

〈特別講演〉

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Pathways to Wellbeing and a More Peaceful and Sustainable World: The Transformative Power of Children and Families**

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If we are to teach real peace in this world, and if we are to carry on a real war against war, we shall have to begin with the children... You must be the change you wish to see in the world.

— Mahatma Gandhi (1869–1948)

There can be no keener revelation of a society's soul than the way in which it treats its children. Education is the most powerful weapon which you can use to change the world.

— Nelson Mandela (1918–2013)

The global community must address the root causes of violence and conflict. Join us to build an inclusive movement for peace, social justice and prevention of violence through using early childhood development strategies that enable the world community to advocate peace, security and sustainable development. Families and children can be agents of change for peace.

— Rima Salah (1943–Present)

Abstract: As a field, scholars and practitioners in psychiatry, neurology, pediatrics, psychology, public health and related disciplines are becoming increasingly aware of the importance of early childhood development (ECD) in setting the stage for the emergence of neurodevelopmental and neuropsychiatric disorders later in life. Beyond psychopathology, it is also clear that events early in a child's life can directly impact their physical health and the degree to which a child is able to reach her or his full developmental and economic potential. Evidence is emerging that family- and community-based ECD services are cost-effective and have the potential to contribute to social cohesion and peacebuilding in both the short and long term – from one generation to the next. Given the importance of this topic, we need to engage government officials and policy-makers around the globe, as partners to invest in ECD services, using a multi-sectorial approach. It will also be critical to pursue ongoing research on the impact of ECD services as well as how best to promote resilience and well-being in children and families.

Key words: adverse childhood experiences, early childhood development, neurodevelopmental disorders, neuropsychiatric disorders, nurturing care, peace, toxic stress, 2030 Sustainable Development Goals, violence against children

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I. INTRODUCTION

Although global attention to the importance of early childhood development (ECD) has been highlighted through its inclusion in the U.N. Sustainable Development Goals (SDGs) and the launch of the Early Child Development Action Network (ECDAN), nearly 250 million children younger than 5 years in low-income and middle-income countries (LMICs) remain at risk of not achieving their developmental potential (Black et al., 2017; Richter et al., 2018). It is also clear that the accumulation of adversities, beginning before conception and continuing throughout childhood, can have a negative impact on brain development, as well as set the stage for a broad range of neuropsychiatric symptoms and disorders including autism, schizophrenia, anxiety, mood disorders, and antisocial and violent behavior (Brander et al., 2016; Browne et al., 2016; Dalsgaard et al., 2015; Estes and McAllister, 2016; Donaldson et al., 2018; Gumusoglu and Stevens, 2019; Heim and Nemeroff, 2001; Hostinar et al., 2018; Khandaker et al., 2013; Leckman et al., 2014a, 2014b; McGrath et al., 2017; Mikton et al., 2014; Nusslock and Miller, 2016; Sciberras et al., 2017).

This review article summarizes information that has been assembled from a number of publications and systematic reviews of the scientific literature to address four key questions concerning the importance of ECD in building a healthier and more peaceful and sustainable world (Box 1). One of the initial publications was: *Building a Generation of Reconciliation: The Role of Early Childhood Development in Peace Building* (Anne Çocuk Eğitim Vakfı [AÇEV], 2012). This report was prepared by several Turkish ECD ex-

perts who explored why parents from different cultural backgrounds formed lasting friendships following their participation in group-based intervention programs where parents came together to learn how best to care for their young children. The topics covered by the AÇEV intervention included sharing with the participants (groups of mothers or fathers) information about the physical, socio-emotional, and cognitive development of their children; the importance of positive child rearing methods including how best to discipline their children; the value of spending quality time and playing with a child; and the use of effective communication and problem-solving skills.

The AÇEV report and reviews by the Turkish team and a team at Yale served as a starting point for the 15th Ernst Strüngmann Forum (Sunar et al., 2013). The Forum brought together 41 scientists from diverse backgrounds (basic sciences, ECD, cross-cultural psychology, interfaith dialogue, and peacebuilding) from 16 countries: Japan, Australia, South Africa, Kenya, Nigeria, Turkey, Israel, State of Palestine, the Netherlands, the UK, Ireland, Finland, Germany, Switzerland, as well as the United States and Canada. The goals of the Forum were to: (1) define “peace”; (2) assess the role of ECD and familial relationships in the process of peacebuilding and conflict resolution; and (3) explore novel approaches to translate science-based knowledge into concrete and sustainable actions to build a more peaceful world. The Forum participants concluded that peace is a process and that peacebuilding is characterized by efforts to negotiate freedom from violence, which can be immensely strengthened through the creation of social cohesion within families and communi-

Box 1: Key Questions

- (1) How can we raise our children in ways that will help build a more peaceful and sustainable world?
- (2) What is the evidence that events beginning before conception and throughout childhood contribute to an individual's vulnerability to develop neurodevelopmental and neuropsychiatric disorders?
- (3) How can multi-level ECD services be leveraged to contribute to reducing the risk of violent conflict and achieving the 2030 SDGs by improving social and economic outcomes in communities?
- (4) What can we recommend to local and national governments so that they can create policies and social service sector plans in which multi-level ECD services are leveraged to contribute to sustainable peace and development?

ties and across groups (Chowdhury, 2014).

The Ernst Strüngmann Forum also served as a foundation for the Early Childhood Peace Consortium (ECPC, 2019). The ECPC was established in 2013 “to advocate for investment in young children as a way to promote peace in homes and communities and, ultimately, as a strategy for global peacebuilding.” At present, the ECPC brings together an international group of university scholars, practitioners, and experts from UNICEF and other non-governmental organizations (NGOs) from across the globe including AÇEV, The Fetzer Institute, Yale University, Queen’s University, Belfast, The Early Years - The Organization for Young Children, the World Organization for Early Childhood Education, World Vision International, Open Society Foundations, and World Childhood Foundation, among others. The ECPC seeks to grow a global movement for peace, social justice and prevention of violence through using evidence-informed strategies to enable the world community to advance peace, security and sustainable development (ECPC, 2019; Leckman and Britto, 2018).

The ECPC recently developed a Theory of Change, which argues how comprehensive ECD services can contribute to promoting sustainable peace and development (Donaldson et al., 2018; Ponguta et al., 2018a). Figure

1 shows a summary of this theory of change. The theory emphasizes the need for experts in ECD—including child psychiatrists and professionals in related disciplines—to share their knowledge and partner with policymakers and government officials in order to establish and maintain conflict-sensitive, culturally appropriate ECD policies and services for families and communities, particularly those from LMICs affected by conflict.

Using insights from the ECPC’s recent developments and related literature, the present review paper describes four key questions concerning ECD and ten specific recommendations with regard to building pathways to wellbeing and a more peaceful and sustainable world.

II. FOUR KEY QUESTIONS

Question #1: How can we raise our children in ways that will help build a more peaceful and sustainable world?

The bio-behavioral systems that underlie the development of the parent-child attachment and social bonds within families and communities are ancient and deeply rooted in mammalian evolution (Bowlby, 1969; Britto et al., 2014a; Carter and Porges, 2014; Hinde and Stevenson-Hinde, 2014). The human brain has evolved to adapt and respond to a wide range of early experiences, which supports the rapid

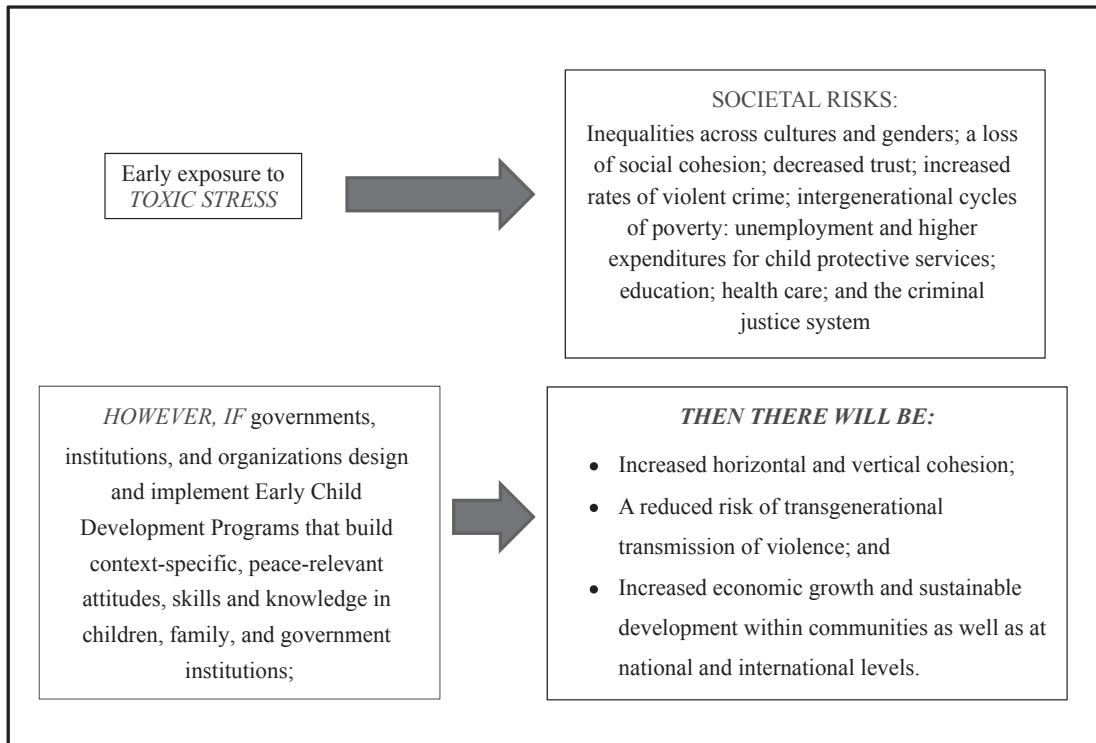


Figure 1 Theory of Change

High quality Early Childhood Development services that focus on creating and sustaining nurturing environments can make a significant contribution to peacebuilding, social cohesion and sustainable development (For an expanded and more detailed presentation see: Donaldson et al., 2018).

acquisition of language, cognitive skills, and socio-emotional competencies (Bronfenbrenner, 1979; Britto et al. 2014a). As a result, the quality and timing of early environments shape a child's future potential. These environments include the parents' health and wellbeing prior to the child's conception, the *in-utero* environment, as well as the physical and socioemotional environment in which the child is raised. Indeed, how a child is parented, and the occurrence of early life stressors have a direct impact on the child's brain development and acquisition of basic skills and abilities, as well as her or his mental and physical health (Grantham-McGregor et al., 2007; Walker et al., 2011a).

While an individual's genetic endowment is crucially important, parenting across mammalian species provides a legacy that transcends genes through epigenetic mechanisms. Epigenetics refers to the study of changes in the regulation of gene activity and expression that are not dependent on gene DNA sequence. The three major regulatory mechanisms are DNA methylation, histone modifications, and alterations of micro-RNA transcription. How a child is parented has an impact on the expression of genes that are transmitted from one generation to the next (Champagne, 2016; Keverne, 2014; Meaney, 2010; O'Donnell et al., 2018; Ramo-Fernandez et al., 2015).

Parenting and early life stressors also can have a direct impact on a child's mental and physical health by altering the composition of their gut microbiome. We are just beginning to understand how the gut microbiome shapes brain and behavior during early life. At present, several studies have also shown that early-life events can also impact on an individual's microbiome (O'Mahony et al., 2017). This is another important new frontier for our field.

A child's early development requires 'nurturing care'. The 2017 Lancet Early Childhood Development Series clearly details each of the elements of nurturing care that are needed for a child to reach his or her full developmental potential (Daelmans et al., 2017; Black et al., 2017; Britto et al., 2017; Richter et al., 2017). The five interconnected domains of nurturing care include health care, adequate nutrition, security and safety, responsive caregiving, and early learning opportunities. Ideally, these core elements are provided by parents and other caregivers in an environment that minimizes stress and enables positive caregiver-child interactions. External factors outside the family unit can also influence the five areas of nurturing care. For example, even with positive parent-child interactions and a healthy home environment, children who live amidst severe pollution, armed conflict, or discrimination may be subject to inadequate health care, nutrition, education, and safety and security. It is therefore crucial to take into account the whole ecological environment surrounding the child when considering nurturing care initiatives.

The 2017 Lancet Early Childhood Development Series also reviews the latest estimates that at least 250 million children

younger than five years in LMICs are at risk of not reaching their developmental potential because of poor nutrition, neglect, abuse, and other forms of dysfunction in the home (Black et al., 2017). Sadly, exposure to violence at an early age can be extremely detrimental to a child's development and is causally related to a broad range of negative outcomes across a lifespan, including major emotional and behavioral problems. Indeed, to varying degrees, violence can become self-perpetuating from one generation to the next (Bailey et al., 2009; Belsky et al., 2009; Conger et al., 2003; Dahlberg and Potter, 2001; Fang and Corso, 2007; Duke et al., 2010; Fatori et al., 2013).

The Lancet series of articles also critically reviews the impact of programs from randomized clinical trials (RCTs) in which families and children were randomly assigned to either receive a specific ECD intervention or not and followed longitudinally for extended periods of time (Britto et al., 2017). In many domains the results were convincingly positive. This body of research, with few exceptions was conducted in the United States (e.g., The Nurse Family Partnership, 2019; Enoch et al., 2016; Olds et al., 1998; Perry Preschool Study, Schweinhart et al., 2005; Abecedarian Project, Campbell et al., 2012; Jamaican Birth Cohort Studies; Samms-Vaughan, 2008; Mauritius Child Health Project, Raine et al., 2010). As a result, additional studies are needed in LMICs.

Given the positive impact that ECD programs can have on long-term outcomes of the participants in adulthood, ECDAN has been established to refine, adapt and implement programs of proven value across the globe (ECDAN, 2019). One emerging area of work focuses on how best to prevent expo-

sure to violence and build social cohesion in the home and local communities as a path to peace. However, there is limited evidence that explicitly examines how ECD programs can lead to violence prevention (VP) within families and communities in LMICs. Recently, Efevbera et al. (2018) completed a systematic review of this important topic and examined the impact of the few ECD+VP interventions that have been implemented in six LMICs (Chile, Jamaica, Lebanon, Mexico, Mozambique, and Turkey). All but one of these studies reported improvements in both child development and maltreatment outcomes (i.e., reducing incidences of child abuse and neglect). The positive results included those reported in Turkey that targeted primary caregivers of children age three and older (Kağıtçibaşı et al., 2001, 2009). As noted previously, these findings provided the foundation for the establishment of AÇEV. In addition to AÇEV's Mother-Child Education Program, they have also conducted group-based interventions with groups of fathers. Remarkably, many of the participating fathers became friends despite differences in their Turkish and Kurdish cultural backgrounds.

The dearth of evidence on ECD+VP interventions clearly indicates that additional research is needed. Integrated ECD+VP interventions may improve multiple child outcome domains while leveraging limited resources in LMICs. One initiative concerns how best to engage fathers in co-parenting ECD programs, as fathers are often associated with violence in the home and in the community (Pruett et al., 2017). However, more research is needed to understand how to best engage fathers and co-parenting couples successfully, and also how to disaggregate

process and impact data among father-only programs, mother-only programs, and co-parenting programs. In addition, the various programming components deserve greater attention, including the reach, sustainability, cost, equity, and scale-up of programs that engage fathers. A greater focus on the role of fathers could constitute a game change in this field (Panter-Brick et al., 2014).

A related initiative involves the Global Health Research Group on Early Childhood Development for Peacebuilding that is currently underway (Connolly, 2018). It is focused on building social cohesion in families, communities, and societies. At present, culturally sensitive ECD programs are being piloted in Egypt, Mali, Vietnam, Timor-Leste, Kyrgyzstan, Tajikistan, and Colombia. This effort is funded by the National Institute of Health Research (NIHR) in the United Kingdom and involves partners from UNICEF, ECPC, Early Years – The Organization for Young Children, Yale, Harvard, New York University, and Queen's University – Belfast.

Question #2: What is the evidence that events occurring in early childhood, including those occurring before conception, can contribute to an individual's vulnerability across a range of outcomes?

Substantial data clearly indicate that persistent adversity in childhood in the absence of protective factors can alter the development of the brain and body and increase the risk of developing a broad range of neuropsychiatric disorders across the lifespan (Center on the Developing Child Harvard University, 2019; Mikton et al, 2014; Norman et al., 2012; Shonkoff et al., 2012a, 2012b). These outcomes also include a child's increased vulnerability to develop somatic illnesses and

disabilities (Shonkoff et al., 2012a, 2012b). Another key outcome concerns the impact of adverse early experiences on basic elements of socioemotional development including the development of empathy and how individuals from other identity groups are perceived (Connolly et al., 2018). Children living in these unfortunate circumstances are being exposed to what is referred to as “Toxic Stress” (Figure 1; Center on the Developing Child, 2019). The Adverse Childhood Experiences (ACEs) scale provides an estimate of an individual’s accumulative burden of toxic stress in childhood (Centers for Disease Control and Prevention, 2014). Higher ACE scores have been shown to be associated with increased rates of disease and disability due to heart disease, cancer, chronic lung disease, major depression, suicide, post-traumatic stress disorder (PTSD), drug and alcohol abuse, sexually transmitted diseases, as well as the inter-generational transmission of maltreatment and a shorter life expectancy (Hughes et al., 2017; Mikton et al., 2014; Norman et al., 2012).

Emerging epidemiological data and evidence from animal models clearly indicate that events occurring while the child is *in utero* can produce long term adverse effects on the child’s physical and emotional health and wellbeing (Gumusoglu and Stevens, 2019; Lindsay et al., 2019). Early disruptions to neurodevelopment are highly relevant to understanding both psychiatric risk and underlying pathophysiology that can be targeted by new treatments. Evidence from the human development literature associates inflammation during pregnancy with later neurodevelopmental and neuropsychiatric disorders in offspring including autism, Attention Deficit Hyperactivity Disorder (ADHD), To-

urette syndrome, Obsessive-compulsive disorder (OCD), and schizophrenia (Brander et al., 2016; Browne et al., 2016; Dalsgaard et al., 2015; Estes and McAllister, 2016; Folger et al., 2017; Hantsoo et al., 2019; Heim and Nemeroff, 2001; Hostinar et al., 2018; Khandaker et al., 2013; Nusslock and Miller, 2016; Sciberas et al., 2017). Diverse methodologies across several studies investigating maternal immune activation in mice, rats, nonhuman primates, and other mammalian model species have demonstrated convergent outcomes including alterations and/or disruptions in the normal developmental trajectory of molecular and cellular processes in the brain of the offspring (Gumosoglu and Stevens, 2019). Alterations to microglia and immune molecules, brain growth and development, synaptic morphology and physiology appear to play an important role in many of these model systems. However, much less is known about how alterations to embryonic brain processes contribute to later dysfunction and the eventual emergence in adolescence and adulthood of neuropsychiatric disorders such as schizophrenia as well as some forms of mood and anxiety disorders.

Question #3: How can multi-level ECD services be leveraged to contribute to reducing the risk of violent conflict and achieving the 2030 SDGs by improving social and economic outcomes in communities and nations?

Long-term effects of early toxic stress on a child’s outcomes in adulthood are associated with a number of societal risks that can hinder the achievement of the 2030 SDGs (Figure 1; Donaldson et al., 2018; United Nations 2030 Sustainable Development Goals, 2015). However, high quality “multi-level”

ECD programs that reach the child, caregiver, community, and governmental levels of the human ecology can serve as a foundation for sustainable peace and development. These programs can reduce early childhood adversities and positively impact the child across multiple domains in adulthood including an individual's physical and mental health and their level of educational attainment and employment status, as well as reducing the risk that they will engage in violence and criminal behavior (Campbell et al., 2012; Gertler et al., 2014; Hoddinott et al., 2008; Olds et al., 1998; Raine et al., 2010; Reynolds et al., 2007, 2011; Schweinhart et al., 2005; Walker et al., 2011b). Due to their close proximity to caregivers, ECD programs can also positively impact the child's family, by providing services that build competencies, address personal needs, and strengthen resilience and prosocial behaviors in vulnerable caregivers. Multi-level ECD programs can additionally be strategically leveraged as social platforms in the community for bringing together caregivers from conflicting sociocultural, ethnic or religious identity groups (thereby nurturing "horizontal social cohesion") in joint programming efforts towards shared goals around their child's wellbeing. Government implementation of ECD services that reach the child, caregiver, and community could not only build bridges between the community and their government (known as "vertical social cohesion") but could also ensure scalability and sustainability of these important programs. Through helping vulnerable children and families reach their potential, universal ECD services offered to all groups can reduce inequalities and promote sustainable economic productivity.

Indeed, an economist, James Heckman

(2014), has conducted a series of cost-benefit analyses based on the age of the child when the ECD intervention was initiated. His core finding is that the earlier the intervention was initiated in the child's life the greater the economic benefit to the child, the family and to the society as a whole (Heckman, 2014; Doyle et al., 2009). Remarkably, the greatest cost saving was due to the reduced rates of incarceration of the individuals who had been randomized to the ECD intervention early in childhood (Heckman et al., 2010).

Despite the recognition that multisectoral coordination is critical for the sustainability and scalability of ECD systems, the attributes of vertical (national, subnational, and local) as well as horizontal (public, private and other sectors) mechanisms remain poorly characterized in the global context (Britto et al., 2014b). Recent multi-country analyses of ECD governance suggest that planning and decision-making should be made within local communities in consultation with government leaders. This will help ensure the equity of and access to ECD services so that targeted investments will promote the autonomy, institutional capacity, and accountability at subnational and local levels (Ponguta, et al., 2019). However, while ECD programs from the bottom up are essential, they are not sufficient for large-scale change. Governments also need to take steps from the top-down to reduce levels of direct, structural and cultural violence (see Galtung, 1969). These forms of violence can result in economic, political, legal, religious and/or cultural marginalization for some families within their country, and which can contribute to toxic stress in children and their families. If this "structural violence" is addressed at the

same time as high-quality ECD services are provided, this will contribute directly to the achievement of the 2030 SDGs (Figure 1; Donaldson et al., 2018; Ponguta et al., 2018a). Indeed, the provision of high-quality ECD services can directly contribute to at least nine of the 17 Sustainable Development Goals.

• **Sustainable Development Goal #1: *Eradicate poverty*** - ECD interventions can increase economic productivity in adulthood and reduce intergenerational cycles of poverty. More specifically, ECD services can be leveraged to support future economic productivity by enabling children when they enter the workforce as adolescents and adults to increase their household wages and by reducing societal costs such as health care and public aid, especially among vulnerable populations (Donaldson et al., 2018; Gertler et al., 2014; Hodinott et al., 2008; Schweinhart et al., 2005; Reynolds et al., 2011).

• **Sustainable Development Goal #2: *End hunger and improve nutrition*** - ECD interventions that promote nurturing care can reduce incidences of malnutrition in young children and improve their growth, development, and their future potential (for reviews of ECD programs that improve nutrition and growth outcomes in young children, see Britto et al., 2017; Donaldson et al., 2018; Richter et al., 2017; Walker et al., 2011a).

• **Sustainable Development Goal #3: *Ensure healthy lives*** - ECD programs focused on improving children's health are the most cost-effective and efficient investment for improving lifelong health outcomes (UNICEF, 2017; Heckman et al., 2010; Heckman, 2014). The implementation of ECD programs can enhance the quality of home care practices among families, reduce incidences of child

maltreatment, and reduce the likelihood of persistent toxic stress. Sadly, child abuse is a matter of concern across the globe including in Japan (The Economist – Intelligence Unit, 2019; Chan, 2013; Isumi et al., 2018; Obikane et al., 2018; Takahashi et al., 2014).

• **Sustainable Development Goal #4: *Ensure lifelong learning*** - Early stimulation and early childhood education opportunities, as part of ECD programs, will enhance children's school performance and improve an individual's level of educational achievement and ultimately economic productivity. Such opportunities can increase the likelihood that when these children become parents, they will promote the early stimulation and learning of their own children, therefore promoting cycles of improved learning and educational achievement for generations (Connolly et al., 2007; Britto et al., 2014a). Quality education for all children is vital for creating a more peaceful and sustainable world. Indeed, research from nearly 100 countries over 50 years found robust evidence that the likelihood of violent conflict more than doubles for countries with high levels of intergroup inequality in education, after controlling for known conflict risk factors such as wealth, political regime, and geographic location. The research also suggests that greater education equality between male and female students decreases the likelihood of violent conflict by as much as 37 per cent (FHI 360 Education Policy and Data Center and UNICEF, 2016). This further highlights the necessity for ECD programs that improve early learning and educational opportunities for all children.

• **Sustainable Development Goal #5: *Achieve gender equality*** - ECD interventions can improve the motivation for families and communities to increase opportunities for learning

for both girls and boys, so that they can benefit equally from their schooling as they enter adulthood (Engle et al., 2007; Irwin et al., 2007). Multi-level ECD programs that also focus on improving gender equality among caregivers in the community can additionally contribute to reducing persistent gender-related inequalities (for a brief review of such programs, see Donaldson et al., 2018, pp. 66-71).

• **Sustainable Development Goal #8: *Improve work opportunities and economic growth*** -

Based on the work of James Heckman and his colleagues, there are clear long-term economic benefits of ECD programs, including improved educational achievements, improved employment status, and higher income in adulthood (e.g., Heckman et al., 2010). In addition to increasing household income and employment opportunities for participants, ECD programs can reduce child maltreatment, improve health outcomes, and reduce crime rates (e.g., Olds et al., 1998; Reynolds et al., 2007; Schweinhart et al., 2005; Walker et al., 2011a), which can reduce government expenditures in health care, public aid, child protective services, and the criminal justice system (Reynolds et al., 2011). Increased youth employment as a result of quality ECD services may further contribute to reduced expenditures related to crime, as the number of individuals incarcerated is reduced (Heckman, 2014; Heckman and Garcia, 2017; Heckman et al., 2010; Heckman and Raut, 2016). ECD programs that also provide caregivers opportunities for employment and income-generating skills (e.g., literacy, numeracy, small-business trainings, etc.) can further improve work and economic opportunities for individuals (for a brief review of such programs, see Donaldson et al., 2018, pp. 66-67).

• **Sustainable Development Goal #10: *Reduce inequality in and among countries*** -

The provision of nurturing care and family support to vulnerable young children and families as part of multi-level ECD social services can reduce inequalities and improve social and economic outcomes in communities and nations, as discussed in detail previously. These programs can to some degree assist children living in adverse environments to attain outcomes similar to their peers who are developing among more fortunate and affluent circumstances (for discussions on how ECD programs can reduce inequalities, see Campbell et al., 2012; Donaldson et al., 2018; Irwin et al., 2007).

• **Sustainable Development Goal #16: *Promote peaceful societies*** -

Children who are well nourished and secure have enhanced coping strategies, even in conditions of severe adversity. ECD programs have the potential to reduce intergenerational cycles of violence and abuse while enhancing social cohesion and building trust both vertically and horizontally within families, community and nations (Cui et al., 2010; Donaldson et al., 2018; Ponguta et al., 2018a). This topic was recently the focus of a special issue of the *Japanese Journal of Child and Adolescent Psychiatry Special Issue: Child Abuse and Care* (Inuzuka, 2016). In addition, ECD services can be leveraged to reduce conflict risks and strengthen social cohesion among groups through: bringing together families from opposing groups around the common goal of child wellbeing. For example, developing context-sensitive programs that intentionally instill respect for the “other” can be conducive to peacebuilding efforts (Donaldson et al., 2018; McCandless, 2012). The work of the Early Years in collaboration with the team at

Queen's University in Belfast provide excellent examples of peacebuilding through ECD services (Connolly, 2018; Connolly et al., 2006, 2007, 2010).

• **Sustainable Development Goal #17: *Strengthen the means of implementation*** - ECD interventions have the potential to strengthen coordination across sectors to achieve common health, social, and economic goals, and to bring together civil society and governmental partners (G20 Initiative for Early Childhood Development and UNICEF, 2018).

Question #4: What can we recommend to local and national governments so that they can create policies and social service sector plans in which multi-level ECD services are leveraged to contribute to sustainable peace and development?

In order to develop policies and systems that contribute to reducing violent conflict and sustaining peace, governments and institutions must develop a conflict-sensitive, culturally-sensitive and systemic approaches to designing and delivering multi-level ECD services. It is important to ensure that these ECD services do not inadvertently exacerbate existing conflict drivers as they strive to build competencies and transform relationships at the individual, interpersonal and intergroup levels. The policy recommendations presented here are based on a number of sources including UNICEF, NGOs, as well as those presented in academic publications (Ang and Oliver, 2016; Britto et al., 2017; Connolly et al., 2006, 2010; Connolly, 2018; Collins, 2015; Donaldson et al., 2018; Ponguta et al., 2018a; ECPC, 2019; Engle et al., 2007; Leckman et al., 2014a, 2014b; Novelli et al., 2016; Staub 2003a; 2003b; UNICEF 2012, 2016a, 2017).

III. POLICY RECOMMENDATIONS

Ten specific recommendations are listed below. Individual practitioners and scholars in our field, as well as the professional and advocacy organizations that we are affiliated with, need to interact and partner with government officials to advocate for each of these recommendations:

• **Recommendation #1:** *Conduct context analyses that identify the root causes and drivers of conflict within a region or country, and assess the feasibility and extent to which multi-level ECD social services can address or at least contribute to the mitigation of these drivers of conflict.* Programming that is relevant to the context of families living in vulnerable settings must be anchored in an understanding of the drivers of the crises and be informed by analyses of feasibility of implementation. Research has shown, for example, that sociocultural perspectives can determine the manifestation of social cohesion, and that individual attributes (such as resilience) are also highly contextual (Pham and Vinck, 2017; Panter-Brick and Leckman, 2013). Context analyses are critical to determining stressors and factors that drive negative outcomes, which need to inform and be addressed in the programmatic design (Connolly et al., 2007; UNICEF, 2019, 2016b; McCandless, 2012). For example, UNICEF in Côte d'Ivoire conducted a context-analysis and found several risk factors for conflict, including inter-ethnic distrust and violence as well as inequitable access to social services (UNICEF, 2014). In order to help mitigate these potential conflict drivers, UNICEF designed inter-ethnic ECD centers where families from all ethnic backgrounds could attend, which helped improve developmental outcomes of vulnerable

children. By bringing together families from different ethnic groups, inter-ethnic relationships among families could flourish, thereby helping reduce inter-ethnic distrust and conflict. In addition, these centers contributed to reducing inequities in social service access by helping female caregivers gain literacy, numeracy, and other income-generating skills, thereby improving their positions in their community and home.

• **Recommendation #2:** *Build partnerships within and among governmental agencies, NGOs, and civil society in which civil actors (community members, communal institutions, etc.) contribute to the design and delivery of the social services that will affect them.* Co-creating valuable social services can help build a sense of trust and cooperation among governments and their constituents, thereby strengthening vertical and horizontal social cohesion (McCandless, 2012). In addition, if community members are involved in the design and implementation of their own social services (such as ECD services), they can ensure they are relevant, culturally appropriate and sustainable, and will also provide communities with a sense of control over their own future (Connolly et al., 2007).

• **Recommendation #3:** *Ensure high quality, sustainable ECD services through efficient staffing among community members.* One major impediment to achieving the target of building scalable ECD services is the lack of a skilled workforce. While data on the global early childhood care and education (ECCE) workforce are limited, there are significant challenges to meeting ECCE workforce needs including a large dependency on volunteers particularly in LMICs (Yousafzai and Aboud, 2014). The impact of an unskilled ECCE workforce can have negative consequences

on children (Lu et al., 2016; McCoy et al., 2017). A recent article argues the case for leveraging youth as an untapped resource for supplying the workforce that an ECCE system needs (Ponguta et al., 2018b). Youth comprise a large proportion of the global population, and historically, although youth experience higher unemployment rates than their adult counterparts, youth are important agents of social awareness, social transformation, and community mobilization in multiple global contexts. A recent pilot project in Pakistan has affirmed the promise of youth-led ECCE programs as a viable option to address workforce gaps while benefiting both young children and youth (Yousafzai et al., 2018).

Developing the workforce at ECD centers can also be leveraged to address specific conflict risks within the community, such as gender inequities, unemployment, or inter-group tensions. For example, UNICEF Chad co-operationalized their ECD programming to additionally address the previously held norm of gender segregation at work by staffing their child centers with both female and male volunteers from the refugee community, thereby changing norms and decreasing gender inequities (Connolly et al., 2007, pp. 41–50). Regardless of the context, it is important to note that ECD staff management should always be taught how to make their center sustainable, for example by offering training courses on how to secure funding and manage projects (Connolly et al., 2007).

• **Recommendation #4:** *Develop conflict-prevention frameworks for ECD services that aim to reduce systemic toxic stress and structural violence through the 4Rs (Novelli et al., 2016): (i) Redistribution (equitable distribution) of resources; (ii) Recognition of all identities and voices in the provision of ser-*

vices; (iii) Representation of all groups in planning and decision making; and (iv) Reconciliation of past injustices among conflicting groups and strengthening of social cohesion through the use of social services. The operationalization of the 4Rs will also set the stage for the implementation and sustainability of multi-level ECD social services in communities and regions.

• **Recommendation #5:** *Build institutional and governmental competencies to develop ECD policies that will contribute to social cohesion and sustainable development.* Funds should be allocated within ECD budgets that are dedicated to building social cohesion (e.g., if the intention is to establish new social services in a given community, it may be useful to establish an intergroup ECD center with the goal of not only providing nurturing care to young children but also strengthening relationships among families across cultural divides). It will also be necessary to secure long-term funding to develop and refine evidence-based action plans informed by science for psychosocial programming, including services for children affected by violence in their homes or communities. These evidence-based services must address each of the elements of nurturing care (health [including WASH – water, sanitation, hygiene], nutrition, responsive caregiving, education, protection), which can be delivered through pre-existing sectoral programs and networks (Black et al., 2017). It will also be crucial to: develop accountability systems that track financial investments in ECD services; create national frameworks that guide scaling up of programs; and build planning, monitoring, and evaluation frameworks to understand how ECD services are promoting sustainable peace and development. The recent initia-

tives of Links – The UK NIHR Global Health Research Group on Early Childhood Development and Peacebuilding at Queen's University Belfast in seven LMICs is an excellent example of what needs to be done across the globe (Connolly, 2018). Another important strategy for furthering this cause is for governments to sponsor advocacy and media campaigns concerning the importance and value of ECD interventions and community development. The Media Initiative for Children-Respecting Difference Programme in Northern Ireland is an excellent exemplar of such a media campaign (Collins, 2015).

• **Recommendation #6:** *Develop peacebuilding capacities and ECD knowledge in community leaders and institutions.* Achieving this goal is essential if we are to build a more peaceful and sustainable world. Community members, leaders, and institutions must develop awareness of the importance of ECD, which can be done through media campaigns, education programming, and other community-based methods. Community leaders need to understand how multi-level ECD services can transform relationships and reduce conflict risks through services that facilitate respect for differences among children and families from differing groups. These leaders must also become more knowledgeable about potential conflict risks in their community, including understanding what factors drive conflict; how their own group contributes to conflict; and how they can leverage their leadership and social influence to mitigate conflict through their words and actions as well as their community's education services, media, intergroup ECD services and school curricula. In addition, leaders should support inclusive, equitable ECD services that include children from all sociocultural identity groups

to maximize the potential for all children.

• **Recommendation #7:** *ECD-sensitive programming must be considered in all emergency contingency plans.* Emergency contingency plans aim to prevent or reduce hazards that may occur from natural or biochemical disasters, climate change, violent conflict, or economic downfalls (Theirworld, 2016). These plans must consider how such events can affect children and their families within specific communities, and what can be done to help prevent adverse effects.

• **Recommendation #8.** *Create nation-wide media guidance to promote ECD programming, social cohesion, and peacebuilding efforts.* Sadly, news broadcasts and social media can make the public fearful and exacerbate intergroup hostility or discrimination against individuals and groups. As a result, the necessary media guidance requires an emphasis on both the importance of early childhood and also the fundamental need to respect differences (physical, social, cultural and ethnic differences) among children, families and practitioners (e.g., Collins, 2015; Connolly et al., 2006).

• **Recommendation #9:** *Join with U.N. Member States to advocate for the drafting of a United Nations resolution on Early Childhood Development (ECD) for Sustainable Peace and Development that complements other peacebuilding resolutions.* The world community needs to recognize that ECD programs have the potential to promote sustainable peace and development. A self-standing resolution on ECD for Sustainable Peace and Development will have a certain moral authority and as such will help to put the concept of ECD and peacebuilding firmly on the map for communities and policymakers. A first step will be to meet with country representa-

tives to consider how best to proceed in drafting this resolution. Ideally, this would be done in consultation with UNICEF and the ECPC.

• **Recommendation #10:** *Encourage funding agencies and governments to continue to fund research on resilience and to explore the degree to which “wellness interventions” can reverse the impact of toxic stress that children experienced earlier in their lives.* A focus on resilience offers the promise of a paradigm shift in many fields of research, clinical practice, and policy (Heckman and García, 2017). By focusing on resilience, researchers and practitioners will alter the focus of their attention – from concerted efforts to appraise risk or vulnerability, as detailed above, towards concerted efforts to enhance strength or capability (Panter-Brick and Leckman, 2013). It also shifts the focus of analysis – from asking relatively limited questions, e.g., ‘*What are the linkages between risk exposures and functional deficits?*’, to complex questions regarding wellbeing, such as ‘*When, how, why and for whom do specific interventions truly matter?*’. Thus, as a field, we might ask *when* interventions are most effective, within the time frame of human development and our evolutionary history; and *how* do we best measure aspects of the human experience to gain a deeper understanding of the ways in which individuals and communities withstand adversity.

More recently, data are emerging that suggest that the implementation of group- and family-based “wellness” interventions with underprivileged children and their families can have a positive impact on the child’s brain structure and function, as well as reversing the epigenetic alterations that were a consequence of the adversity that occurred

earlier in the child's life (Barch et al., 2018; Bethell et al., 2017).

IV. CONCLUSION

We will all benefit enormously if each of these recommendations can be successfully addressed. Our world then would, in all likelihood, become more peaceful and sustainable (ECPC, 2019). Every individual is important to the transformation required to secure a culture of peace in our world (Chowdhury, 2014; Zaragoza, 1999). We need to empower our children to become global citizens, so that they will become pro-socially competent agents of change and take an active and positive role in their communities to work collaboratively with others to make our planet more equal, fair and sustainable (Oxfam, 2019). As global citizens, we need to take a broad view of how our global community interacts and realize that the obstacles we face also are encountered by others. Together we can meet such challenges far more successfully than we can as separate individuals, families, communities, or nations.

Without a doubt, it will be a challenge to convince government leaders and policymakers to take definitive action with regard to ECD services (Heckman and García, 2017). But there is reason for optimism. In 2018 the Development Working Group of the G20 (2018) launched an Initiative for ECD that affirms the importance of early childhood as the foundation for future health and wellbeing, benefiting both individuals and societies. This G20 initiative specifically calls for a closer examination of national investments in ECD. The most recent G20 summit was held in Osaka, Japan in June of 2019. Although world leaders recognized that “global health ... is essential as a basis for sustainable

growth of the global economy”, there was little attention paid to the promise of ECD services as a path to a more peaceful world. Hopefully, the next G20 summit will take us one step closer to a more peaceful and sustainable world by investing in the next generation. More needs to be done and we honored to be working with our colleagues in Turkey and Saudi Arabia to address this need (Almuneef et al., 2018).

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