

#### Dr. Robert Serpell, Department of Psychology, University of Zambia, Lusaka



Professor Serpell was born and raised in England and joined the founding staff of the University of Zambia (UNZA) in 1965. In 1979 he became a citizen of Zambia, where all his children were born and raised. Formerly Director, UNZA Institute for African

Studies (1977-83), Director, Applied Developmental Psychology, University of Maryland, Baltimore County, USA (1989-2001), and Vice-Chancellor of UNZA (2003-2006), he is currently Professor in the Department of Psychology. His publications include: Culture's influence on behaviour (1976), mobilizing local resources in Africa for persons with learning difficulties or mental handicap (1984), and the significance of schooling: life journeys in an African society (1993), Becoming literate in the city: the Baltimore Early Childhood Project (2005 with L. Baker & S. Sonnenschein) and Child Development in Africa: views from inside (2014 co-edited with K. Marfo). His primary interests are in cultural aspects of human development, intelligence, multilingualism, literacy, assessment and inclusive early childhood education. In 2017, the Society for Research in Child Development honoured Dr. Serpell for his distinguished contributions to understanding international, cultural and contextual diversity in child development.

#### Mr. Khalil Z. Shariff, Chief Executive Officer Aga Khan Foundation Canada



Mr. Shariff joined AKFC as CEO in August 2005. He was previously with the Toronto office of McKinsey & Company, an international management consultancy, where he advised governments, financial institutions, and health care

providers on strategy, organization, and operational improvement. He served on AKFC's National Committee for five years, and has cultivated interest in international development and conflict resolution issues through a variety of activities, including as: Deputy Editorin-Chief, Harvard Negotiation Law Review; Policy Coordinator and Research Associate, Harvard Program on Humanitarian Policy and Conflict Research; Legal Intern, Chambers of the Vice-President, International Criminal Tribunal for Rwanda in Arusha, Tanzania; Intern, Office of Under Secretary General, UN Department of Peacekeeping Operations. In 1993, he was the youngest member ever elected as a School Trustee for the Richmond (British Columbia) School Board. Mr. Shariff holds a B.A. in International Relations and Economics from the University of British Columbia and a J.D. magna cum laude from the Harvard Law School.

#### Ms. Nafisa Shekhova, Aga Khan Foundation



Ms. Shekhova is the Global Advisor, Education, with AKF. Nafisa has been with the Aga Khan Development Network for over 15 years in key education and ECD programme roles in Afghanistan, East Africa and Geneva.

Before joining the global team, she was the Regional Education Programme Manager in East Africa and was responsible for the education and early childhood portfolio of the region. Before this, she spent over 5 years with AKF in Afghanistan, rising from Education Programme Coordinator to Director. During this time she successfully led the expansion of the Foundation's education portfolio, including the startup of the pre primary work. She has over three years of school and university level teaching experience in Tajikistan. She holds a Bachelor of Arts in teaching English as a second language from Khorog State University and a Master of Education in ECD from Melbourne University, Australia. Nafisa is fluent in English, Russian and Tajik.

#### Dr. Marleen Temmerman, Medical College and Faculty of Health Sciences, Aga Khan University, Nairobi



Prof. Temmerman is a well recognized global leader in women, adolescent and child health and rights. Professor of Obstetrics & Gynaecology. She is Director of the Centre of Excellence in Women and Child Health, Aga Khan University (AKU), Nairobi. Former Director of Reproductive Health and

Research at WHO, Geneva; Honorary Senator Belgian Parliament; Founding Director International Centre for Reproductive Health, Ghent University, Belgium. Her keyaffiliations/memberships include: IERG (independent expert review group); EWEC (Every Woman Every Child); FP2020 Reference group; Guttmacher Lancet Commission on Sexual and Reproductive Health and Rights in the post-2015 world; Lancet Commission on Adolescent Health, Scientific Advisory Committee of the EDCTP (European and Developing Countries Trial Partnership), as well as professional bodies. She has been the Chair Reproductive Health Supplies Coalition; senior advisor for the WHO Cluster 'Families, Women and Children' and Senior Fellow in the Institute for Global Health Diplomacy in Geneva.

#### Mr. Marc Theuss, Aga Khan Development Network, Geneva, Switzerland



Mr. Theuss has more than 15 years of experience in managing and coordinating MERL processes and systems within the development sector. He is currently Director of the Quality of Life (QoL) Monitoring Evaluation and Research Support Unit for

the Aga Khan Development Network. Marc leads global MERL processes within AKDN that relate to exploring changes in QoL. Marc additionally leads the Unit's role with regard to providing strategic Technical Support in the arena of MERL across all AKDN agencies globally.

#### Professor Mark Tomlinson, Stellenbosch University, South Africa



Dr. Tomlinson is a Professor in the Department of Psychology at Stellenbosch University. His scholarly work has involved a diverse range of topics that have in common an interest in factors that contribute to compromised maternal and child health. He is also interested in

the development, implementation and evaluations of community-based intervention programmes to improve maternal and child health. He has a particular interest in understanding infant and child development in the context of caregiver mental illness. He is an Editorial Board member of PLoSMedicine, Associate Editor of Infant Mental Health Journal, and editorial board member of Psychology, Health and Medicine. He has published over 180 papers in peer reviewed journals, edited two books and published numerous chapters. He is the lead editor of a forthcoming volume from the University of Cape Town Press: "Child and adolescent development in Africa in the context of the Sustainable Development Goals".

## Ms. Evelyn Udedi, Conrad N. Hilton Foundation funded Evaluation Project, Malawi



Ms. Udedi is a registered nurse by profession and holds a Bachelor of Science degree in nursing. She has extensive experience in working with under five children in a clinical setting and in providing general nursing care and counseling to mothers clinics settings. Subsequently, she has

been working in a health research setting for the past six years. Currently, she is the Project Manager on a Conrad N. Hilton Foundation-funded research study that is evaluating the feasibility and effectiveness of providing ECD content as an integral component of HIV services in a clinical setting in Malawi. On this study, she is responsible for overall technical and management oversight. Throughout her career (assisted in part by her own experiences as a parent to two young children), she has been passionate about parenting and ECD, and has worked with caregivers to build their capacity to provide sensitive and responsive care.

#### Dr. Roland van de Ven, Elizabeth Glaser Pediatric AIDS Foundation



Dr. Van de Ven is a medical doctor from the Netherlands, specialization in tropical medicine and hygiene. He holds a master's degree in public health, and has over 17 years of experience in offering health care services in Zambia, Malawi and Tanzania at both

hospital and national levels. In 2011 he joined the Elizabeth Glaser Pediatric AIDS Foundation as the Technical Director of the Tanzania program, where he currently is responsible for the implementation of several MNCH, HIV and TB projects, including an integrated Early Childhood Development project funded by the Conrad Hilton Foundation. Throughout his career Roland has shown a great commitment towards strengthening healthcare systems, putting his energy and emphasis on the importance of integrating services and engaging communities in assuring quality health services

#### Ms. Jane West, Heart of the West Counseling & Two Lilies Foundation, Colorado, USA



Ms. West is a leader in the early childhood development field in the United States and overseas. From her base in Colorado as an early childhood mental health clinician and special educator, West, the director of heart of the West Counseling, LLC, has developed and

provided a wide array of programs aimed at deepening young children's social-emotional connections to the caregivers in their lives at home and in the early learning setting. As the founder and executive director of the Two Lilies Fund, West selects organizations to support throughout under-resourced parts of the world that are growing the nurturing capacity of EC professionals and families. West gained strong advocacy skills as a Zero to Three Leader of the 21st Century Fellow and clinical and programmatic ones from her studies at Stanford University (B.A. in international development), Columbia University (M.S. in journalism) and the University of Colorado (M.A. in counseling psychology and early childhood development). She is also an award winning documentary filmmaker.

## Dr. Aisha K. Yousafzai, Harvard University & Aga Khan University (Visiting)



Dr. Yousafzai is an Associate Professor of Global Health in the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health and a Visiting Faculty at the Department of Paediatrics and Child Health at Karachi Aga Khan University. She has 15 years of field

research experience and established an early childhood focused field research team in rural Sindh, Pakistan. Dr. Yousafzai has extensive experience in evaluating early childhood interventions in south Asia, east Africa, and in Central and Eastern Europe. Dr. Yousafzai's research has also focused on the inclusion of children and adolescence with disabilities in global child health services. She serves on a number of Advisory Groups on early child development for international organizations, including the Interim Executive Group of the Early Childhood Development Action Network (ECDAN).

# SESSION ABSTRACTS BY ORDER OF PRESENTATION

Nurturing young brains, transforming human futures Pia Britto, Senior Advisor, Early Childhood Development UNICEF Headquarters, New York

The SDG era creates opportunities for change like never before. The inclusion of ECD in the goals for all nations brings the youngest members of society to the center of the agenda. The SDGs make nations committed allies to support the most vulnerable children to thrive. The transformative role of ECD is a strong case made by science and common sense. Furthermore the financial case for investing in children's early moments is robust. The rate of return on investing in ECD programmes can be about 13.7%. The benefits are reaped in better education and health outcomes, lower crime and higher individual earnings. Investments in early development lead to better individual adult incomes of up to 25%. ECD builds healthier, happier and more peaceful communities. Globally, governments and partners are providing children with adequate nutrition, protection and stimulation – and reaping the benefits. Governments need to back up their pledge with action and place ECD at the top of their economic and political agendas by (1) investing to provide young children, especially the most deprived, the best start in life, (2) expanding access to effective and essential services in homes, schools, communities and health clinics, (3) making family-friendly policies a national-and private sectorimperative, (4) collecting data and tracking progress on essential indicators of ECD, (5) providing leadership for programmes and coordinating efforts more effectively, and (6) driving demand for high-quality services.

## The Nurturing Care Framework: A new early childhood development initiative

Bernadette Daelmans, , Pia Britto, World Health Organization, Geneva, Switzerlan, UNICEF New York

A new WHO and UNICEF initiative aims to promote early childhood development by encouraging and supporting parents and other caregivers to provide nurturing care for children during the first months and years of their lives. Nurturing care refers to health, nutrition, safety and security, responsive care giving and opportunities for early learning. Studies show that investing in such care, especially during the first three years of a child's life, starting from conception, can have lasting benefits for health, learning, productivity and social cohesion. The framework will build upon the UNICEF Early Moments Matter report and provide a practical roadmap for supporting child development in the early years, through policies, interventions and services. The document will be launched at the time of the World Health Assembly in May 2018. This session serves as an opportunity for consultation. Participants

will review the proposed outline and content of the framework and share ideas and experiences to inform its further development. The idea is one of joint ownership and therefore the inputs and feedback from governments, civil society, health and child development professionals and other stakeholders are most welcomed.

#### Early childhood socialization in a pluralistic world: Addressing uncomfortable truths

Judi Mesman, MESMANJ@FSW.leidenuniv.nl, University of Leiden, Canada

Before children have reached their first birthday, they can reliably distinguish between major ethnic groups. Simultaneously, children become increasingly worse at distinguishing individuals within unfamiliar ethnic groups, a mechanism also known as the 'other-race effect'. And when members of another ethnic group cease to be recognized as individuals with unique characteristics, ethnic stereotypes and prejudice are only a small step away. These all-too-human mechanisms are not easily reversed as they operate largely on an unconscious level and are deeply ingrained, reinforced, and reproduced in societal institutions. In pluralistic societies, there is always an 'Other' that is not accorded the same rights or moral treatment as those who have defined this 'Other'. What then, can we do to promote inclusive citizenship norms in children that are crucial to the peaceful functioning of pluralistic societies that have – at least on paper – pledged allegiance to the universal declaration of human rights? The answer lies in dedicated and explicit attention to positive intergroup contact, fostering basic trust but also openness to getting to know and trust the 'Other'. This requires no less than a commitment to openly discussing and challenging uncomfortable truths, not just in educating and raising our children, but across all public domains.

## Bringing up children in an Uncertain World: Who's right? Whose rights?

Caroline Arnold, caroline.arnold@akdn.org, Aga Khan Foundation, Geneva, Switzerland

This presentation will unpack the way global efforts to provide effective supports for young children and their families have been evolving over time and examine key trends as well as the challenges and opportunities therein. It raises a number of questions in order to stimulate dialogue and encourage us to consider how we respond. These responses need to include both I ) framing vital new research especially as part of the new OXSCIE "learning to navigate uncertainties" global agenda and, ii) ensuring that programmes address the key issues. Themes to be touched on include: Comprehensive and comprehensible frameworks - How

are we doing? , Uneven progress in expanding access to ECD services— How are we addressing equity issues?, Reaching the youngest — How are we including parents and health services more effectively? , SDG4.2—How is this playing out in practice?, Developmentally and culturally appropriate practice including attention to social and emotional learning and pluralism—How do we protect and promote this? And Public and Private sectors—What are the roles and partnerships, the promises and the perils? Examples from the field will illustrate these themes—including the way AKDN programmes have evolved and continue to develop over more than 30 years.

#### Pluralism conversational round table: Early child development in fragile settings: Pathways to pluralism Session Overview

Greg Moran<sup>1</sup>, gmoran2@uwo.ca, Kofi Marfo<sup>2</sup>, Academics Without Borders, Montreal, Canada<sup>1</sup>, Aga Khan University<sup>2</sup>

We live in uncertain, unstable times - characterized by agitation, tension, violence, and other forms of social strife that often emanate from ethnic, racial, and religious differences. The movement of displaced persons within their own countries or across national borders has challenged previously well-defined, homogenous communities and societies - often perceived as a threat to stability and well-being. But the nature of the human and natural forces behind these movements means that such diversity will only increase. Ethnic or out-group prejudice arises from sources throughout the life span but has its origin in early child development in processes likely linked to our evolutionary past. What are the developmental roots of a pluralistic society characterized by respect, justice, equity and opportunity irrespective of ethnic, racial, cultural and religious differences? What socio-cultural forces and institutional responses to diversity nurture the necessary conditions to build toward functional pluralistic societies, and which forces are inimical to progress toward pluralism? What is the role of civil society in advancing the cause of authentic pluralism? These are some of our world's truly momentous questions. This conversational symposium will explore how we can individually and collectively adapt to this change in a productive, harmonious manner rather than in a fashion that produces division, conflict and suffering.

#### Assessing early childhood vulnerabilities in Pakistan Ghazala Rafique, ghazala.rafique@aku.edu, Aga Khan University, Karachi

Early childhood is an extremely sensitive period during which children are most susceptible to positive and negative environmental exposures. Addressing vulnerabilities early in life can help prevent poor social, emotional, cognitive, and mental health outcomes later in life. There is increasing recognition of the need to monitor children's early development at individual and population levels because resource disparities and inequities impact outcomes for individuals and populations alike. This presentation shares the first population-level data on ECD from Pakistan using the psychometrically reliable Early Development Instrument (EDI) that assesses performance in five domains (physical health; language and cognitive skills; social competence; emotional maturity; communication and general knowledge) and is interpreted at the group level to assess at-risk children and identify populationbased vulnerability. EDI data collected from 397 schools across 5 Karachi towns were aggregated at the town level and analysis conducted on 8170 children (46.2% boys; 53.8% girls) meeting EDI validity criteria. Among the key findings, EDI scores improved in all domains with increasing age. Girls scored better than boys in all domains. Overall vulnerability was found in 22.7% children, with boys (24.9%) being more vulnerable than girls (20.5%). The EDI's utility in identifying vulnerable communities and providing guidance for policy and interventions will be discussed.

## The Science of Early Child Development as a living curriculum: Past, present, and future.

Janet Jamieson<sup>1</sup>, janetijamieson@gmail.com, Nafisa S<sup>2</sup>, Jan Sanderson<sup>1</sup>, Red River College, Manitoba, Canada<sup>1</sup>, Aga Khan Foundation<sup>2</sup>

The session will focus on the Science of Early Child Development (SECD), a knowledge mobilization initiative aimed at making current research accessible to anyone interested in learning more about the profound impact of early experience on lifelong health and wellbeing. Initially developed by Red River College with the University of Toronto, SECD soon partnered with the Aga Khan Development Network (AKDN) to internationalize content (including extensive filming in early childhood programmes in majority world settings), develop on and offline formats to reach diverse global audiences and support translation. The session will discuss how SECD has grown into a suite of mediarich, engaging and interactive curriculum resources that evolve as new science emerges. SECD resources are being used by universities, NGOs, community groups, professional associations and governments in over 35 countries.

# Effectiveness of a youth led early childhood care and education programme in rural Pakistan: A cluster-randomised controlled trial

Aisha Yousafzai<sup>1</sup>, aisha.yousafzai@aku.edu, Muneera Rasheed<sup>2</sup>, Arjumand Rizvi, Fariha Shaheen, Liliana A Ponguta, Chin R. Reyes, and Emily E. Franchett, Harvard University<sup>1</sup>, Aga Khan University<sup>2</sup>

This presentation describes a study investigating whether an Early Childhood Care and Education (ECCE) programme for young children could be effectively delivered by female youth in rural Pakistan. We implemented the 'Youth Leaders for Early

Childhood Assuring Children are Prepared for School' (LEAPS) programme to train female youth (18-24 years) to deliver ECCE for children aged 3.5-6.5 years old in NausheroFeroze, Sindh, Pakistan. Outcomes on children's school readiness were evaluated in a cluster randomized controlled trial. Five clusters (villages) were randomly assigned to receive the intervention (n= 170 children) and 5 clusters to control (n= 170 children). Children's school readiness was assessed after 9 months of intervention exposure using the International Development and Early Learning Assessment tool. Analyses were by intention-to-treat. At end line, the intervention group had significantly higher school readiness scores compared with the control group with a medium effect size. Trained female youth were able to effectively deliver an ECCE programme benefitting young children's school readiness. Qualitative data were collected to explore benefits to youth from participation in this programme, and inductive thematic analysis was conducted. Findings showed perceived benefits to confidence building, empowerment and growth in personal and professional aspirations among youth leaders.

#### Impact of the Kenya Tayari School Readiness Programme: Catalyzing government systems to improve the quality of pre-primary provision

Benjamin Piper<sup>1</sup>, bpiper@rti.org, Evangeline Nderu<sup>2</sup>, RTI International<sup>1</sup>, Ministry of Education & County Education Offices Kenya<sup>2</sup>

Early childhood development (ECD) programs have expanded rapidly since 2000. Pre-primary education in particular has shown benefits for child development (Engle et al., 2011, Heckman 2006). There remains limited understanding of whether and how pre-primary education would differ if program implementation was at scale. Programs that are successful in small pilots may not be effective at scale (Bold et al, 2013). The Tayari pre-primary intervention in Kenya was designed to rigorously evaluate the impact of a low- cost intervention implemented through government systems on school readiness. Tayari is being implemented at medium scale, covering more than 1700 ECD centres by 2018, and working across four counties in the programme, as well as the APBET institutions in Nairobi. Tayari works through the Kenyan government systems to improve pre-primary education instruction using classroom feedback from government ECD officers and low-cost modeling-based teacher training provided every term focused on improving the interactivity and relevance of instruction. Finally, Tayari provides a revised set of materials for learners and teachers. A longitudinal sample of 2891 pupils was followed over time. Results from the implementation of Tayari in 2016 show significant impact on all categories of school readiness and an overall impact of 0.3 standard deviations.

## ECCD centre quality and child cognitive and language development over 12 months in Nyanza, Kenya

Mark Tomlinson<sup>1</sup>, markt@sun.ac.za, Sarah Skeen<sup>1</sup> (presenter), Christina Laurenz, Caroline Ruoro, Yussuf Omondi and Mark Sweikhart, Stellenbosch University<sup>1</sup>

Little is known about the quality of early childhood education in low and middle income countries and how it relates to child developmental outcomes, particularly cognitive development. Our study focused on Plan International's Community-Led Action for Children (CLAC2) intervention for parenting and early childhood care and development (ECCD). We aim to describe predictors of improvements in language and cognitive development over time. In this longitudinal study we recruited children aged 4-5 years and their caregivers from 19 ECCD centres supported by the CLAC2 programme in Nyanza Province, Kenya. We also collected quality-related information from ECCD centres and related parenting groups. We conducted a baseline assessment and 12 month follow up. Assessments consisted on multi-part caregiver interviews as well as child developmental assessments. We also conducted preschool observations of each ECCD centre. In total, 497 children and their caregivers (n=465) took part in the study. We will report on child language and cognition findings, and look at the role of programme quality in child outcomes at 12 months. In considering how ECCD quality may connect with child developmental outcomes, our study will convey lessons about ECCD programming in rural areas and highlight important areas for programme improvement.

# Preschool healing classrooms for Somali and Eritrean refugee children: A case study with highlights from implementation research

Shewaye Tike<sup>1</sup>, shewaye.tike@rescue.org, Katie Maeve Murphy<sup>1</sup>, International Rescue Committee<sup>1</sup>

Young children living in crisis and conflict-affected contexts face added disadvantages associated with the stress of exposure to violence, displacement and family separation, and are vulnerable to the long-lasting effects that prolonged stress has on the developing brain and the stress response system. Without intervention, young children living in adversity face cognitive, physical and social-emotional disabilities that not only impact how they learn, grow and interact with others, but can also impact the well-being of future generations. Ethiopia hosts more than 20 refugee camps, home to approximately 652,234 refugees from neighboring Somalia, Eritrea, Sudan, and South Sudan. To address the challenges to healthy development faced by preschool children (aged 3-6) in Eritrean and Somali refugee camps in Ethiopia, the International Rescue Committee (IRC) is currently implementing the Preschool Healing Classrooms (PHC) program in six refugee camps. The PHC model, uses a multi-pronged approach to improve young children's wellbeing and development, and prepare them for academic success in primary school.

This paper will highlight findings from implementation research of the first year of PHC implementation within the Somali and Eritrean refugee camps, and highlight successes and challenges that will inform our support strategy for all ECCD classrooms in the future.

#### From research to practice: Enabling caregivers in lowincome communities to make a difference in the first three years of a child's life

Patricia Kitsao-Wekulo<sup>1</sup>, pwekulo@aphrc.org, Moses Ngware<sup>1</sup>, Elizabeth Kimani-Murage<sup>1</sup>, Joan Njagi<sup>1</sup>, African Population and Health Research Centre (APHRC), Nairobi, Kenya<sup>1</sup>

In many urban informal settlements, provision of appropriate stimulation to young children remains challenging; and yet children are particularly sensitive to early experiences. The study reported here was a parenting/caregiving intervention targeted at caregivers of young children living in urban informal settlements. The current presentation focuses on the question: Which current childrearing practices can be incorporated into a child stimulation package? A sequential mixed- methods design was used. Participants were female caregivers aged 15-39 years and living in an informal settlement setting in Nairobi, Kenya, together with their children aged 10-14 months. We assigned 80 caregiver-child dyads into the intervention or the control group during the implementation phase. For the majority of time that caregivers were observed, they kept their children within their visual range, and ensured a safe play environment. Caregivers considered proper diet, children's health and hygiene to be very important. Other practices included playing with the child, talking to the child, and training the child to walk. Caregivers were mainly concerned with activities to promote children's healthy growth, but not other aspects of development. Documenting familyspecific interactions to inform the content and process of a child stimulation package enhances the significance of the current study.

# Daily school attendance: A challenge to effective assessment of early childhood primary school children's performance in rural Zimbabwe

Emily Ganga<sup>1</sup>, emilyganga@gmail.com, Samuel Masomere<sup>1</sup>, Great Zimbabwe University<sup>1</sup>

The plight of some early childhood primary school children in rural Zimbabwe is food for thought for multiple stakeholders. Young rural children are faced with a myriad of challenges which hinder consistent daily school attendance, thus assessment on their learning, development and optimal performance is affected. Absenteeism is the greatest challenge faced by young learners in remote rural areas and its causes are complex whilst the solutions continue to be elusive. The success of effective assessment strategies relies on school attendance by learners. In this qualitative study, we investigate how daily school attendance affects assessment at ECD B level in local primary schools.

The qualitative enquiry, involving ECD B learners from sampled schools in Gutu district, has evidence obtained through observations on learner school attendance and in-depth interviews with teachers/caregivers and parents. Record books were also analyzed. The study presents findings on how daily school attendance becomes a decisive factor in the effective assessment of ECD B primary school children. Recommendations were made to encourage teachers, parents and the Ministry of Education to collaborate in ensuring that young children attend school. The teacher training programmes should also inculcate skills and competencies to curb obstacles rooted in daily school attendance.

Teachers' preferred methods of teaching Rreading in early childhood settings of Early Childhood Grades in Dagoretti and Westlands Divisions, Nairobi County, Kenya Esther W. Marima, esther.marima@gmail.com, Pan Africa Christian University, Nairobi, Kenya

This report on study of teachers' preferred methods of reading in selected schools in Dagoretti and Westlands Divisions of Nairobi County is based on the premise that Reading skills in the early years of learning is a reliable indicator of whether a learner will attain the requisite competence for achieving academic success. The quality of experience children get at this level lays the foundation for literacy. Study into teaching of reading in early childhood is important since research into the level of English language proficiency in Kenyan primary schools has revealed significant underperformance. The study used a descriptive survey, data was collected using semi-structured interviews from forty early childhood teachers and twenty Heads of Departments selected from twenty schools. Quantitative data was analyzed using descriptive statistics. The study revealed that teachers use some instructional strategies and not others, most preferred being phonics, whole word and language experience. Findings indicated that the guidelines available to the teachers are not clear on how to teach reading in a uniform way. The guidelines do not clarify strategies to be used and how. The study recommends compulsory in-service training for pre-unit and preschool teachers on how to teach reading at these levels.

#### A holistic approach to nurturing care for babycare settings: an implementation model by AKF (EA) in Ruaraka constituency, Nairobi

Stella Ndugire – Mbugua<sup>1</sup>, stella.mbugua@akfea.org, Ruth Muendo<sup>2</sup>, Joyce Wesonga<sup>3</sup>, Musa Juma<sup>4</sup>, Aga Khan Foundation East Africa<sup>1</sup>, Aga Khan University<sup>2</sup>, Daraja Civic Initiatives<sup>3</sup>, Ruben Centre<sup>4</sup>

Research advances in child development attests that child survival has improved over the last 3 decades (Lancet, 2016). For instance, under-5 mortality rates dropped by 53% in the period 1990 - 2015. Despite this milestone, risk levels remain high, affecting about 250 million children (43%) under 5 years in low and middle-income countries, and rising to two thirds in Sub-

Saharan Africa. In Kenya, urban informal settlements present contexts with myriad of risks for children. It is estimated that approximately 60% of Nairobi's residents - over 2 million people - half of whom are children - live in urban informal settlements. The health indicator on stunting in this context has shown a prevalence rate of 57% compared to 28% in urban Kenya. Moreover, quality early care for children under three is distressed by high unemployment rates, alterations in extended family support and gaps in public provision. This leads families to rely on informal and unregulated "babycare centers". These centers are faced with the challenge of limited understanding among parents and babycare operators on quality early child development. This paper seeks to present a quality and holistic babycare implementation model, which integrates urban agriculture, in two urban informal settlements of Nairobi.

#### Quality of caregiving environment of baby care centres in Nairobi's informal settlements after a 1-year intervention by Kidogo Early Years

Ruth Muendo<sup>1</sup>, James Mwangi<sup>2</sup>, james@kidogo.co Sabrina Natasha<sup>2</sup>, Aga Khan University<sup>1</sup>, Kidogo Early Years<sup>2</sup>

Kidogo is a social enterprise that improves access to high quality, affordable early childhood care and education (ECCE) in Nairobi's urban informal settlements using a 'hub and spoke' model. Hubs are Kidogo-owned early childhood centres that serve as a Centre of Excellence for holistic, play-based ECCE for children ages 6 months to 6 years. Kidogo then uses a social franchising approach to partner with local women in the community called 'mamapreneurs' who run informal baby care centres and provide them with training, materials and ongoing mentorship to improve the quality and sustainability of their childcare micro-businesses (spokes). In order to evaluate the impact of the hub and spoke model, Kidogo partnered with Aga Khan University's Institute for Human Development to assess the change in quality of the caregiving environment at its 2 hubs and 5 spokes. Data was collected using the Infant-Toddler Environmental Rating Scale (a classroom assessment tool designed to measure the quality of group programs for infants and toddlers [birth to age 3] by collecting data through classroom observations and staff interviews). Results showed a 19% improvement in the quality of the caregiving environment, particularly in the areas of interaction, personal care routines, and listening and talking.

#### Service delivery system for the provision of quality care at a University-based early childhood Centre: Issues from the Pakistan context

Zahra Virani<sup>1</sup>, zahra.amirvirani@aku.edu, Amber Shahzad<sup>1</sup>, Almina Pardhan<sup>1</sup>, Ghazala Rafique<sup>1</sup>, Yuling Liu Smith<sup>1</sup>, Aga Khan University<sup>1</sup>

Global demand for early childcare services has increased (Araujo, 2017) and similar trends are emerging in Pakistan where work-place models of childcare services for children under three years are springing up. One such work-place model is at a reputable private university in an urban Centre in Pakistan. Recently this centre has undergone expansion to meet the growing demand of the university's employees for high quality childcare. The Centre's governance structure includes early childhood specialists from the university. The centre employs qualified and experienced staff, who are regularly supported with professional development by the university's faculty. The policies, procedures and education programme draw on global best practice, which is contextualized, to local needs. The centre also contributes to the university's early childhood academic objectives as a site for teaching, learning and research. This paper presents the service delivery model of the centre. It describes issues related to: programme structure; staffing; curriculum and resources; partnerships with parents; physical environment; and contribution to academic and research programs at the university. The issues discussed have important implications for informing the establishment of similar childcare services to respond to this emerging need in Pakistan and similar contexts, as well as for educational and policy frameworks.

# Improving child development and maternal mental health – A cluster randomized controlled Trial (ROSHNI) Batool Fatima¹, Batool.fatima@gmail.com, Nusrat Husain, Tayyeba Kiran, Meher Husain, Hina Fayyaz, Farah Lunat, Nancy Cohen, Farhat Jafri, Shehla Naeem, Nasim Chaudhry, Aga Khan University, Karachi,

Pakistan<sup>1</sup>

There is strong evidence that maternal depression is associated with emotional, cognitive and behavioral problems in children. The study aimed to test the efficacy of an affordable intervention that can be used by Lady Health Workers (LHWs) in a low resource setting. A total of 60 villages each were assigned to LTP Plus intervention and routine care, from Gadap town Karachi, Pakistan. A total of 811 women-child dyads meeting inclusion criteria were included in the study. 10 group sessions of intervention integrating Learning through Play (LTP) and the Thinking Healthy Program (THP) were delivered to encourage motherinfant play focusing on stimulation and support for infant exploration and autonomy integrated with the Thinking Healthy Program. There was a significant mean difference between LTP Plus and routine care group on PSI (MD=25.54, p<0.000), PSC (MD=1.78,

P<0.000), KAP (MD=-12.35, p<0.000) and HOME (MD=-6.7, P<0.000), MSPSS (MD=11.51, P<0.000), and on all subscales of Ages and Stages Questionnaire (P<0.000) at 3 months post randomization (end of intervention). Parenting interventions should be considered a component of routine care to improve child developmental outcomes. The distribution of competencies in primary care can better address the child developmental needs in low resource settings.

# Early Child Development risk factors and HIV-associated neurocognitive disorders across the life span in Africa Michael J. Boivin, boivin@msu.edu, Michigan State University/University of Michigan

Globally, an estimated 3.4 million children are living with HIV, and millions more are developmentally at risk from perinatal exposure to maternal infection and ARV treatment. Although little is known about the neuropathological mechanisms of HIV perinatal and exposure on the developing brain throughout the lifespan, more evidence is emerging from cohort studies as children survive into adolescence as ARV treatments have become more available. This evidence suggests that there is a critical need globally to prioritize research directed at reducing mental health, neurological and substance use (MNS) disorders in adolescents affected by HIV. At the core of this concern is the fact that adolescence is a pivotal age for the development of self-control/regulation. Neuropathonesis in frontal lobe development and neurocognitive executive function from perinatal exposure and infection may be compounded by other co-morbid infections and risk factors during middle childhood and adolescence. Perinatal HIV neuropathogenic risk may be foundational to the development of a different form and/or severity of HIVassociated neurocognitive disorders (HAND) than has previously been characterized in the. This presentation will explore ways in which the effects of perinatal HIV neuropathogenic processes associated with impairment of executive function can compound the complexity and severity of HAND.

# Managing inappropriate behaviours of pupils with cognitive disabilities in selected inclusive public primary schools, Changamwe Sub-county, Mombasa County, Kenya

Vincent Otieno Macmbinji<sup>1</sup>, macmbinjivincent@gmail. com, Daniel Mbirithi Mange<sup>2</sup>, Pwani University<sup>1</sup>, Kenyatta University<sup>2</sup>

The purpose of the study was to examine managing inappropriate behaviours of pupils with cognitive disabilities in selected inclusive primary schools in Changamwe Sub-county, Mombasa County, Kenya. The study employed descriptive survey. The sample size comprised 10 deputy head teachers, 60 teachers and 30 pupils with cognitive disability. The total sample was 100 participants. The sample size was determined using purposive and random sampling methods. The study

established that academic inappropriate behaviours were most prevalent among learners with cognitive disability as compared to the social and disruptive inappropriate behaviours. Hyperactivity and easy distraction were cited as the major factors leading to the inappropriate behaviours among learners with cognitive disability. Use of guidance and counselling, and group contingencies were effective strategies of dealing with inappropriate behaviours. Lack of experience in managing learners with cognitive disability and absence of special needs policy regarding behaviour management were the main challenges. The study recommended that Ministry of Education Science & Technology should employ more inclusive education trained teachers, curriculum review for teacher training colleges to inculcate behaviour management for learners with special needs as well as more in-service training on special needs for teachers within inclusive schools.

## When the child is deaf...An integrated approach to ECD of the deaf or hard of hearing child

Maria Brons, m.brons@kentalis.nl Royal Dutch Kentalis Academy International Department, Netherlands

Based on the ten Moeller principles of Family Centered Early Intervention for the deaf and hard of hearing (d/hoh) child, developed by a multidisciplinary group of professionals in 2012 in Bad Ischl/Austria, Kentalis International developed an approach on Early Childhood Development that is adapted to the social, educational and health care environment of the child in Africa. For a child that is born d/hoh or experiences a profound hearing loss in its pre-lingual period, ECD is crucial. A d/hoh child deprived of alternative language and/ or technical devices will not develop an understanding of its surrounding world and language in order to give meaning to this world. Socio-emotional bonding suffers. Kentalis co-developed with its African partners ECD tools used in a three-pillar approach focusing on parents, health workers and educators. Research showed that the documentary film on deaf role models increased the trust of parents in the capacities of their deaf child. The e-learning in Basic Audiology enables health workers, nurses, teachers and CBR workers to early test hearing loss. Teachers who received hands-on training in how the deaf child learns could easily adjust the classroom environment and engage in visualized playing and learning.

## Psychosocial attachment in orphaned children under orphanage care in Tanzania

Agnes Cyril Msoka, agnes.msoka@aku.edu/agnesmsoka@gmail.com, Aga Khan University

This study explored psychosocial attachment in orphaned children under orphanage care in Tanzania. Aspects of psychosocial attachment that enable the orphaned children to cope with orphanage life were identified. Descriptive cross-sectional survey was employed to collect data from orphans in institutions.

Simple random sampling was employed to select 10 orphanages from which 203 children were selected. A mixed method approach was used. Guiding points and self-administered questionnaires comprising basic needs, protection and security, advice, suggestions and appreciations. Quantitative approach was analyzed through SPSS and summarized in a table, pie chart and bar chart were used. The qualitative approach was managed through content analysis. From children's perceptions, 73.4 % received provision of basic needs; 17.2 % protection and security; 35.5%; advice and suggestions, and 23.2 % were shown appreciation. The findings indicate low levels of care and affection needed for psychosocial attachment due to shortage of caregivers, expressed by children. In this study aspects of psychosocial support services fell far short of expected standards with protection and security, including appreciation support, less prioritized. Improvement in quality of children's life in the orphanages by endorsing major development of the nontangible services.

## School safety: A challenge in preschools in informal settlements

Teresa Mwoma¹, mwoma.teresa@ku.ac.ke, Catherine Murungi¹, Nyakwara Begi¹, Kenyatta University¹

School safety is defined as measures put in place by staff, parents, learners and other stakeholders to minimize or eliminate risk conditions or threats that may cause accidents, bodily injury as well as emotional and psychological distress. Accidents if not prevented can cause disability or death, while emotional and psychological trauma can lead to lack of self-esteem leading to poor performance. This article presents findings of a study conducted in preschools in informal settlements in Nairobi City County, focusing on safety and security of children in preschools. A mixed methods approach involving qualitative and quantitative data collection was utilized for the study. The study was conducted in 54 preschools involving 54 head teachers/ managers and 78 preschool teachers and three education officers. Findings revealed that while government has endavoured to come up with guidelines and minimum standards through various policies, preschools in informal settlements are experiencing a myriad of challenges that impact negatively on children's learning. Among them are poor infrastructure, and congested classrooms. In view of these challenges, it is recommended that county government in collaboration with other stakeholders in early childhood should come up with model preschools in informal settlements to create conducive learning environment.

#### Care for child development- Roll out initiative in Tanzania: Partnership between Ministry of Health and ECD implementing partners

Aline Villette<sup>1</sup>, aline.villette@akfea.org, Josephine Ferla<sup>2</sup>, AKF Tanzania<sup>1</sup>, Aga Khan Foundation<sup>1</sup>, Elizabeth Glaser Pediatric Aids Foundation<sup>2</sup>

In 2017, The Lancet identified Tanzania as one of the ten countries where children are at risk of not reaching their full potential (>60%). To address this issue, the Ministry of Health, Community Development, Gender, Elderly and Children (MOHCGEC), with the support of AKF, EGPAF, and UNICEF, contextualised the Care for Child Development (CCD) package to Tanzania. As part of the USAID funded Kizazi Kipya programme led by Pact, AKF and EGPAF will support the MOHCGEC to reach over 800 Health Care Workers (HCW) and 3200 para-social workers (PSW) across 82 health centres and surroundings communities. These HCWs and PSWs will then work with families on a 1:1 basis and within groups to improve the quality of nurturing care for boys and girls aged 0-3. Implementation in 2017-18 will provide AKF and EGPAF with learning on how to effectively scale CCD across Tanzania as well as provide a platform to support the Tanzanian health system to take increasing responsibility for the delivery of quality CCD across the country.

#### Role of catholic sisters in early childhood development in programming to greater equity for children in Malawi, Kenya and Zambia

Bertha Mpepo Phiri<sup>1</sup>, Bertha.Phiri@crs.org, Fidelis Chasukwa Mgowa<sup>1</sup>, Tobias Opiyo<sup>1</sup>, Catholic Relief Services<sup>1</sup>

Children of Malawi, Kenya and Zambia faced with impacts of extreme poverty and a growing HIV prevalence remain at risk of a poor Early Childhood Development (ECD). Although child care services are available in these countries, there is an undeniable shortage of a reliable ECD human resource impacting the fulfillment of the rights for the child's survival, growth and development. CRS with support from Conrad N. Hilton Foundation is committed to strengthening Sisters ECD technical capacity. Malawi, Kenya and Zambia are using Catholic Nun's community presence as a sustainable platform for dissemination of ECD messages to the most hard to reach communities. Through the SCORE ECD project, Sisters have been engaged as agents to enhanced ECD service delivery through trainings. 96 sisters in the three countries trained as master trainers reached 2,720 fellow sisters and 10, 150 households with ECD messaging. Care groups are a community-based model that aid widespread of key ECD messages to households through community volunteers, to encourage behavior change. CRS will extend this model to Sisters and have them act as ECD mentors of the care groups to deliver key health, nutrition, WASH, child protection and early stimulation messages to the communities they service.

## Improving parental care and stimulation through community-run play groups

Alison Naftalin, alison@livelyminds.org, Lively Minds

One of the biggest barriers to ECD and one of the most pressing needs is that parents in deprived rural communities lack the information, skills and aspiration to provide their children with simple affordable opportunities to nurture their development. Lively Minds is working in Ghana & Uganda, and believe we have found a sustainable, scalable and cost-effective way to bring high quality ECCE to the hardest-to-reach, resource-poor communities who need it most. In each community, 30 uneducated & marginalised "Volunteer Mothers" are trained and supported to run Play Groups for their villages' pre-schoolers and to provide better care at home, using locally-made materials. To ensure sustainability and scalability, the programme is delivered through government systems using a training of trainers approach (Kindergarten system in Ghana, Village Health Team system in Uganda). This means that the materials and people-power are readily available and the programme can be delivered and sustained at low cost.

Strengthening families so young children thrive: Evaluation findings from a zambian early childhood development program for children affected by HIV/AIDS Abiy Seifu¹, aseifu@episcopalrelief.org, Felicia Sakala², Episcopal Relief & Development, New York¹, Zambia Anglican Council Outreach Programmes, Lusaka, Zambia²

In the midst of rural poverty, high HIV prevalence, and the challenges of meeting basic needs, how can parents provide responsive care and stimulation of their vulnerable young children? This presentation will synthesize an external evaluation of a community-led Early Childhood Development (ECD) program in rural Zambia - implemented by the Zambia Anglican Council Outreach Programmes in partnership with Episcopal Relief & Development. The integrated ECD program's goal is for children to reach their full developmental potential - through support to primary caregivers and their families. Trained ECD volunteers work with caregivers in groups and home visits, using participatory learning and visual guides. The 2016 external evaluation analyzed primary caregiver behavior change in parenting practices, ECD volunteer effectiveness, and community ownership of local ECD programming. Using mixed methods, longitudinal data and a control group, the study documented positive behavior change among primary caregivers. The largest increases were in the initially low performing areas of cognitive, language and motor skills development. Activities to promote children's social and emotional development also increased. The evaluation concluded the program's strategies effectively achieved social and behavior change in parenting attitudes and practices, and represent a cost-effective approach replicable in rural Africa to strengthen vulnerable young children's development.

## Promoting school readiness through community based early childhood programs

Tamara Chansa-Kabali<sup>1</sup>, tamarachansa@yahoo.com, Beatrice Matafwali<sup>1</sup>, University of Zambia<sup>1</sup>

The study examined the influence of community based early childhood education on children' literacy and cognitive skills. The study sought to investigate whether children who attended the community based early childhood programmes were ahead of their peers who did not attend any programmes. The study utilized the quantitative design. The total sample was approximately two hundred and thirty-one. These were divided into treatment and control groups. The skills measured included early literacy—letter naming, fine motor skills, receptive and expressive language and cognitive skills—Rapid Automatised Naming (RAN), problem solving and attention skills. Other moderating factors included age, gender and socioeconomic status. On early literacy outcomes, SES and ECE attendance strongly predicated letter naming while age, SES and ECE predicted fine motor skills. ECE and socioeconomic status predicated expressive language while none predicted receptive language. Predictors for cognitive skills were SES for Rapid Automatised Naming (RAN); age, SES and ECE attendance predicted problem solving skills. None of the predictors explained variation for the attention skills. Children attending the community based ECE programmes in rural areas are ahead of their counterparts with no ECE exposure and are better prepared for school compared to those that do not. Investing in community based ECE programmes is a sustainable way of preparing children for school.

## Impact of an ECD home-visiting programme in deep rural villages in southern Mozambique

Dr Glynis Clacherty<sup>1</sup>, glynis@clacherty.co.za, Sergio Chiale<sup>2</sup>, University of the Witwatersrand, Johannesburg<sup>1</sup>, CARE Mozambique<sup>2</sup>

CARE International, Mozambique developed a homevisiting programme built on ethnographic work on traditional parenting practices and beliefs and the contextual challenges of bringing up a young child in a deeply underdeveloped rural area. The intervention, started in 2013, focused on facilitating nurturing care but also included psychosocial support to caregivers and sharing life-saving health information with families. Building on the presence of traditional "Masungukate" (good advisors in the local Xitswa language) who advised young women, the programme trained a cadre of home visitors, which included men. They have each visited six families in their local neighbourhood at least once a week for the last four years. The implementation was documented through ongoing qualitative work. An impact evaluation was conducted using a quasiexperimental comparison group design with a control and experimental group at both baseline in 2014 and endline in 2016. The results showed high impact on maternal depression, social support, malaria prevention,

dietary diversity, positive discipline, stimulation through play and presence of a safe and hazard free home environment. The research provides important information about the value of home visiting ECD programmes especially in deep rural areas where the preschool model is not practical.

Early Childhood Resource Centre (ECDRC): A replicable model for initiating and sustaining ECD programs in remote and scattered mountainous communities Shahnaz Gul, shahnaz.gul@akesp.org, Aga Khan Education Services, Pakistan

This presentation reports on an intervention of the Aga Khan Education Service Pakistan (AKES,P) in northern Pakistan. This intervention focused on increasing accessibility of quality early childhood education services, particularly to girls, in the remotest valleys of Gilgit-Baltistan and Chitral (GBC). In 2016, AKES,P intervened by establishing 7 Early Childhood Resource Centres (ECDRCs), each located within an AKES,P school in GBC. These ECDRCs serve as a hub of support for surrounding public and private early childhood schools. The ECDRCs work closely with community-based and government schools and also AKHS,P. One ECD specialist is deployed at each ECDRC to provide teachers with classroom-based support, conduct awareness sessions for parents and caregivers, conduct trainings for teachers, and enrich and enhance the curriculum. In co-ordination with AKHS,P lady health visitors, also provide health education. These specialists have received extensive training from AKU-IED and HDP. They have trained 275 ECD teachers, and attracted 1,136 new children to the schools. 108 classrooms have been provided with ECD materials. By implementing child-centred High Scope approach, the classroom experience has significantly improved. This presentation shares details on the intervention through ECDRCs, the success stories, key challenges and lessons learnt.

#### Kidogo: A case study for providing high-quality, holistic early childhood care & education in Nairobi's urban informal settlements

Sabrina Habib, sabrina@kidogo.co, Kidogo Early Years

Kidogo is a social enterprise providing high-quality, holistic Early Childhood Care & Education in Nairobi's informal settlements using an innovative "hub & spoke" model. Our holistic programming focuses on 5 key components: (1) safe, stimulating environments that use local learning materials, (2) certified early childhood caregivers who have been trained on the importance of responsive caregiving and positive discipline, (3) play-based curriculum based on the KICD framework which emphasizes problem-solving and social-emotional learning, (4) a robust health and nutrition program, which includes nutritious meals, health checks and handwashing and (5) a child protection policy and training for caregivers on how to develop

safe environments for children both inside & outside of the centres. All programs are underpinned by strong relationships with parents and communities. To date, Kidogo has provided over 1 million hours of quality childcare and pre-school services and is changing the landscape of early childhood in Kenya's urban informal settlements.

## A qualitative assessment of an integrated early childhood development programme in Tanzania

 $Kate\ McAlpine, kmcalpine@email.fielding.edu,\ Fielding\\ Graduate\ University$ 

A qualitative study of the perspectives of Tanzanians who provide and use new community based early year's services for children. Eighteen narrative interviews were analysed using the classic grounded theory method. The results reveal gains across multiple and surprising domains. These include expected improvements in parental knowledge and educators' practice. There have been unanticipated shifts within the wider community towards self-organization. These take the form of cost sharing to sustain services, women's voice becoming clearer and more respected within the home, and young people volunteering to mentor children within the primary school system. This study reveals that a programme designed and directed primarily at young children and their care-givers has multiple positive pay-offs, in terms of wider community development and accountable governance. This evaluation reveals the immediate transformative power of early year's interventions in catalysing community collective action in the here and now; and in triggering positive changes in behaviour in groups from across the life-course; not just in young children and their families.

#### Assessment of pre-primary science learning environment and pre-primary school children's performance in science process skills in Ibadan, Nigeria.

Eileen Akintemi<sup>1</sup>, eileen\_akintemi@yahoo.com, Esther Oduolowu<sup>2</sup>, University of Ibadan<sup>1</sup>, University of Ibadan<sup>2</sup>

This study was carried out to determine the availability of science materials /equipment in preprimary classrooms and pre-primary school children's performance in the basic science process skills in Ibadan, Nigeria. Explanatory sequential mixed method research design was adopted for the study. The population comprised all pre-primary teachers and children in Oyo State, Nigeria. The sample was made of 20 teachers and 90 pre-primary school children from 10 public primary schools in Ibadan North Local Government Area, Oyo State, Nigeria. The teachers and children were drawn from the population using simple random sampling technique. Quantitative Data was collected using "Pre-primary Classroom Science Materials/ Equipment Checklist adapted from Tu (2006) and Science Process Skills Rating while Qualitative data was collected using interviews. Quantitative data was analysed using frequency counts, percentages, mean

and standard deviation. While qualitative data was analysed using content analysis. Results revealed that majority of the classrooms had no science corner for children to carry out informal science activities. The findings also revealed that in classrooms where there were science corners, relevant science materials and equipment were not adequate. Furthermore, all children were found to be deficient in the basic science process skills of observation, communication, classification, measurement, prediction and inference.

# Increasing the developmental potential of pre-primary aged children in Tanzania through improving the quality of early childhood education.

Ray Harris<sup>1</sup>, r.harris16@gmail.com, Magdalena Massawe<sup>1</sup>, (presenter), RTI International<sup>1</sup>

The Government of Tanzania has recognized the significance of early learning and implemented a new policy of one year compulsory, fee-free pre-primary education, as well as a new competence based preprimary curriculum, introduced in January 2017. The result is a net enrolment rate of 47% which is a significant increase over recent years. Although access has increased, quality has not, exemplified by the recent baseline study in Mtwara . This assessment highlighted the prevalence of teacher-centred pedagogy, few opportunities for children to work in pairs and groups, a lack of teaching and learning materials and poor literacy, numeracy and socio-emotional outcomes, as measured by MELQO. The Tusome Pamoja (TP) pre-primary intervention challenges this poor quality of education through a low cost strategy of supporting school and ward based professional development opportunities for teachers, providing a teaching and learning kit (including story books), working with parents on early stimulation, researching on locally defined socio-emotional learning and collaborating in a national policy dialogue. An endline assessment will help provide the lessons learned from the T P intervention, so as to inform the government on a cost- effective model to support pre-primary schools and teachers throughout the country to improve the school readiness of their pupils.

#### Parenting practices, childcare and family structure in rural Uganda as reported by parents and children: a cross sectional survey.

Daniel Wight<sup>1</sup>, danny.wight@glasgow.ac.uk, Godfrey Siu<sup>2</sup>, Flavia Zalwango<sup>3</sup>, Carol Namutebi<sup>2</sup>, Rebecca Nsubuga<sup>3</sup>, University of Glasgow<sup>1</sup>, Makerere University<sup>2</sup>, Uganda Research Unit on AIDS<sup>3</sup>

In low income countries there is little evidence on how family structure and parenting practices affect child outcomes, although diversity in the distribution of child care responsibilities is recognised. Furthermore, there are methodological concerns with much of the evidence that does exist. This poster will present patterns of family structure, child care and parenting practices in semi-

rural Uganda, reported by both parents and children, and identify predictors of positive and harsh discipline. It uses cross-sectional data from an evaluation of the Parenting for Respectability programme. Questionnaires were administered with 400 parents (219 mothers, 181 fathers) and 183 10-14 year old children (107 girls, 76 boys) in two sub-counties of Wakiso District, Uganda, within 40 kms of Kampala. The main measures had previously been validated in Wakiso. We will present findings on household composition, the sharing of child care, and parenting practices associated with child outcomes, including: parents' connectedness to their children; harsh parenting; parental monitoring; psychological control; material provision and modelling behaviour. We will examine how these parenting practices are associated with key socio-demographic and psychological variables. Preliminary findings show high levels of violent parental conflict which is associated with harsh parenting.

#### Are parenting practices associated with the same child outcomes in Sub-Saharan African countries as in high income countries? A systematic review.

Daniel Wight<sup>1</sup>, danny.wight@glasgow.ac.uk, Alison Devlin<sup>1</sup>, University of Glasgow<sup>1</sup>

The transfer of parenting interventions from high income to low income countries (H/LICs) is based on the premise that associations between parenting practices and child development or health outcomes are similar in both settings. However, little evidence exists on such associations in LICs. This review assesses the evidence from sub-Saharan Africa (SSA) to compare findings with HICs. Web of Science, ASSIA, Embase, IBSS and PsycINFO were searched for studies reporting associations between parenting practices or styles and child health or development-related outcomes. The World Health Organisation classification of parenting dimensions guided the synthesis. Forty-four studies met our inclusion criteria, conducted in 13 countries. They included cross-sectional and longitudinal studies and were predominantly descriptive. Associations between parenting practices (e.g. 'connectedness', 'behavioural control', 'harsh discipline') and child outcomes (e.g. sexual health, mental health and conduct disorders) in SSA are broadly similar to those found in HICs. The impacts of parenting practices on child outcomes appear similar across regions and, therefore, parenting interventions from HICs might be successfully transferred to SSA, subject to appropriate adaptation. However, a stronger evidence base is needed to confirm these findings and for the successful development and evaluation of parenting interventions in SSA.

# The impact of child rearing practices on young children's holistic development in Chivi district, Zimbabwe

Rose M. Mugweni<sup>1</sup>, ro.mugweni@gmail.com, Melody Matsvange<sup>2</sup>, Great Zimbabwe University<sup>1</sup>, Ministry of Primary and secondary Education, Zimbabwe<sup>2</sup>

This study explored the impact of child rearing practices on young children's holistic development in Chivi District, Zimbabwe. It is the responsibility of the community to see to it that children are raised appropriately. This study builds on earlier researches focusing on how families bring up their children. Bronfrenbrenner's Ecological theory guided the study. Qualitative methods were used to collect data from a sample of fourteen (14) early childhood development (ECD) parents, three (3) caregivers and thirty-six (36) ECD B children. Results indicated that most children in Chivi District come from nuclear families that are authoritarian, authoritative or neglectful. The data collected also revealed that in Chivi district raising children in extended families is no longer a common practice as it used to be in the past. A lot of factors were found to contribute to this extended family disintegration. It was also found out that authoritarian and neglectful parenting styles impacted on young children's total development as well as caregivers' use of both positive and negative techniques in handling children's behaviours. It is recommended that parents and caregivers should adopt positive child rearing practices and interact well with their children for positive development.

#### Neurocognitive Functioning of HIV positive children attending the Comprehensive Care Clinic at Kenyatta National Hospital: Exploring neurocognitive deficits and psychosocial risk factors

Otsetswe Musindo<sup>1</sup>, binaotis@live.com, Kigamgwa P<sup>1</sup>., Okoth R<sup>1</sup>., Kumar M<sup>1</sup>., University of Nairobi<sup>1</sup>

Neurocognitive deficits are one of the most significant long term effects on HIV infected children and adolescents. The aim of the study was to assess the neurocognitive function of HIV infected children ,and adolescents then correlate it with psychosocial factors. A cross sectional study was carried out involving a sample of 90 children living with HIV between 8-15 years (M=11.38, SD=2.06) attending Comprehensive Care Clinic (CCC) at Kenyatta National Hospital (KNH). Kaufman Assessment Battery for Children- Second Edition was used to assess cognitive function and psychosocial issues were assessed using HEADS-ED. Results: The prevalence of neurocognitive deficits among HIV positive children was 60% based on the KABC-II scores. There was no significant association between Mental Processing Index and viral load (p=0.056) and early ARV initiation (0.27). Using the HEADS\_ED, risks factors related to education ( $\beta = -5.67$ , p=0.02) and activities and peer support ( $\beta = -9.1$ , p =0.002) were significantly associated with poor neurocognitive performance. Cognitive functioning is not influenced

by severity of viral load, medication or early initiation in HIV care. However, it was related to challenges in educational and peer relations domains as assessed on HEADS-ED tool.

#### A Partnership for training caregivers to prevent Konzo disease from toxic cassava and enhance neurodevelopment in very young Congolese children

Michael J. Boivin<sup>1,2</sup>, boivin@msu.edu, Desire Tshala-Katumbay<sup>3</sup>, Esperance Kashala-Abotnes<sup>4</sup>, Michigan State University<sup>1</sup>, University of Michigan<sup>2</sup>, University of Kinshasa and the Oregon Health and Sciences University<sup>3</sup>, University of Kinshasa and University of Bergen<sup>4</sup>

Konzo is a distinct motor neuron disease caused by poorly processed cyanogenic cassava. Children from konzo areas present with poor neurocognition compared to those from non-konzo areas. Serum concentrations of oxidant and carbamoylating biomarkers significantly correlate with neuropsychological deficits. Our recent work has extended these findings to children as young as 1, suggesting that neurotoxicity may begin when children are weaned from breast milk to cassava porridge. The "wetting method (WTM)" was taught to rural women to minimize the amount of cyanogens in cassava flour prior. Working with the Ministry of Health in the DRC, we are launching a cluster (village) randomized controlled trial enlisting household food providers (mothers) who have been successfully trained in the WTM as peer trainers, training small groups of other mothers throughout a two-year period intervention for the safer processing of cassava for their families. Primary outcomes will be changes in cassava cyanogenic content and U-SCN in the children in their MISC/WTM versus WTM only intervention households. Secondary outcomes will children's neurodevelopmental performance. Outcomes will be measured at baseline, 6-month and 12-month time points. This presentation will focus on the nature of the intervention, the dsign of the study, and our anticipated outcomes.

#### Creating leaders from within the classrooms in an era of educational change: What they say v/s what we do in teacher preparation discourses

Shelina Walli, shelina.walli@aku.edu, Aga Khan University and University of Arizona

Pre-service teachers, given the opportunity, can explore factors that influence their learning. Scholars argue that allowing pre-service teachers engage in teaching practice and reflection of their learning, contributes towards formation of their changing identity as teachers (Blank, 2010; Janssen, Westbroek, Doyle & Van Driel, 2013; Mayer, 1999). Learning stories' allow pre-service teachers the ownership of writing about their experiences and the influences during the transition of identities (Beauchamp & Thomas, 2009; Hammerness, Darling-Hammond & Bransford, 2007). This paper presents findings addressing the question "How do early childhood pre-service teachers' learning

stories illustrate their processes of "becoming a teacher" and "being a teacher?" The paper highlights factors influencing Early Childhood Education pre-service teachers' learning, as expressed through their learning stories in a research project conducted at the University of Arizona. Data was collected through eight learning stories from each participant in two consecutive cohorts of Early Childhood Education pre-service teachers, and a discourse analysis process was followed to create themes using pre-designed codes as well as codes that emerged from the dynamic data over the analysis period. The paper further provides comparison to the pre-service teacher-training curriculum in Tanzania, highlighting considerations for capacity building in a global context.

# Embedding career readiness within the holistic development of early childhood

Juliana Seleti<sup>1</sup>, Juliana.Seleti@nwu.ac.za, Rosemary Cromarty<sup>1</sup>, North West University, Potchefstroom, South Africa<sup>1</sup>

This article focuses on how best to integrate career readiness into a holistic development framework which takes account of the personal characteristics, orientations, interests and strengths of the child. To enable this, practitioners and caregivers would need to be trained to identify the above traits in their children and to enhance them through various techniques and strategies designed for career readiness. This would entail a special pedagogy focussing on aspects such as social-emotional intelligence, and cognitive development. The key to harnessing early childhood opportunities for career readiness lies in the interactional space between adults and children. The paper will review various theories on career development and early childhood to distil the notion of career readiness for the target group (0-6 years). Economic arguments for investment in ECD focus on equalising educational opportunities and achievement in order to increase productivity for society. This is essentially creating a future workforce, for a healthy society. The paper concludes with recommendations for a career readiness component as part of the early childhood curriculum and for a research intervention in practitioner training that involves piloting such a component to be later evaluated by means of an impact study.

#### Global parent-child mental health program findings from China, Chile, Kenya and Peru: Cross-cultural capacity building at multi-sectoral levels for innovation and empowerment

Manasi Kumar, m.kumar@ucl.ac.uk, Guan Hongyan, Francisca Sofia Perez, Ines Bustamante, Paul Burns, Cecilia Brainbrauer

We present findings on child and adolescent mental health from China, Chile, Kenya and Peru that point to critical challenges around parenting, child caregiving environment and key social determinants of health such as poverty, gender-based violence, poor access to education, health, and exposure to HIV and other life-threatening conditions. Within this context, the system-level challenges in robust CAMH policy, adequate numbers of and well specialist service providers, social workers and health worker cadre are some of the wellknown barriers in establishing child and adolescent mental health services. The Global Parent-Child mental health program started in 2016 with funding from the University of Washington where Dr Brainbrauer developed a partnership model between researchers and practitioners from China, Chile, Kenya, Peru and US. The key partnership goal was to engage in-country and cross-country partners in CAMH capacity building in schools, community health centres, mental health clinics and hospitals through dialogue, information and knowledge sharing and exchange. This program developed over ten online lectures providing overviews of the field, some of them focusing on challenges within each country. With efforts at cross-cultural learning around common barriers, easily adaptable solutions and translational learning, the partners have engage with each other over a period of one year. Through interviews and project output we reflect on how empowerment and innovations can take place through collaborative learning, task-sharing and cross-cultural partnerships.

Indigenizing early childhood training: Rethinking early childhood teacher preparation approach in Uganda Godfrey Ejuu, godfreyejuu@gmail.com, Kyambogo University, Uganda

Research has already shown that quality early childhood programs can ensure optimal outcomes for children irrespective of their socio-economic status if they are delivered by quality caregivers. The process of arriving at quality caregivers has been a subject of debate dues to differences in what quality entails. Whereas quality caregivers can be made, the preparation system may also break them. To understand this study, a systems theory that uses systems thinking in a cultural context is applied. This study uses the survey design to explore the current teacher preparation approaches in Uganda and how it impacts on the quality of caregivers entrusted with delivering quality programs. Qualitative data got through interviews were obtained from a total of 12 purposively selected teacher educators and 24 caregiver trainees in three training institutions affiliated to the university. Findings indicate a rigid training program that is overly academic with less hand on activities for trainees that may be attributed to less skilled caregivers. It is recommended that more mentorship sessions adopted from indigenous apprenticeship practices be incorporated in teacher preparation programs with a more prolonged practicum period to grow teacher competence and quality.

#### Strengthening the 21st century educator

Amina Mwitu, amina.mwitu@akfea.org. Madrassa Early Childhood Program-Kenya

Madrasa Early Childhood Programme-Kenya (MECP-K) has over the years worked with early childhood teachers towards improving their pedagogical skills for better learning outcomes of children. The UWEZO reports indicate that literacy scores of children from coastal region are still very low. This could be attributed to teachers' competencies among other challenges. MECP-K developed a training model that has proved effective in improving teachers competencies. The model begins with conducting a teacher needs assessment to identify areas of challenges. Then training of educators is conducted using participatory and modern methodologies to ensure effectiveness. This is then enhanced with onsite support and mentorship. Mentorship is the core of the model since it's through practice and sharing feedback that skills are improved. Learning visits and reflection meetings are also conducted to promote cross learning among the teachers. Finally, the teachers are certified. The model also includes planning and reflection meetings with the government ECD officers to build their capacity as well as a sustainability measure. This model ensures the teacher is in a continuous state of learning and is able to deliver in complex and inclusive environment that is crucial for a 21st century teacher.

# Interventions for child protection from sexual abuse Ruth Walioli, ruthwalioli@gmail.com, Kenyatta University

Child protection is the process of protecting individual children identified as either suffering, or likely to suffer, significant harm as a result of abuse. This conference addresses the topic of child protection from sexual abuse drawn from research conducted by Walioli, Kang'ethe & Runo (2016) on 'Relationship between sexual abuse and learning among survivors of sexual abuse in early childhood in Nairobi County, Kenya'. Among the traumatic experiences in life, sexual abuse is one of the most detrimental to early childhood survivors. Worldwide, Child Sexual Abuse is a condemned vice. Societies throughout history endeavored to protect children from abuse as children were a treasured possession and resource. Today, the traditional African social system where the extended family protected children is no longer the norm. Mwiti (2006) reiterates that with growing urbanization, the extended family is fizzling out giving way to the nuclear family that doesn't quite enjoy the support, nurture and protection of a wider society. Consequently, care and protection of children is compromised rendering them vulnerable to CSA. Research shows that children need to be protected by adequate legislations, parental education, age appropriate life skills for children, and inclusion of life skills in teacher training and school curriculums.

Clinical characteristics of children with epilepsy managed at an urban hospital in Africa: a retrospective study Pauline Samia<sup>1</sup>, pauline.samia@aku.edu, Arwen Barr<sup>2</sup>, Kirsty Donald<sup>3</sup>, Jo Wilmshurst<sup>3</sup>, Charles Newton<sup>4</sup>, Aga Khan University<sup>1</sup>, Victoria University<sup>2</sup>, KEMRI-University of Cape Town<sup>3</sup>, WELLCOME, Kilifi<sup>4</sup>

Most children with epilepsy reside in resource-limited regions such as sub-Saharan Africa; where the majority of studies have been conducted in rural areas with limited investigations. A retrospective observational study was conducted involving review of medical records of children with epilepsy. A total of 426 patient records were included in this study, 260 males and 166 females. The most frequent age at presentation; documented in 29% was in infancy. Generalized seizures due to structural brain abnormalities were the most common form of epilepsy (28%) and Lennox Gastaut Syndrome was the most common electroclinical syndrome (7%). Brain atrophy was the most common MRI finding, occurring in a fifth of the population (20%). Half (50%) of all EEG recordings performed for this cohort were abnormal. A total of 16% of the patients had not visited the clinic for more than 12 months and were considered to be lost to follow-up. The highest frequency of epilepsy cases was documented in children less than one year of age. Significant morbidity due to early age of onset, identified etiologies, types of epilepsy and loss to followup is a possible long term outcome for these children.

# Childhood autism: Description of an African cohort Maureen Kanana<sup>1</sup>, maukan87@gmail.com, Christy Denckla<sup>2</sup>, Aga Khan University<sup>1</sup>, Harvard University, Broad Institute of MIT and Harvard<sup>2</sup>

Autism spectrum disorder is a neurodevelopmental disorder, evident from early childhood leading to significant health resource utilization and lifelong disability. A retrospective observational study was conducted involving review of medical records of children with Autism spectrum disorder. Among of 1,223 records of children seen at the neurology clinic 116 records were identified with ASD (9.4%). The male to female ratio among ASD patients was 5:1. The median age at presentation was 4 years. Almost all (95%) of families had the main concern as speech delay. Fifty three percent of the patients were classified as being at high risk of ASD on initial MCHAT evaluation. Epilepsy (20%) and ADHD (26%) were the most prevalent comorbidities. Expressive language delay was observed in majority (92%). Approximately half (54%) of these children had access to speech therapy. Children with ASD present late at the child neurology service with majority having expressive language delay and poor access to appropriate interventions. A higher than previously reported male to female ratio is observed in this cohort as well as co-morbidities that negatively impact on outcome for ASD patients.

## Plasma carbonic anhydrase II levels in children with sickle cell disease

Charlotte Midiwo<sup>1</sup>, cmidiwo@yahoo.com, Daniel Okun<sup>1</sup>, Samson Gwer<sup>1</sup>, Gordon Ogweno<sup>1</sup>, Kenyatta University, Nairobi<sup>1</sup>

Erythrocyte carbonic anhydrase II (CA-II) causes acidification of the red blood cell, triggering dissociation of oxygen from oxyhemoglobin. Mutant hemoglobin S favors sickling in this hypoxic state. We sought to determine the relationship between plasma levels of CA-II and the sickle cell disease (SCD) state and related clinical complications. We enrolled 20 children with SCD (12 males and 6 females) and 20 gender matched controls. CA-II levels were determined by enzyme linked immunosorbent assay (ELISA). We applied the Student T test to determine differences in CA-II levels between cases and controls, and between SCD children with complications and those without. The mean CA-II levels were significantly elevated in children who suffered from sickle cell disease (116.4±50.03ng/ml) compared to healthy controls (77.6±42.29ng/ml) (p=0.0001). CA-II mean levels was significantly enhanced in children who suffered from clinical complications of sickle cell disease (126.1±51.3ng/ml) compared to healthy controls  $(79.8\pm12.5 \text{ng/ml})$  (p=0.0001). CA-II is elevated in children with SCD likely on compensatory blood gas transport mechanisms. CA-II appears to be associated with clinical complications in SCD and may help predict clinical course and guide optimal and timely interventions.

# Social dimensions of Sickle Cell Disease: unmet palliative care need in Homa Bay, Kenya

Meshack Liru<sup>1</sup>, lirumeshack@gmail.com, Macharia William<sup>2</sup>, Gaily Sealy<sup>3</sup>, Omoroh Florence<sup>1</sup>, Lynette John<sup>1</sup>, Kasera Caren<sup>1</sup>, Homa Bay County Referral Hospital<sup>1</sup>, Aga Khan University Hospital<sup>2</sup>, Shikuri Charitable Trust<sup>3</sup>

Psychosocial discrimination in the school and home environment for children with Sickle Cell Disease (SCD) has not received much attention. The current study aimed to describe the social aspects of children with SCD in Homa Bay County. A cross-sectional descriptive study involving 100 children between 3-18 years with confirmed SCD from Homa Bay County Referral Hospitals' database was conducted. Children and their caregivers were interviewed. Analysis revealed that out of the 96 school going children, only 17% participated in sports. A significant majority, (92%) of the children were not assigned leadership roles as compared to their peers in class, because of a compromised capability perception by their teachers. Most of the children (36%) spent as much as three months away from school seeking treatment. 24% had obnoxious nicknames associated because of their condition. None of the children received psychosocial palliative care of any kind. Findings revealed that social discrimination towards children with SCD is common. Teachers underestimate their leadership potential. The study has implications psychosocial

palliative care at home, school and health facilities.

# Exploring perception and practices of mothers regarding exclusive breast feeding

Sana Shamsher Ali, sana\_karachiest@hotmail.com Aga Khan University

The World Health Organization recommends exclusive breast feeding (EBF) for the first 6 months. EBF provides for healthy growth and immunity for infants. Unfortunately, EBF rates are low globally. National nutrition survey Pakistan (2011), reports only 9.6% EBF rates in Sindh. The purpose of this research was to explore attitudes and practices of mothers towards EBF and identify factors that hinder EBF. This was a qualitative, cross sectional study conducted in Karachi. Participants were 10 mothers (6 housewives and 4 employed) who have given birth in the last two years. Semi structured IDI guide was used to collect data. Each IDI took 30-40 minutes and was audio taped. Interviews were transcribed on MS-word and entered in NVivo. Interviews revealed that all mothers were aware of the benefits of EBF, 8 mothers had EBF till 6 months. These mothers identified that support of close family members an important motivational element for EBF. Data shows 2 mothers stopped EBF because of perceived diminished feed. Other problems identified were body pains and cracked nipples. This study revealed that no major factors hinder EBF. It is recommended that perceived hindrances to EBF should be explored on large scale and mothers should be educated regarding these.

#### Perspectives regarding antenatal care, delivery and breast feeding practices of women from Baluchistan, Pakistan

Aneeta Khoso¹, aneetakhoso@gmail.com, Ayesha Zahid Khan², Sayeeda Amber Sayed³, Ghazala Rafique² (Presenter), Liaquat National Medical College, Karachi, Pakistan¹, Aga Khan University, Karachi, Pakistan², University of Calgary, Canada³

Antenatal Care (ANC) is a fundamental right for women to safeguard their health. Neonatal mortality rates have remained relatively static, compared to the decline in infant and under 5 mortality rates, adverse practices regarding breast feeding and pre-lacteal feeds being the important factors responsible. This study aimed to explore the ANC, delivery and breastfeeding practices in three districts of Baluchistan, Pakistan. It was a qualitative phenomenological design using Constructivist approach, conducted in three districts of Baluchistan province, Gwadar, Quetta, Qila Saifullah. There were a total of 14 Focus Group Discussions with women regarding ANC, delivery and Breastfeeding practices, followed by audio taping, transcription as verbatim and analysis through Nvivo version 2. Across the sites, women attended ANC clinics at least once, preferring Dais instead of doctors, due to the affordability, customs and availability. A lack of trained doctors and long distances to get a check-up led to home deliveries. Colostrum was discarded by majority of the mothers,

while prelacteal feed was a common practice. This paper explores factors affecting ANC attendance, delivery and breast feeding practices across three settings. Both the demand and supply side factors have an important influence on practices.

# Social franchising models to improve early childhood in Nairobi's Informal Settlements

Sabrina Habib<sup>1</sup>, sabrina@kidogo.co, Stella Mbugua<sup>2</sup>, Ruth Muendo<sup>3</sup>, Kidogo Early Years<sup>1</sup>, Aga Khan Foundation<sup>2</sup>, Aga Khan University<sup>3</sup>

In Nairobi's informal settlements, the majority of working mothers rely on unlicensed 'babycare' centres run by untrained local women for childcare during the working day. These centres are unregulated, lack any supervision or standards, and are often plagued by unsafe & unstimulating environments that hinder the development of young children. In 2016, The Babycares Consortium was established as a partnership between the Aga Khan Foundation, Kidogo and the Institute for Human Development at Aga Khan University with funding from the Hilton Foundation. The overall goal of the consortium is to develop a holistic and financially sustainable social franchising model to improve the quality of childcare in the urban informal settlements (slums) of Nairobi. Over the course of 12 months, the partners piloted social franchising models in 3 different low-income communities across Nairobi, and captured the results in an engaging 20-minute documentary. The documentary has been used as an advocacy tool with local policy makers, civil society actors, and private sector leaders to build a common understanding of the challenges of low-income parents, and form an interinstitutional response to addressing the childcare crisis in these informal settlements.

#### Reaching Syrian refugee parents with VROOM brainbuilding activities through digital media

Katelin Wilton<sup>1</sup>, katelin.wilton@rescue.org, Marika Shioiri-Clark<sup>1</sup>, Katie Maeve Murphy<sup>1</sup>, International Rescue Committee<sup>1</sup>

Over 3.7 million Syrian children have been born since the start of the Syria crisis. Faced with compounding stress factors due to war and displacement, parents of these children often struggle to provide the high-quality care and age-appropriate stimulation necessary to build resilience and protect children from the negative effects of toxic stress. Parenting programs have been shown to be effective in improving parent-child interactions but such programs are costly to scale due to high human resource costs. To address this, the International Rescue Committee (IRC) has been exploring the use of mobile phone-based strategies to promote improved parentchild interactions in crisis contexts. Using the U.S.-based Vroom application, the IRC authors tested dissemination strategies for Vroom's bite-sized brain building games and activities using various digital media platforms such as SMS, Facebook, WhatsApp, and an Android mobile

application. This media display will highlight research conducted in Jordan and Lebanon from 2016-2017, and will be composed of original short video prototypes (4 animated, and 3 Live) which demonstrate Vroom activities. Additionally, infographic-style slides will present the results of the research.

#### Optimizing the potential of children with neurodevelopmental disorders in low resource areas Charles Newton<sup>1,2</sup>, newton@kemri-wellcome.org KEMRI-Wellcome Collaborative Programme<sup>1</sup>, Kilifi, Kenya & University of Oxford, United Kingdom<sup>2</sup>

Children with neuro developmental disorders can lead a fulfilling life, but they often do achieve their full potential, since interventions to promote their development are not prioritised. Early intervention is beneficial in the high resource areas, but requires early detection, which is difficult to achieve in low resource areas. Interventions started later in life can improve the quality of life, not only on the affected child but the family as well. Interventions for children with neurodevelopmental disorders should be aligned with the United Nations Convention on the Rights of the Child and the Convention on the Rights of People with Disabilities. They entail the inclusion of children with neurodevelopmental disorders in community activities, so as to promote acceptance and the reduction of stigma. Interventions are more successful if they are administered in all environments that the child encounters: home, educational and health facilities, and the community. This involves a partnership between the child, carer and family members, interacting with personnel from educational, social and healthcare services. Interventions should target the whole family, not just the child. They do not need a confirmed medical diagnosis, but rather focus on maximizing the child's abilities, and promoting acceptance in society. The interventions need to change according to the stage of life and resource availability.

#### Co-constructing participation to enhance the value of developmental science in context: case studies of ECD interventions in Zambia

Robert Serpell, robertnserpell@gmail.com, UNZA Institute for African Studies, Zambia

How can developmental scientists, policymakers, professional practitioners and local communities together generate effective and sustainable enhancement of young children's developmental opportunities? Two different, large-scale intervention programmes in Zambia will be discussed: the Child-to-Child approach to health promotion (1986-97); and use of indigenous languages for initial literacy instruction (1997-2013). Each was designed to apply psychological principles to the support of Early Childhood Development. Deliberate attempts were made to scale up effective practices. International funding was channeled into adaptation of technical instruments to the local socio cultural context.

Training and orientation were offered to professionals and administrators. Effective implementation and longer-term sustainability of the interventions called for coordination among different stakeholder groups, at the interface between scientific reasoning, indigenous culture, professional practices and administrative policies. Key processes for addressing those challenges were cooperative communication, participatory appropriation and institutional transformation.

#### Potential for enhancing child development through integration of ECD interventions into core health services/systems: Findings and lessons learned from Tanzania, Malawi, and Mozambique

Roland van de Ven<sup>1</sup>, roland@pedaids.org, Evelyn Udedi<sup>2</sup>, Debjeet Sen<sup>3</sup>, Elizabeth Glaser Pediatric AIDS Foundation<sup>1</sup>, UCLA-Malawi Project<sup>2</sup>, PATH<sup>3</sup>

"Traditional" early childhood development (ECD) programs target older children in preprimary education settings and miss the period from pregnancy through a child's third birthday, when brain development is most rapid. In the early years, the health system is often the only means to reach children and their caregivers with services that promote ECD: counseling on responsive care giving and age-appropriate stimulation, screening for developmental milestones, and referral for developmental delays. University of California Los Angeles/Partners in Hope (UCLA/PIH) is providing ECD interventions through routine HIV services in Malawi, while the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) in Tanzania and PATH in several African countries are using a systems-based approach to provide ECD services through the health system. EGPAF's baseline survey underscores the critical need for the health system to provide ECD services, while results from work by UCLA/PIH and PATH demonstrate high degree of feasibility and acceptability of ECD integration.

#### Systems approaches to nurturing care

Lisa Bohmer<sup>1</sup>, Lisa@hiltonfoundation.org, Aisha Yousafzai<sup>2</sup>, Bernadette Daelmans<sup>3</sup>, Vichael Silavwe<sup>4</sup>, Conrad N. Hilton Foundation<sup>1</sup>, Aga Khan University, Karachi, Pakistan<sup>2</sup>, WHO<sup>3</sup>, Ministry of Health, Lusaka, Zambia<sup>4</sup>

This plenary panel will bring together perspectives from research, policy and practice to examine opportunities and challenges to operationalizing nurturing care and to discuss new ways of working together to achieve this goal. Lisa Bohmer of the Conrad N. Hilton Foundation (who brings the donor perspective will facilitate the panel. Vichael Silavwe from the Ministry of Health in Zambia will discuss implications for integration as part of the health system; panelist will discuss integration opportunities as part of the social welfare/child protection system; Bernadette Daehlmans of WHO will address the policy perspective; and Aisha Yousafzai of Harvard University will speak on the research

perspective. This panel will build upon the panel from earlier in the day that showcases NGOs working closely with Ministries of Health to integrate stimulation and responsive care as part of the health system – starting with pilot efforts that are expanding (usually within a particular district, province, county or region. The panel will discuss how practice, policy and research come together to help us achieve the goal of fully integrating quality programming as part of existing systems.

## How to bridge the scaling up gap using implementation science

Mark Tomlinson, markt@sun.ac.za, Stellenbosch University, South Africa

One of the consequences of the renewed interest in and focus on early child development is likely to be a demand from community-based organisations and governments for models of implementation and scale up that will ensure that limited resources are used judiciously. Translating evidence for the efficacy of intervention into real-world effectiveness is complex. In this presentation I will draw on a case study of Philani (a maternal and child health intervention implemented in South Africa), and outline eight lessons for programming that I believe offer promise for early child development programming in Africa

# Taking the toxic stress out of early childhood toxic stress: we all can help!

Jane West, jane@thwtwolilierfund.org, Heart of the West Counseling, Clarity Jane Productions

Much is becoming known about the short term and long term consequences of toxic doses of stress during early childhood. Indeed those among us with an early chronic experience of psychological adversity indeed constitute a vulnerable population in need of protection. In this session, we will cover what is known about this new term, toxic stress, and why exposure to it in early childhood is so dangerous for the long-term health of individuals and society at large. We will spend time on what the latest research and practice is showing adults can do to protect children from high risks and stressors so they can handle the adversity in their lives in a resilient way. We will discuss concrete strategies that can be tried in early learning classroom and embedded in early interventions efforts such as home visitation programs. It is hoped that participants will join in a discussion of what is going on to "buffer" the effects of toxic stress in their own communities so that successful strategies can be made available to all.

#### Assessment of neuro-developmental outcomes in infants and children born to diabetic mothers using Ages and Stages Questionnaires

Hina Aziz<sup>1</sup>, Rozina Nuruddin<sup>1</sup>, Nuruddin Muhammed<sup>1</sup>, nuruddin.mohammed@aku.edu, Iqbal Azam<sup>1</sup>, Muneera Rasheed<sup>1</sup>, Aga Khan University, Karachi<sup>1</sup>

Hyperglycemia in pregnancy (HIP) may lead to programming of certain brain loci and altered neurodevelopment. We assessed association between HIP and neurodevelopment of infants and children using Ages and Stages Questionnaires. Exposure to HIP was determined from antenatal records of the Aga Khan Hospital Karachi. Neurodevelopmental assessment of 155 children aged 4 to 36 months was performed in 5 domains (Communication, Gross Motor, Fine Motor, Problem Solving, and Personal-Social) using Ages & Stages Questionnaire and overall health assessment by using Multiple Indicator Cluster Surveys Questionnaire. In HIP group (n=72), aggregate neurodevelopment scores were significantly lower 214.72 (SD=41.94) compared to in non-diabetic group [235.96] (SD=42.73) (p value 0.002)]. Their other impaired domains were gross motor (p value 0.001), personal social (p value <0.001), and communication (p value 0.019). After adjustment for relevant maternal and child factors, HIP was associated with altered aggregate neurodevelopment (β-coeff -26.65, 95% CI: -41.09, -12.20), communication ( $\beta$ -coeff -6.19, 95% CI: -10.62, -1.75), gross motor (β-coeff -7.69, 95% CI:-11.80, -3.57), and personal social ( $\beta$ -coeff -6.73, 95% CI:-10.99, -2.47) domains. HIP is associated with altered neurodevelopment in infants and children independent of maternal and child characteristics. We recommend that children born to diabetic mothers should undergo routine neurodevelopment assessment during preschool age.

# Promoting early literacy in Pakistan: An exploration of teachers blended learning, field-based professional development experiences

Almina Pardhan, almina.pardhan@aku.edu, Aga Khan University-Institute for Educational Development, Pakistan

This study explored teachers' experiences in a training to promote early literacy development in two linguistically diverse contexts of Pakistan, Karachi and Gilgit. While Pakistan is experiencing reforms in early childhood education, few early childhood teachers have the necessary knowledge, skills and/or confidence to effectively implement early literacy strategies in their settings. Early literacy training for teachers is inadequate, and teaching practices provide less than optimal support for early literacy development. To address this, an early literacy blended learning, field-based training programme was undertaken as part of a small-scale research intervention. Eleven teachers were trained in early literacy content knowledge and pedagogy with on-site mentoring support. Data

were drawn from interviews, observations and a questionnaire, and analyzed identifying themes concerning the influence of the training on the teachers' early literacy content knowledge and practice. Findings indicate enhancement of practice and sense of professionalism through the training; mentoring was associated with growth in knowledge, skills, and confidence. Teacher practice demonstrated how the classroom environment, social climate, and pedagogy supported early literacy development. Blended learning allowed teachers to share teaching knowledge across diverse geographical contexts and school systems. The paper has important implications for blended learning and for field-based professional development as a quality investment for early literacy development.

# ECD workforce development using the science of early child development (SECD): Reflection on the promotion and delivery of SECD courses, seminars, and workshops in the field,

Najma Rashid<sup>1</sup>, najma.rashid@akfea.org, Leonard Chumo Falex<sup>2</sup>, AKF East Africa<sup>1</sup>, Aga Khan University Institute for Human Development<sup>2</sup>

Science of Early Child Development (SECD) is a knowledge translation and mobilization initiative designed to make current research accessible to anyone interested in learning more about the impact of early experience on lifelong health and well-being. In collaboration with Conrad N. Hilton Foundation, the Aga Khan University Institute for Human Development has been offering a range of courses and seminars since 2014 to participants from community based and civil society organizations, academia, medical institutions, UN and governments agencies. SECD targets to empower the workforce providing the much-needed range of services, advocacy and policy enhancement that ensures all children have access to quality early years services. Since 2014, AKU IHD has reached over 400 ECD workforce in East and Southern Africa and continues to do so recognizing the significance of building capacity of those who work with children and families. This paper is a reflection on the experience promoting and delivering SECD courses, seminars, and workshops in the field using the SECD.

# Promoting early childhood development in marginalized communities with embedded refugees: A systematic literature review of evidence-based intervention approaches

Linlin Zhang<sup>1</sup>, llin.zhang@utoronto.ca, Tina Malti<sup>1</sup>, Marie-Claude Martin<sup>1</sup>, Stephen Lye<sup>1</sup>, Greg Moran<sup>2</sup>, Amina Abubakar<sup>3</sup>, Kofi Marfo<sup>4</sup>, University of Toronto<sup>1</sup>, Western University, Canada<sup>2</sup>, Pwani University<sup>3</sup>, Aga Khan University<sup>4</sup>

Like other populations of children growing up in marginalized communities, refugee children in informal settlements are exposed to multiple risk factors, such as poverty, violence, and poor access to services. They

are likely at high risk for sub-optimal developmental outcomes. Therefore, there is an urgent need to identify effective early interventions to optimize their developmental potential. We present an updated systematic review of early childhood interventions in low and middle income countries (LMICs) to inform such interventions. Building upon previous reviews, we examined research on ECD interventions in LMICs published since 2015. The goal was to extend our knowledge of ECD interventions in LMICs, especially in marginalized settings with embedded refugees. Various types of interventions, such as nutrition and health, parenting, education, maltreatment, protection, and social protection, were searched in electronic databases and specialized websites. An initial screening of 13,440 records showed interventions in the area of nutrition and health were most frequent, followed by parenting, education, maltreatment protection, and social protection. Our review did not identify ECD interventions for refugee populations in LMICs. We will discuss opportunities and challenges in adapting integrated effective ECD interventions in refugee settings.

The effects of early childhood stimulation interventions on maternal parenting outcomes in low and middle-income countries: a systematic review and meta-analysis Joshua Jeong¹, jjeong@mail.bu.edu, Helen Pitchik², Aisha Yousafzai¹, Harvard University¹, University of Carlifornia²

Early childhood stimulation interventions targeting children during the first few years of life have demonstrated robust positive effects on various early child development (ECD) outcomes in lowand middle-income countries. However, trials have less comprehensively evaluated the benefits of such parenting programs on mothers' caregiving skills and capacities. We conducted a systematic review and meta-analysis to assess the effectiveness of stimulation interventions on improving parenting outcomes. We searched six electronic databases, and 14 randomized controlled trials met the inclusion criteria and evaluated at least one parenting outcome. Pooled standardized mean differences based on random effects models revealed moderate to large benefits of stimulation interventions for improving the home caregiving environment (n=10; d=0.57; 95% CI: 0.37-0.77), motherchild interactions (n=3; d=0.44; 95% CI: 0.14-0.74), and maternal knowledge of ECD (n=6; d=0.91; 95% CI: 0.51-1.31). No significant difference was seen for maternal depressive symptoms (n=9; d=-0.10; 95% CI: -0.23-0.03). Considerable heterogeneity in effects was detected in all four outcomes. Early child stimulation interventions benefit several distinct aspects of maternal parenting. Improvements in parenting capacities may serve as the primary mechanisms by which these programs positively affect ECD outcomes.

# Predictors of cognitive development in young adolescents in a low-middle income country

Sarah Skeen<sup>1</sup>, skeen@sun.ac.za, Barak Morgan, Peter Cooper, Lynne Murray, Ben Rogers, Robert Weiss, Mark Tomlinson<sup>1</sup>, Stellenbosch University, South Africa<sup>1</sup>

There is a lack of research on cognitive development in low and middle income countries, particularly during the adolescent years. We report on predictors of cognitive development in a sample of 13 year olds who have been enrolled in the long term follow up of a randomised controlled trial (RCT). From 1999 to 2003 we conducted an RCT to test an intervention, which was developed to improve maternal sensitivity and responsiveness and child attachment status in mothers and their infants in South Africa. Over the period 2012-2014 we re-enrolled the children from the original sample of mother-child pairs. Of the 449 original subjects, 333 returned for follow up at 13 years and KABC scores were recorded on 330 participants. There was no intervention effect on cognitive performance. Higher scores were predicted by male gender, maternal employment and maternal education. Other predictors, such as exposure to community violence, showed more sporadic associations across the different KABC subscales. This is one of the only long-term follow up studies of a maternal-infant intervention in South Africa. Predictors of cognitive development included maternal employment, education and male gender. Reasons for this and implications for future research will be discussed.

#### Combining agribusiness training and skillful parenting to reduce violence against children in impoverished communities in rural Tanzania: A small-scale cluster randomized controlled trial.

Jamie Lachman<sup>1</sup>, jamie.lachman@spi.ox.ac.uk, Joyce Wamoyi<sup>2</sup>, Jane Maganga<sup>2</sup>, Spreckelsen Thees<sup>1</sup>, Danny Wight<sup>3</sup>, Gardner Frances<sup>1</sup>, University of Oxford<sup>1</sup>, Tanzania National Institute for Medical Research<sup>2</sup>, University of Glasgow<sup>3</sup>

This study uses a small-scale cluster randomized controlled trial to examine the effects of parenting and economic strengthening programs in order to reduce the risk of violence against children in farming communities in northern Tanzania. Participating rural villages were randomly assigned to either a parenting program, an agribusiness training program; a combination of parenting and agribusiness programs; or a 1-year wait-list control (N = 8 villages, 248 families). Primary outcomes assessed at baseline, mid-treatment, and 1-year post-intervention included child maltreatment, positive parenting, and attitudes towards corporal punishment. Secondary outcomes included parent/child mental health, economic strengthening, and early childhood development. Villages receiving the parenting program component showed reductions in child maltreatment in comparison to controls. Parents receiving the combined interventions also reported reduced acceptability of corporal punishment. Villages receiving only the

agribusiness component reported reduced household poverty but increased physical abuse and reduced positive parenting. Results suggest that while parenting training alone may be sufficient to reduce child maltreatment, the combined programs reduced additional risk factors for maltreatment. Furthermore, agribusiness training delivered alone may have a harmful effect on parent-child relationships. Further refinement is recommended prior to scaling up the intervention.

Perceived program impact of a combined skillful parenting and economic strengthening intervention on parent-child interaction and child maltreatment: Implications for understanding processes of change in parenting interventions

Joyce Wamoyi<sup>1</sup>, Jwamoyi@gmail.com, Jamie Lachman<sup>2</sup>, Jane Maganga<sup>1</sup>, Aniseth M, Gardner Frances<sup>2</sup>, Danny Wight<sup>4</sup>, Tanzania National Institute for Medical Research<sup>1</sup>, University of Oxford<sup>2</sup>, University of Glasgow<sup>4</sup>

This study investigated the perceived impact of the combined Skillful Parenting and Agribusiness (economic strengthening) programmes in Tanzania, and explored how the parents' experience of the intervention led to change in their parenting behaviour. Participants were randomly assigned to one of four conditions: (a) 12-session group-based parenting program; (b) agribusiness training; (c) a combination of parenting and agribusiness programs; (d) 1-year wait-list control. Eight focus groups were conducted immediately after the completion of skillful parenting intervention sessions. Parents' main motivation to enroll in the parenting intervention was to learn new and friendly parenting techniques. Majority of parents experienced positive changes in their families and communities as a result of the intervention. They reported reduced marital conflict and improved parent-child communication and problem solving within their households. Participants discussed the benefits of the economic strengthening component as having improved household income and food security. Building the skills of parents and enhancing their economic capabilities could reduce child maltreatment. Policies and parenting interventions should utilize a combined approach that addresses poor parenting skills as well as economic vulnerability.

First steps towards quality early childhood care and development through holistic parenting education: randomized control trial in Ngororero District, Rwanda Caroline Dusabe<sup>1</sup>, Caroline.Dusabe@savethechildren.org, Monique Abimpaye<sup>1</sup>, Lauren Pisani<sup>1</sup>, Save the Children<sup>1</sup>

First Steps project is a holistic parenting education intervention aiming to equip parents with the skills, attitudes and knowledge to support their children's holistic development with emphasis on cognitive development. The project targets families of children aged 0-3 years in Rwanda. This paper will share learning and outcomes from implementing 3 different modalities of the First Steps program, highlighting

the most cost-effective and scalable approach for improving parenting practices, child development milestones, and emergent literacy promotion in the home. The project implemented a randomized control trial where families were assigned to receive either the full package, light package or serve as control group. Multivariate regressions were used to analyze child development outcomes and parents' skills, attitudes and practices using data from baseline, midline and end line evaluations to determine which, if any, changes in child development outcome can be attributed to the intervention. The study found strong positive effects of the First Read program. Specifically, children whose parents reported engaging in more play and stimulation activities had a greater likelihood of meeting the developmental milestones for their age than children whose parents engaged with them less frequently. One of the intervention types has proven more cost effective and scalable

# Meeting the training needs of ECD cadres: Findings from a study of global expert perspectives

Emma Pearson<sup>1</sup>, emma.pearson@bishopg.ac.uk, Helen Hendry<sup>1</sup>, Nirmala Rao<sup>2</sup>, Bishop Grosseteste University<sup>1</sup>, University of Hong Kong<sup>2</sup>

This paper reports on a Delphi study of expert consensus on training needs for ECD cadres working in low-resource contexts. Fourteen global experts in the field of ECD participated in three Rounds of data collection designed to achieve consensus among the expert group on key aspects of ECD cadres training, measured via ranked statements about desirable dispositions, essential skills and knowledge, training methods and training systems. Findings indicate consensus on points of convergence and distinction in training needs of different groups of ECD cadres. These are reflected in expert views on desired dispositions; essential skills and knowledge, and appropriate methods and materials and training for different groups of cadres. Strong consensus around the need to prioritise the needs of children in ECD delivery was evident in each round of data collection. These include a focus on children's well-being, inclusion and diversity, cultural responsiveness, relationship building and reflective practice. Results provide important insights into strategies for strengthening delivery of ECD training through integrated systems, including key underpinning principles; content and delivery mechanisms.

# The beginning of life: An innovation in global advocacy for early childhood development.

Roberta Rivellino<sup>1</sup>, roberta@fmcsv.org.br, Manuela Parisi<sup>1</sup>(presenter), Fundação Maria Cecilia Souto Vidigal Foundation<sup>1</sup>

Sensitize and mobilize society on the importance of Early Childhood, through an audiovisual tool that translates science in an emotional and engaging way. That was the goal of producing the documentary The Beginning of Life, which brings to life the science behind the importance of loving relationships in a child's early years, with expert interviews illustrated by footage of parents and children from nine countries across four continents. Powered by an innovative distribution platform - Video camp, an online catalog of movies and documentaries focused on causes, which allows anyone, anywhere to promote a free screening. The Beginning of Live generated a greater level of exposure and debate in homes, schools, hospitals, public spaces, and was adopted by professionals and leaders all around the world, helping transform a film into a movement. The documentary was idealized by Maria Cecilia Souto Vidigal Foundation, and co-funded in partnership with Alana Institute, Bernard van Leer Foundation and UNICEF, and represented a successful case of collaboration between these organizations to strengthen the cause worldwide. More than a film, it became a movement!

# Comparative analysis of ECD policies in Anglophone and Francophone African countries

Ajayi Hannah Olubunmi<sup>1</sup>, lordofhost2013@gmail.com, Okewole Johnson Oludele<sup>1</sup>, Adeyele Victoria Olubola<sup>2</sup>, Obafemi Awolowo University<sup>1</sup>, Ikere Ekiti College of Education<sup>2</sup>

Early childhood development is a global project in the Education for All (EFA) campaign embarked upon in the Sustainable Development Goals (SDGs) taken up after Millennium Development Goals. Hence, every nation prepared a roadmap of action-policy- to serve as a guide. It is therefore expedient to examine the journey so far with ECD in different countries (developed, developing and possibly under-developed) in order to ascertain the place of the child in the global agenda. The paper is therefore an analytical review of policy on ECD in some West African countries in comparison with some developed nations. Four West African countries were selected based on the linguistic classifications of Anglo and Francophones. These are Nigeria and Ghana as Anglophone; Senegal and Cote d' Voire as Francophone. Two nations from the developed world, namely America and United Kingdom were also selected. Five objectives were formulated for the study as follows: examine and compare the contents of the policy in each country, assess and compare the implementation procedures in each country, determine the achievement so far, examine and compare the challenges in the implementation and achievement; and analyse the way forward, with the

view to informing decision making in early childhood development globally in the post- millennium ECD agenda.

# Stimulating interest in early childhood care and development: Focus on the role of fathers

Caroline Ruoro<sup>1</sup>, caroline.ruoro@plan-international.org, Moth Pritchard<sup>1</sup>, Plan International Kenya<sup>1</sup>

Plan International is implementing an Early Childhood Care and Development project in Kenya utilizing a Community-Led Action for Children (CLAC) approach that integrates a component of positive parenting delivered through interactive education sessions for caregivers. Confronted initially with limited male participation (17%), the project crafted creative interventions to improve male participation including (1) introduction of fun and play activities for fathers and their children (dubbed Fathers' Day Out); (2) establishment of fathers-only group sessions (to complement ongoing joint sessions for both parents); (3) introduction of a Voluntary Savings and Loaning Association within parenting groups to infuse economically-viable activities into the parenting activities; and (4) provision of branded IEC materials to motivate fathers and highlight their roles as ambassadors. Consequently, the project's male participation has doubled to 34% (2017), resulting in male caregivers' active participation in children's learning and growth. The project seeks to further consolidate gains made and to inform those strategies and incentives that best motivate behavior change in fathers' and a shift in community gender norms. It also offers insights on how these changes actually impact fathers' direct connection and communication with their young child.

# Teachers' quest for gender equity: Exploring the possibilities of transforming an early childhood classroom in Karachi, Pakistan

Nasima Zainulabidin<sup>1</sup>, nasima.zainulabidin@aku.edu, Dilshad Ashraf<sup>1</sup>, Aga Khan University<sup>1</sup>

This paper presents the preliminary findings of a Collaborative Action Research (CAR) conducted in an early childhood classroom in Karachi, Pakistan. Along with the first author, two early childhood teachers and 43 five-year old children (23 girls and 20 boys) participated in the study. Data were collected using in-depth interviews, observations, post-observation discussions, dialogues, field notes, and reflective journals over a four-month long data collection period. The analysis of the talks, actions and interactions of both teachers and children revealed a number of gender stereotypical discourses. However, both the participating teachers were critical of the role teachers and school environment can play in transforming the discriminatory gender norms perpetuating in the society. The paper discusses how both participating teachers positioned themselves for transforming classroom discourses by

disrupting the processes of promoting stereotypical masculine and feminine traits and oppressive gender relationships among children in the classroom. Further, this paper calls for explicit integration of gender equity perspective in teacher preparation programs and education policies to meet the global and national targets around equitable access and participation of all learners in early childhood education.

#### Child protection and very young children: Findings and next steps from an ethnographic study in Siaya County, Kenya

Damaris Wambua<sup>1</sup>, dkwambua@ChildFund.org, Eunice Kilundo<sup>1</sup>, Ken Ondoro<sup>2</sup>, ChildFund Kenya<sup>1</sup>, African Research and Development<sup>2</sup>

Child protection interventions have long taken a blanket view of children, giving little focus to infants and young children (IYC) of 0-5 years, who are particularly vulnerable because of their low visibility in social spaces as well as their sole reliance on parents and caregivers to protect them. The aim of this study was to explore the child protection situation for infants and young children in two villages in Siaya County, Kenya. The research focused on identifying the child protection risks confronted by IYC, community responses, and responses from both informal and formal child protection systems. Twenty-five (25) in-depth interviews, seventeen (17) focus group discussions, and twenty-seven (27) key informant interviews were conducted with community members and individuals at county level as well as body mapping activities with 66 children aged 3-5 years. Primary risks identified for IYC were neglect, poor parental care, and domestic violence, loss of parents to illness, young parents, incest and defilement, among others. Findings highlighted that these risks disproportionately affected children with disabilities. Study findings were validated with communities and key stakeholders to build awareness and engage in a collaborative approach to strengthening communitybased child protection systems for young children in these villages.

# Bringing up children in an uncertain world: Who's right? Whose rights?

Caroline Arnold, caroline.arnold@akdn.org, Aga Khan Foundation, Geneva, Switzerland

This presentation will unpack the way global efforts to provide effective supports for young children and their families have been evolving over time and examine key trends as well as the challenges and opportunities therein. It raises a number of questions in order to stimulate dialogue and encourage us to consider how we respond. These responses need to include both I ) framing vital new research especially as part of the new OXSCIE "learning to navigate uncertainties" global agenda and, ii) ensuring that programmes address the key issues. Themes to be touched on include: Comprehensive and comprehensible frameworks - How

are we doing? , Uneven progress in expanding access to ECD services— How are we addressing equity issues?, Reaching the youngest — How are we including parents and health services more effectively? , SDG4.2—How is this playing out in practice?, Developmentally and culturally appropriate practice including attention to social and emotional learning and pluralism—How do we protect and promote this? And Public and Private sectors—What are the roles and partnerships, the promises and the perils? Examples from the field will illustrate these themes—including the way AKDN programmes have evolved and continue to develop over more than 30 years.

# Adolescent sexual and reproductive health and rights Marleen Temmerman, marleen.temmerman@aku.edu, Aga Khan University, Nairobi, Kenya

The 2010 Global Strategy for Women's and Children's Health was a bellwether for a global movement and led to significant progress worldwide in women's and children's survival and health. The year 2015 marked a defining moment for the health of women, children, and adolescents. For the first time, adolescents joined women and children at the heart of the Global Strategy. Adolescents aged 10-19 years have specific needs and require a responsive health system that takes into account their biological, emotional, and social development. Ensuring their healthy development means making the health system work for adolescents. But, it also requires a focus on social risk factors as well as on the factors that can offer a protective effect across various health outcomes. This focus includes the legal and policy environment. To realise the health and wellbeing of adolescents and protect their human rights, countries need to adopt holistic health policies and education programmes about prevention of injuries, violence, and self-harm; good sexual and reproductive health outcomes; prevention of non-communicable disease; and other crucial aspects of physical and mental health and development. Such education will help adolescents enhance judgment and learn the skills to maximise their health and wellbeing.

#### The Adolescent Girls Initiative – Kenya: A randomized controlled trial testing multi-sectoral interventions for very young adolescent girls

Karen Austrian, kaustrian@popcouncil.org, Population Council, Nairobi, Kenya

Many adolescent girls in Kenya face considerable vulnerabilities that affect their education, health, and general well-being—including early marriage, teenage pregnancy, early unprotected and/or unwanted sexual activity, violence, social isolation, and HIV/STIs. For the most part, adolescent girls under age 15 who live in risk-prone environments have not yet experienced these negative outcomes. It is critical to intervene early to increase their capacity to overcome these risks. Research shows that single-sector interventions are not adequate

to produce the outcomes needed to help girls enter into a healthy adulthood. However, there is insufficient evidence regarding the most cost-effective combination of interventions to achieve the greatest positive impact on well-being. The Adolescent Girls Initiative-Kenya (AGI-K) delivered multi-sectoral interventions for 6,000 girls ages 11-14 in Kibera slums and Wajir County. Interventions ran for two years at the girl, household and community levels. The study will compare impact for four different interventions packages: violence prevention only, violence prevention + education, violence prevention + education + health, and violence prevention + education + health + wealth creation. Using a randomized controlled trial design, program impact will be evaluated. The girls will be followed for two years after the intervention. Using quantitative and qualitative methods, the evaluation will examine the impact of the intervention packages, identifying causal mechanisms. The presentation provides an overview of the study design, key lessons learned, and an in-depth exploration of the theory of change.

## Adolescent mental health in Africa: A critical look at the role of the school environment

Amina Abubakar, amina.abubakar.ally@gmail.com, Pwani University & Kenya Medical Research Institute

Globally, mental disorders account for a large proportion of the disease burden in young people. Addressing mental health needs of adolescents is important as poor mental health has been associated with health and development concerns such as poor educational outcomes, substance abuse, and poor reproductive and sexual health among other. African adolescents, are at an elevated risk of experiencing mental health problems due to exposure to multiple risk factors such as chronic poverty, ill-health, limited educational and vocational opportunities among others. A recent systematic review reported that 14.3% (95% CI, 13.6%-15.0%) of children and adolescents involved in community based studies in Sub Saharan Africa were identified as having a psychopathology. Despite this very high need there is limited research evidence on effective mental health interventions in Africa. The school is an important ecological context for adolescent development and functioning. In this presentation, I will highlight role of the school environment in shaping mental health outcomes in Africa. Based on data from more than 25 schools in Kenya involving more than 2500 adolescents I will highlight some of the risk and protective factors within the Kenyan school environment including harsh disciplinary practices, sense of school belonging and connectedness. Based on these findings I will discuss potential strategies for using the school as a platform for promoting, and protecting mental health among African adolescents.

### Critical issues in early care and education of Muslim children

Hasina Banu Ebrahim, hasinaebr136@gmail.com, University of South Africa

Islam is one of the fastest growing religions in the world and there are a significant number of Muslim children across the globe. Despite the impact of Islam and the numerical strength, there is little visibility of Muslim childhoods and the education of Muslim children. This presentation is based on my latest book entitled Early Education for Muslim Children (2017). In examining the rationales and practices of mothers, teachers and managers in South Africa, this book raises critical issues for how Muslim children in a minority context are cared for and educated in centre-based provision. As an entry point, the issue of contextualization is highlighted through examining how the quest for faith development intersects with specific circumstances to open up possibilities for early education of Muslim children in centres. This is followed by a discussion on the contemporary models informing early education. The practice dimension shows the negotiations and tensions that arise when both faith development and academic outcomes are brought together for one-stop care and education of Muslim children. The presentation concludes with possibilities to guide the development of early care and education for Muslim children.

#### Effect of caregiver training on neurodevelopment of HIVexposed uninfected children and caregiver mental health: a Ugandan cluster randomized controlled trial

Michael J. Boivin<sup>1,2</sup>, boivin@msu.edu, Noeline Nakasujja<sup>3</sup>, Itziar Familiar-Lopez<sup>1</sup>, Sarah M. Murray<sup>4</sup>, Alla Sikorskii<sup>1</sup>, Jorem Awadu<sup>1</sup>, Cilly Shohet<sup>5</sup>, Deborah Givon<sup>5</sup>, Horacio Ruiseñor-Escudero<sup>1</sup>, Elizabeth E. Schut<sup>1</sup>, Robert O. Opoka<sup>3</sup>, Judy K. Bass<sup>4</sup>, Michigan State University, East Lansing<sup>1</sup>, University of Michigan<sup>2</sup>, Makerere University, Kampala, Uganda<sup>3</sup>, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland<sup>4</sup>, Bar Ilan University, Ramat-Gan, Israel<sup>5</sup>

ECD programs typically combine healthy nutrition and cognitive stimulation in an integrated model. We separately delivered these two components in a cluster randomized controlled trial (RCT) to evaluate their comparative effectiveness in promoting healthy child development and caregiver mental health. 221 HIV-exposed but uninfected (HEU) 2- to 3-year old child and caregiver dyads in 18 geographic clusters in Eastern Uganda were randomized by cluster to receive biweekly individualized sessions of either 1) Mediational Intervention for Sensitizing Caregivers (MISC) training emphasizing cognitive stimulation, or 2) Uganda Community Based Association for Child Welfare program (UCOBAC) that delivered health and nutrition training. Children were evaluated at baseline, six months, one year (training conclusion), and one-year post-training with a variety measures. Caregiving quality was measured with the HOME.

Caregiver depression/anxiety and functionality were also evaluated. MISC resulted in significantly better quality of caregiving compared to UCOBAC at midintervention, post intervention and one year follow-up. MISC caregivers reported more problems for their child at one-year post-training only. Caregiving quality was significantly correlated with child performance one-year post training for both the MISC and the UCOBAC. Even though MISC improved caregiving quality, it did not produce better child cognitive outcomes compared to health and nutrition training.

Reflecting on the tensions between researching and scaling a community-led peer support program

Astrid Christoffersen-Deb<sup>1</sup>, astrid.cdeb@utoronto.ca, Julia Songok, Laura Ruhl, Justus Elung'at, Sheilah Chelagat, Jamie Lachman, University of Toronto<sup>1</sup>

# Increasing pregnancy health services uptake through integrated peer support groups in Kenya: A prospective cohort study

Recognizing the importance of pregnancy care in optimizing early child development, AMPATH and the Government of Kenya launched Chama cha MamaToto, a community-led peer support model that groups women together in pregnancy and infancy. To evaluate the effect and feasibility of chamas, we compared data from a prospective cohort of women in chamas with a referent group who did not belong to a chama, matched for age, parity, and location of prenatal care. Compared to the referent group (n=115), women in chamas (n=222) were more likely to attend four recommended prenatal visits (64% vs 37%, p<0.001), deliver in a health facility (84%) vs 50%, p<0.001), breastfeed exclusively to 6 months (82% vs 47%, p<0.001), and to receive the recommended home visit from a CHV within 48hrs of birth (76% vs 38%, p<0.001). Furthermore, chama participation showed a trend toward fewer stillbirths/newborn deaths (2.4% vs 5.2%, p=0.083). Following adjustment in multivariable models, chama women had five times the odds of both health facility delivery (OR=5.07, 95% CI: 2.74-9.36) and 48h CHV visit (OR=4.91, 95% CI: 2.76-8.72). Participating in chamas is associated with a fivefold increased uptake of key pregnancy health services in Kenya.

#### Malezi mema: Building parents' capabilities to safeguard children's developmental potential through maternal peer support groups in Western Kenya.

We aimed to assess the feasibility and impact of integrating a positive parenting program into maternal peer support groups. We designed a prospective cohort study with a matched control. The intervention group was randomly selected from women active in chamas (n=613). We used the Protocol for Child Monitoring-Infant Toddler (PCM-IT) tool. We interviewed women using Parental Stress Scale, Attitude Towards Punishment Scale and ISPCAN Child Abuse Screening

Tools. CHVs delivered all 18 modules with high fidelity. Attendance was high. We compared 95 mother-child pairs in chamas to 28 mother-child control pairs. At baseline, we found similarly high proportions of children with delayed growth and development (27.5% vs 21.4%, p=0.53). Attitude towards punishment and mean parental stress were also similar. Ten months later, we found a 10.3% absolute improvement in children's social and emotional development in chamas compared to 0% in controls. Episodes of abuse reduced by 53%. Parental stress reduced from 78% to 56% and was unchanged in the control group. Important lessons were learned in using the PCM-IT tool. Chamas can be used to deliver ECD at the community level. We found participants were less likely to punish harshly or report high levels of stress.

#### Putting the horse before the cart? Negotiating tensions between the need for evidence and the demand for dissemination of parenting programs to reduce violence against children in low- and middle-income countries

Parenting programs have shown promise in preventing violence against children, as well as improving child and parental outcomes. This paper examines the tension between establishing rigorous evidence of effectiveness that is applicable in multiple contexts with the urgent need for the application of parenting programs to reduce violence against children in low-and middle-income countries. It uses insights gleaned from implementing partners, program beneficiaries and policy makers, and draws on Parenting for Lifelong Health's experience of developing evidence-informed parenting programs in multiple countries and contexts. This paper presents four challenges facing researchers, policy makers, and practitioners: First, establishing evidence requires substantial time and resources to meet international standards of effectiveness. Second, international and local implementing agencies often require lower thresholds for evidence before taking programs to scale. Third, implementation across contexts may require considerable adaptation to fit local cultures and delivery systems, as well as additional research to establish evidence in new contexts. Fourth, maintaining program fidelity requires the development of systems to support training and accreditation for service providers, and monitoring implementation at scale. The authors advocate a pragmatic approach to balance the need for high-quality evidence and implementation with the current global demand for parenting interventions to reduce child abuse.

# Disasters and conflicts: Human contribution to aiding and impeding

Kausar Waqar, kausar.waqar@aku.edu, Silvia Dominguez, Christina P.C. Borba, Batool Fatima, Deborah A. Gray, Gabrielle Murphy, Edward K.S. Wang, Benjamin L. Harris, David C. Henderson, Seema Lasi, Kishore Shrestha

Emergency situations emanating from war and conflicts, natural or man-made disasters take toll on human life. The disruptions span all aspects of the life spectrum. These have a multiplier effect on disadvantaged people especially children. Intersectionality not only exacerbates discrimination, it also influences it in a way making it more challenging and disempowering. The symposium explores issues around lives of children facing disadvantages emanating from emergency situation. Findings from three different research studies present a range of perspectives. War and conflict affecting children from Liberia, bringing negative consequences to child development on one hand; children in Pakistan facing neglect and danger during floods on the other hand. This symposium goes on to present findings of yet another research from Pakistan, providing perspectives from children, parents and teachers, building on initiatives from early years of life resulting in preventing violence and bringing resilience, at home, in schools and community. The discussion emanating from this symposium will bring forth the spectrum of concerns on child development in emergency situations. The discussion will also revolve around the strategies like conflict preparedness and violence prevention from early years of life to deal with those challenges to reduce the burden of trauma and improve child health, development and quality of life.

## Interfacing two strands of measurement & evaluation innovation within AKDN

Alison Joyner Alison.joyner@akdn.org, Marc Theuss, Aga Khan Foundation, Geneva

This symposium will explore interaction and synergy between the Aga Khan Foundation (AKF)'s focus on transforming teaching - and through that children's learning experiences - and the AKDN Quality of Life (QoL) Unit's work to understand better teachers' perceptions of their quality of life. AKF will present its overall approach to monitoring, evaluation, research and learning, which goes beyond academic subjects to the social and emotional skills essential to navigating an ever more uncertain world. Supporting this, a new mobile application - Programme Management Information System for Education for Everyone Everywhere, PROMISE3 – allows teachers and school leaders(preschool onwards), to record and analyze student enrolment, attendance, transition, learning assessment, and teacher presence and performance, providing actionable data as the basis for improving the quality of children's learning. In the second presentation, we will build on over 500 "user stories"

generated in the initial PROMISE consultation process to demonstrate that key decision-makers within schools are articulating a need to generate a deeper and richer understanding of the Quality of Life of teachers. This provides a platform for undertaking innovative research in relation to Quality of Life among teachers and students. This area of research will complement and enrich evidence generated through PROMISE3.

#### Profiling recipients, elements, and perceptions of a Comprehensive HIV Care Initiative: The Case of the SHOFCO project in Kibera

Ruth Muendo<sup>1</sup>, ruth.muendo@aku.edu, Joyce Marangu<sup>1</sup>, Rael Ogwari<sup>2</sup>, Kofi Marfo<sup>1</sup>, SHOFCO<sup>3</sup>, Aga Khan University<sup>1</sup>, Moi University<sup>2</sup>, Shining Hope for Communities<sup>3</sup>

This study aimed at documenting the existence, utilization and perceived benefits of three interventions: health services, economic empowerment and psychosocial support, delivered under the auspices of Shining Hope for Communities (SHOFCO), and targeting women living with HIV/AIDS who are caregivers to children aged 0-3 years. The sample consisted 5 program staff and 92 women. Data was collected through a structured questionnaire, key informant interviews and focus group discussions. Cronbach alpha was used to estimate the internal consistency of items in the scales of social support, economic empowerment and health responsiveness in all the subscales items had a reliability with alpha  $\leq .7$ . The analysis revealed positive significant correlations between social competence and age (r=.21, p<.05, n=91); health responsiveness and marital status (r=.32, p<.05, n=92); and economic competence and different variables (age; r=.38, <.05, n=44, employment; r=.43, <.05, n=44, economic impact; r=.77, <.05, n=44). The study also identified important perceived benefits emanating from the 3 interventions. This has implications for SHOFCO's programming and for women caregivers affected by HIV.

# Linking investments in Water, Sanitation, and Hygiene (WASH) presents an overlooked but potentially important opportunity for progress for Early Childhood Development (ECD) outcomes.

Asifa Nurani, asifanurani@gmail.com, Public Health Consultant, Calgary, Canada

Globally, stunting affects 26% (165 million) of children aged <5 years, causes 15%–17% of their mortality, and leads to long-term cognitive deficits, fewer years and poorer performance in school, lower adult economic productivity, and a higher risk that their own children will also be stunted, perpetuating the problem into future generations. Stunting begins during pregnancy and peaks at 18–24 months of age. Inadequate diet and recurrent illness, especially diarrhea, have been the two most commonly implicated causes of stunting. 25% of stunting is attributed to five or more episodes of diarrhea during the child's first two years. About

88% of diarrhea-associated deaths are attributable to unsafe water, inadequate sanitation, and insufficient hygiene. The provision of WASH in health care facilities serves to prevent infections and spread of disease, yet just under half of all health care facilities in the Africa Region lack an improved water source on-site or nearby. Among newborns, sepsis and other severe infections are major killers estimated to cause 430,000 deaths annually. Strides made over the last 20 years have shown that, in addition to rotavirus vaccination and breastfeeding, diarrhea prevention focused on safe water and improved hygiene and sanitation is not only possible, but cost effective: every \$1 invested yields an average return of \$25.5. This presentation makes the case for why it is imperative to integrate WASH, together with MNCH and nutrition interventions to support optimal development among young children in both home and birth facility settings.

# Social ontogenetic theory: An African conceptualization of the ontogenesis of social selfhood

Bame Nsamenang, bamenang@gmail.com University of Bamenda, Cameroon & Human Development Resource Centre

Substantial research-based knowledge now exists on human development since developmental psychology became a viable science. Yet, the overwhelming bulk of this knowledge, like its governing theories, has been gleaned from studies of the offspring of highly educated, affluent, mainly white Europeans and Americans. The developmental trajectories of African and other Majority world children are hardly embodied in the discipline's knowledgebase. This paper introduces an African conceptualization of the ontogenesis of social selfhood - Social Ontogenetic Theory - which posits the development of a social selfhood across the lifecycle. The paper frames socialization as the process that permits African children's gradual and systematic social integration from an early age, progressively maturing and "graduating" them from one role sphere and position to another. Building on reviewers' evaluation of the theory and reflecting on the key developmentally appropriate social and affective markers of each of the seven stages of social selfhood, the author teases out some implications for research, training, and early childhood interventions.

#### Sensitivity/specificity of Parental Screening tool for Evaluating Developmental delays (PEDS; DM) among children under 5 years in Western Kenya

Japheth O. Adina<sup>1</sup>, ajadinajo@gmail.com, Christian B. Ochieng<sup>2</sup>, Moi University<sup>1</sup>, Jaramogi Oginga Odinga University of Science & Technology<sup>2</sup>

We evaluated psychometric properties of Parent Evaluation of Developmental Status: Developmental Milestones (PEDS:DM) developed by Brothers et al., 2008, with intention to adopt a simple and convenient developmental delay (DD) screening tool for use in primary care settings in Kenya. The study assessed sensitivity, specificity and reliability of PEDS:DM in rural western Kenya. A cross sectional survey was used to draw a sample of 870 under 5 children with median age of 32 months. A child was scored as either at-risk of domain DD or not, based on their caregiver's response to questionnaire items. Data in each domain were normalized by age-group and sex to provide sample level estimation grouping for risk of domain DD. A child was grouped at risk of DD in a domain if their quotient was ≤16th percentile of the normalized data. Results revealed overall Specificity ≥ 89%; Sensitivity ≥ 57% in all the domains except for gross motor; mean area under ROC curve of 70.5%; moderate positive likelihood ratio, LR= 5-10(95% CI); and mean reliability of 0.86. Our findings showed good specificity and high reliability for all developmental domains in children under 5 thereby lending credence to PEDS:DM tool as adequate for use by healthcare providers for initial screening.

#### Private nursery and primary school owners' Knowledge, Attitude and Practice of Budgeting and Implementation in Southwestern, Nigeria

Ajayi Hannah Olubunmi, lordofhost2013@gmail.com, Obafemi Awolowo University,

Effective and efficient planning and management of early childhood centres hinge on funding towards realization of desired educational goals and objectives for the adequate development of children. This may be ascertained through the budgeting and implementation processes by the school administrators. However, the occurrences of poor or lack of human and material resources as well as deficit reports in most early childhood centres make it imperative to examine this among these key educational actors as in the school system. The study adopted descriptive survey design. Nursery and primary schools' owners in the Southwestern, Nigeria formed the population. Three hundred and sixty nursery and primary school owners formed the sample size, selected using random sampling technique. One instrument was used for the study entitled; School Owners' Budgeting Questionnaire(SOBQ). The results showed that most school owners have not measured to expectation in the area of budgeting. The major implication is that school owners' resources provisions and management might hampered quality early childhood education that may directly or indirectly influence sustainable development. Recommendations are therefore proffered.

# Sustainability of early childhood education in Kenya: Where are we now at the close of the MDGs and the start of SDG agenda?

Grace Jepkemboi<sup>1</sup>, memoi@uab.edu, Rose Ruto-Korir<sup>2</sup>, University of Alabama at Birmingham<sup>1</sup>, Moi University<sup>2</sup>

Potential investment in early childhood education, can be assessed from the progressive efforts invested in ECE in specific contexts. Therefore, to appraise the

achievements so far attained in ECE in Kenya, is to provide an analytic tool to assess these achievements as part of focusing on the Sustainable Development Goals-SDGs. How the synergistic efforts are framed in the Kenyan ECE, and the subsequent efforts required to steer SDGs through education. This paper traces some of the milestones that have so far shaped ECE education in Kenya, focusing on efforts by development partners and national government in curriculum development, capacity buildings, and teacher training. The current policy to devolve ECE from the national government to County governments is also examined. More critically, the paper explores the potential for these partnerships for sustainability, based on how these efforts have also yielded specific benefits. The overall aim of this paper is to provide a critique about some of the achievements in ECE in Kenya through development partners, potential challenges of such partnerships and lessons that can be drawn to inform a sustainable developmental framework.

## Achieving positive child outcomes through integrated ECCD in Cambodia

Andrew Hill<sup>1</sup>, andrew.hill@plan-international.org, Emma Pearson<sup>2</sup>, Sun Jin<sup>3</sup>, Sok Uttara<sup>4</sup>, Borany Aum<sup>1</sup>, Borany Aum<sup>1</sup>, Sakan Soth<sup>1</sup>, Plan International<sup>1</sup>, Bishop Grosseteste University<sup>2</sup>, University of Hong Kong<sup>3</sup>, Pannasastra University<sup>4</sup>

This paper reports on child outcomes associated with Integrated ECCD programmes currently being implemented by Plan International in Cambodia. The Integrated ECCD actions introduced by Plan in Cambodia respond to international evidence on ECCD best practice by incorporating a holistic approach integrating not only an educational dimension but also health, nutrition, hygiene and early stimulation components through parenting support, community awareness raising and improvement of the quality of Community Preschools (CPS). A total of 141 children and their parents (70 from villages where Integrated ECCD programmes have been implemented and 71 from villages with no access) participated in the research. Findings indicate that children residing in areas that have had access to the Integrated ECCD Programmes for the past 3 years, are experiencing significant benefits in terms of both health and early learning outcomes. As reported in the paper, children living in villages where Integrated ECCD programmes were in operation (i) scored higher in holistic child assessments; (ii) were significantly less likely to suffer from stunting and (iii) were less likely to be exposed to unhealthy hygiene practices. These findings provide evidence to support the value of Integrated ECCD programmes.

# Promoting social justice in Eritrea: The role of the Integrated Early Childhood Care and Development Programme

Musa Hussein Naib, musanaib01@gmail.com, Ministry of Education the State of Eritrea

Eritrea launched the Integrated Early Childhood Care and Development program (IECCD) as a project in September 2000. The objective of the program was to promote the basic needs for a healthy growth and holistic development of children, through the provision of services and support in health care, early education, cognitive stimulation and social protection and affection. The research paper discusses the Eritrean concept of social justice and the IECCD program and explores the relation that exists between them. The deliberation upholds the view that the economic, social, cultural and biological benefits obtained from IECCD program can create a balanced and sustainable economic, political, social and cultural development as envisaged under the principle of social justice. The practical case for consideration under this paper is how IECDD programs can contribute to the attainment of the social justice in Eritrea. It argues that since Eritrea adheres to the principle of social justice, implementing IECCD program can facilitate the realization of this principle. The challenges confronted and lessons learned from the previous project are critically analyzed. Based on these findings the paper proposes a way forward for a sustainable IECCD program under community ownership.

The Brazilian legal framework for early childhood and the executive leadership program on Early Child Development: Developing process and public policies Roberta Rivellino¹, roberta@fmcsv.org.br, Eduardo Marino¹, Maíra Souza¹, Fundação Maria Cecilia Souto Vidigal¹

The experience of the Brazilian Legal Framework for Early Childhood is an example of the importance of bringing ECD evidence-based knowledge into practice and political action towards capacity building, leadership development and awareness. The Executive Leadership Program on Early Child Development is part of this process of policy-making, by bringing together a high-qualified national network with international experts, as well as strengthening Brazilian early childhood system. The paper synthetizes it as a success case of how inter sectoral partnerships can directly influence public policies for social changes. In this sense, the Legal Framework oversees the component of capacity building and illustrates ways of inspiring, engaging and technically preparing all those who play a key role in the formulation of public policies. Therefore, policymakers can lead a stronger movement for the development of early childhood - a population of more than of 20 million people in Brazil.

# Contribution of partnerships in ECD service delivery: The Madrasa Early Childhood Programme experience in East Africa.

Shafique Ssekalala<sup>1</sup>, shafique.ssekalala@akfea.org Khamis Said<sup>1</sup>, Amina Mwitu<sup>1</sup>, Madrasa Early Childhood Program<sup>1</sup>

It is an established fact that ECD service provision the world over is done best and taken to scale through partnerships. For over 30 years now, the Madrasa Early Childhood Program (MECP) an initiative of Aga Khan Foundation has used partnership in delivering ECD initiatives. To MECP partnerships with various stakeholders is key to effective ECD service delivery and a lot of effort has been invested in building the same. Partnerships are instrumental in exchanging knowledge and helps partners to reach meaningful decisions geared towards supporting child growth and development. MECP experience again indicates that partnership with government at all levels has given it an opportunity to sit on government committees and working groups to influence policy frameworks. MECPs have had a good experience and this paper highlights the process and benefits of sitting on committees. In most cases partnerships have yielded strong consortia to access resources and share best practices. This presentation shares an experience of delivering ECD programmes in partnership with community, government and development partners. We are optimistic that this experience will help institutions and agencies that aim at building strong partnerships. Nonetheless, building and maintaining partnerships takes time and effort from the people involved.

# Building home-school partnerships: Constructing and implementing an innovative parent-child programme for children three years old and under in a school system in Pakistan

Dr. Almina Pardhan<sup>1</sup>, almina.pardhan@aku.edu, Aien Shah<sup>2</sup>, Salman Khimani<sup>3</sup>, Aga Khan University<sup>1</sup>, Aga Khan Education Services<sup>2</sup>, TEXT Pakistan<sup>3</sup>

Evidence shows that high quality early childhood programmes and interventions can make a difference in the lives of young children (Oates, 2010). This has led to policies, programmes and investment in early child development in Pakistan, where millions of children are at risk of meeting their developmental potential in their first five years of life (Grantham-Mcgregor et al., 2007). One such example is an innovative parentchild programme for children under three years old which has been recently constructed and implemented in a school system in Pakistan. This programme has been contextualized to the local needs of parents and the school (Oates, 2010), and integrates nurture, enjoyable early education activities and songs, health, and nutrition. The programme is part of the school curriculum, takes place regularly at the school, and is conducted by the classroom practitioners. This paper describes this parent-child programme. It discusses

factors that have facilitated the construction and implementation of the intervention as well as challenges encountered with regards to: contextual relevance; material development and translation; multilingual contexts; integrating the programme into the school curriculum; parent participation; and teacher training. The paper concludes with a discussion on factors that may facilitate or inhibit the success of school-based interventions for early years children, which has important implications for informing early childhood programs and policies.

# Early child development programmes: What research is needed to support access, equity and quality? Aisha K. Yousafzai<sup>1,2</sup> aisha yousafza@aku edu

Aisha K. Yousafzai<sup>1,2</sup>, aisha.yousafza@aku.edu, Harvard T.H. Chan School of Public Health<sup>1</sup>, Aga Khan University<sup>2</sup>

More than 250 million children fail to meet their cognitive developmental potential in the first five years of life. Systematic reviews and meta-analyses of interventions such as parenting, stimulation and early childhood education have reported consistent mediumto-high effect sizes on early child development (ECD) and academic outcomes. Despite consistent evidence about the types of interventions that are effective in promoting ECD, few interventions have gone to scale and access to early childhood interventions remains poor especially among the most disadvantaged children living in low- and middle-income countries. Among the handful of established national early childhood programmes, there is mixed evidence about the effectiveness of services. This paper discusses what types of research approaches are required to address improving access, equity and quality in programmes designed to promote ECD.

# NOTES

#### ACKNOWLEDGEMENTS

The convening of this conference was made possible through generous funding provided by the Conrad N. Hilton Foundation, Aga Khan Foundation USA, and Aga Khan Foundation Canada in partnership with Global Affairs Canada. AKU is located in a region with limited opportunities for child development researchers/professionals to share their work and learn from one another in an international forum. We are most grateful to our funders for their investment in the Institute to support its use of this international conference as a platform for advancing its knowledge dissemination mission.

We wish also to thank the numerous individuals and institutional partners for their various forms of support. It is always risky to identify specific individuals and entities for explicit mention, so we should note that the list provided below is by no means exhaustive. Finally, we recognize and applaud the 340 participants from 42 countries represented at the conference. These countries cover five major regions of the world: Asia, Central and South America, Europe, the Middle East, and North America.

#### Overall Planning

Caroline Arnold Meseret Belachew Sheila Manji Dr. Kofi Marfo Damaris Nelima Sarah Vahora

#### Local Arrangements: Nairobi (IHD)

Meseret Belachew Esther Peter Soraiya Shah

#### Local Arrangements: Dar es Salaam (IED)

Lulu Kansari Gamariel Mboyo IT, Security, Other Arbogast Fabian John Gonza Rogers Haule Sweetbert John Amos Luisa Fredrick Richards Fatuma Rutta

#### Scientific Programme

Dr. Ghazala Rafique, Co-Chair Muneera Rasheed, Co-Chair

#### **Review Management**

Joyce Marangu Ruth Muendo Esther Peter

#### Peer Reviewers

Dr. George Andima Leonard Falex Dr. Batool Fatima Dr. Helen Inyenga Dr. Caroline Kabiru Dr. Hezborn Kodero Dr. Anil Khamis Dr. Tina Malti Joyce Marangu

Dr. Kofi Marfo Dr. Marie-Claude Martin Buth Muendo

Dr. Teresa Mwoma
Dr. Marriote Ngwaru
Dr. Rozina Nuruddin
Dr, Rael Ogwari
Dr. Almina Pardhan
Dr. Anselme Sanou

Dr. Kausar Waqar Dr. Aisha Yousafzai Dr. Linlin Zhang

#### **On-Site Management**

Dr. George Andima Leonard Falex Dr. Hezborn Kodero Joyce Marangu Ruth Muendo Esther Peter

#### **AKU President's Office**

Munira Janmohamed

#### **AKU Communication**

Victoria Nyamunga Sabrina Zahor Hillary Reginald

#### AKU Pakistan Web Team

Hiba Khan Iqra Azmat

#### Conference Venue

Serena Dar es Salaam

#### Travel Arrangements

GT Holidays Travel, Vancouver, Canada

#### Event Management

Consultants Lokuai, Nairobi

#### Printing

WHO

Centerpress Media

#### **International Partners**

AfECN PATH RTI International UNICEF

#### **Cross-Border Transport**

James Wachira

#### **Countries Represented**

Afghanistan
Armenia
Austria
Belize
Brazil
Burkina Faso
Cambodia
Cameroon
Canada

Cote d'Ivoire

Eritrea
Egypt
Ethiopia
Ghana
India
Israel
Jordan
Kenya
Liberia
Madagascar
Malawi

Mali
Mozambique
Netherlands
Niger
Nigeria
Norway
Pakistan
Panama
Russia
Rwanda
Senegal

Syria Tanzania United Arab Emirates

Zimbabwe

South Africa

Switzerland

Uganda United Kingdom United States Zambia





