Early Child Development: A Powerful Equalizer

Final Report

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for the World Health Organization’s Commission on the Social Determinants of Health

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Abstract

This document synthesizes knowledge about opportunities to improve the state of early child development (ecd) on a global scale. In keeping with international policy standards, we define early childhood as the period from prenatal development to eight years of age. What children experience during the early years sets a critical foundation for their entire lifecourse. This is because ecd—including health, physical, social/emotional and language/cognitive domains—strongly influences basic learning, school success, economic participation, social citizenry, and health. Within the work of the Commission, ecd has strong links to other social determinants of health, particularly Urban Settings, Gender, Globalization, and Health Systems. Areas of common concern with these determinants are discussed throughout this document. Research confirms a strong association between child survival and child development, such that the child survival and health agendas are indivisible from ecd.

Our developmental approach to the early years includes the factors that affect child health and survival, but goes beyond these to consider how the early years can be used to create thriving global citizens. Here, we provide a framework for understanding the environments (and their characteristics) that play a significant role in influencing early development. The evidence and its interpretation is derived primarily from three sources: 1) peer-reviewed scientific literature, 2) reports from governments, international agencies, and civil society groups, and 3) a Knowledge Network of experts in ecd that is representative in both international and inter-sectoral terms. The principal strategic insight of this document is that the nurturant qualities of the environments where children grow up, live and learn—parents, caregivers, family and community—will have the most significant impact on their development. In most situations, parents and caregivers cannot provide strong nurturant environments without help from local, regional, national, and international agencies. We propose ways in which government and civil society actors, from local to international, can work in concert with families to provide equitable access to strong nurturant environments for all children globally.

Key Words: early child development; equity; social determinants of health; lifecourse; rights of the child
Early Child Development: Investment in a Country’s Future

The early years of life are crucial in influencing a range of health and social outcomes across the lifecourse. Research now shows that many challenges in adult society—mental health problems, obesity/stunting, heart disease, criminality, competence in literacy and numeracy—have their roots in early childhood. Economists now argue on the basis of the available evidence that investment in early childhood is the most powerful investment a country can make, with returns over the lifecourse many times the amount of the original investment. Governments can make major and sustained improvements in society by implementing policies that take note of this powerful body of research while, at the same time, fulfilling their obligations under the UN Convention on the Rights of the Child.

Research now shows that children’s early environment has a vital impact on the way their brains develop. A baby is born with billions of brain cells that represent lifelong potential, but, to develop, these brain cells need to connect with each other. The more stimulating the early environment, the more positive connections are formed in the brain and the better the child thrives in all aspects of his or her life, in terms of physical development, emotional and social development, and the ability to express themselves and acquire knowledge.

We know what kinds of environments promote early child health and development. While nutrition and physical growth are basic, young children also need to spend their time in caring, responsive environments that protect them from inappropriate disapproval and punishment. They need opportunities to explore their world, to play, and to learn how to speak and listen to others. Parents and other caregivers want to provide these opportunities for their children, but they need support from community and government at all levels. For example, children benefit when national governments adopt “family-friendly” social protection policies that guarantee adequate income for all, and allow parents and caregivers to effectively balance their time spent at home and work. Despite this knowledge, it is estimated that at least 200 million children in developing countries alone are not reaching their full potential.

Political leaders can play an important role in guaranteeing universal access to a range of early child development services: parenting and caregiver support, quality childcare, primary healthcare, nutrition, education, and social protection. In the early years, the health care system has a pivotal role to play, as it is the point of first contact and can serve as a gateway to other early childhood services. To be effective, services at all levels need to be better coordinated and to converge at the family and local community in a way that puts the child at the centre.

These kinds of family-friendly policies and practices clearly benefit children and families, but they also result in economic benefits to the larger society. Globally, those societies that invest in children and families in the early years—rich or poor—have the most literate and numerate populations. These are the societies that have the best health status and lowest levels of health inequality in the world. Success in promoting early child development does not depend upon a society being wealthy. Because early child development programs rely primarily on the skills of caregivers, the cost of effective programs varies with the wage structure of a society. Regardless of their level of wealth, societies can make progress on early child development by allocating as little as $1.00 in this area for every $10.00 spent on health and education.

Child Survival and Child Health agendas are indivisible from Early Child Development. That is, taking a developmental perspective on the early years provides an overarching framework of understanding that subsumes issues of survival and health. A healthy start in life gives each child an equal chance to thrive and grow into an adult who makes a positive contribution to the community—economically and socially.
Executive Summary

The early child period is considered to be the most important developmental phase throughout the lifespan. Healthy early child development (ecd)—which includes the physical, social/emotional, and language/cognitive domains of development, each equally important—strongly influences well-being, obesity/stunting, mental health, heart disease, competence in literacy and numeracy, criminality, and economic participation throughout life. What happens to the child in the early years is critical for the child’s developmental trajectory and lifecourse.

The principal strategic insight of this document is that the nurturant qualities of the environments where children grow up, live and learn matter the most for their development, yet parents cannot provide strong nurturant environments without help from local, regional, national, and international agencies. Therefore, this report’s principal contribution is to propose ways in which government and civil society actors, from local to international, can work in concert with families to provide equitable access to strong nurturant environments for all children globally. Recognizing the strong impact of ecd on adult life, it is imperative that governments recognize that disparities in the nurturant environments required for healthy child development will impact differentially on the outcome of different nations and societies.

The early years are marked by the most rapid development, especially of the central nervous system. The environmental conditions to which children are exposed in the earliest years literally “sculpt” the developing brain. The environments that are responsible for fostering nurturant conditions for children range from the intimate realm of the family to the broader socioeconomic context shaped by governments, international agencies, and civil society. These environments and their characteristics are the determinants of ecd; in turn, ecd is a determinant of health, well-being, and learning skills across the balance of the lifecourse.

Economists now argue on the basis of the available evidence that investment in early childhood is the most powerful investment a country can make, with returns over the lifecourse many times the size of the original investment.

The scope of the present report is fourfold:

1. To demonstrate which environments matter most for children. This includes environments from the most intimate (family) to the most remote (global).
2. To review which environmental configurations are optimal for ecd, including aspects of environments that are economic, social, and physical in nature.
3. To determine the “contingency relationships” that connect the broader socioeconomic context of society to the quality of nurturing in intimate environments such as families and communities.
4. To highlight opportunities to foster nurturant conditions for children at multiple levels of society (from family-level action to national and global governmental action) and by multiple means (i.e. through programmatic implementation, to “child-centered” social and economic policy development).

In keeping with international policy standards, early childhood is defined as the period from prenatal development to eight years of age. The evidentiary base, as well as
Economists now argue on the basis of the available evidence that investment in early childhood is the most powerful investment a country can make, with returns over the life course many times the size of the original investment.
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Residential and relational communities offer families multiple forms of support, from tangible goods and services that assist with child-rearing, to emotional connections with others that are instrumental in the well-being of children and their caregivers. At the residential/locality level, both governments and grass-roots organizations also play a highly influential role. Many resources available to children and families are provided on a community level through local recognition of deficits in resources, problem-solving, and ingenuity. There are, however, inequities in ecd that are apparent between residential communities, which must be addressed in a systematic way.

“Relational community” refers to the people, adults, and children, who help form a child’s social identity: tribal, ethnic, religious, and language/cultural. Often, this is not a geographically clustered community. Relational communities provide a source of social networks and collective efficacy, including instrumental, informational, and emotional forms of support. However, discrimination, social exclusion, and other forms of subjugation are often directed at groups defined by relational communities. The consequences of these forms of discrimination (e.g., fewer economic resources) can result in discernable inequities. Moreover, relational communities can be sources of gender socialization, both equitable and non-equitable. Relational communities are also embedded in the larger socio-political contexts of society; as such, reciprocal engagement with other relational groups, civil society organizations, and governmental bodies is a means of addressing the interests and resource needs of their members.

The availability of ecd programmes and services to support children’s development during the early years is a crucial component of an overall strategy for success in childhood. ecd services may address one or more of the key developmental domains (i.e., language/cognitive, social/emotional, and physical development). The quality and appropriateness of services is a central consideration in determining whether existing ecd programmes improve outcomes for children. There are principles of ecd programmes and services that are readily transferable between places; however, many programme features require tailoring to the social, economic, and cultural contexts in which they are found. ecd services may be targeted to specific characteristics of children or families (e.g., low birth-weight babies or low-income families), may occur only in some communities and locales and not others, or may be more comprehensively provided. Each of these is also accompanied by their respective benefits and drawbacks; however, the overarching goal of the global community should be to find means of providing universal access to effective ecd programmes and services. Health care systems (hcs) are key to providing many important ecd services. The hcs is in a unique position to contribute to ecd, since hcs provide facilities and services that are more widely accessible in many societies than any other form of human service, are already concerned with the health of individuals and communities, employ trained professionals, and are a primary point of contact for child-bearing mothers.

The influence of the regional and national environments is fundamental in determining the quality and accessibility of services and resources to families and communities. They are also salient for understanding the levels of social organization at which inequities in opportunity and outcome may be manifest, and the levels of organization at which action can be taken to ameliorate inequities. There are many interrelated aspects of regional environments that may be significant for ecd: physical (e.g., the degree of urbanization, the health status of the population), social, political, and economic. These aspects of the regional environment affect ecd through their influence on the family and neighbourhood, and on ecd services. In contrast to more intimate environments, such as the family, the significance of large environments, such as the region, is that regions have an effect on large numbers of children. Thus, changing the environment at this level can influence the lives of many children. Much more research and accumulation of knowledge is required regarding how regional characteristics can be modified to positively influence ecd.
The most salient feature of the national environment is its capacity to affect multiple determinants of ecd through wealth creation, public spending, child- and family-friendly policies, social protection, and protection of basic rights. The chances that children will face extreme poverty, child labour, warfare, HIV/AIDS, being left in the care of a sibling, and so on, is determined, first and foremost, by the countries in which they are born. At the level of the national environment, comprehensive, inter-sectoral approaches to policy and decision-making work best for ecd. Although ecd outcomes tend to be more favourable in wealthy countries than poor ones, this is not always the case. It is clear that a commitment of 1.5–2.0% of GDP to an effective mix of policies and programmes in the public sector can effectively support children’s early development. Those nations with less economic and political power are less free to determine their internal policy agendas, and are more influenced by the interests of the international community, including other nations and multilateral organizations. Notwithstanding this, most of the recommendations in this report are within the capabilities of any national government that meets the international criteria for a “competent authority.”

The global environment can influence ecd through its effects on the policies of nations as well as through the direct actions of a range of relevant actors, including multilateral economic organizations, industry, multilateral development agencies, non-governmental development agencies, and civil society groups. A major feature of the global environment in relation to children’s well-being is the element of power in economic, social, and political terms. Power differentials between types of actors, particularly between nations, have many consequences, including the ability of some nations (mainly resource-rich ones) to influence the policies of other nations (mainly resource-poor ones) to suit their own interests. Although power differentials may have invidious effects on ecd, they can be exploited for the benefit of children, too. Requiring a minimum level of government spending on ecd and compliance with the Rights in Early Childhood provisions of the Convention on the Rights of the Child, as pre-conditions for international developmental assistance, are two mechanisms that can be used. Analogous mechanisms have been used effectively in other areas of international development in the past. Civil society groups are conceptualized as being organized at, and acting on, all levels of social organization, from local residential through global. The ability of civil society to act on behalf of children is a function of the extent of “social capital” or connectedness of citizens, and the support of political institutions in promoting expressions of civil organization. When civil society is enabled, there are many avenues through which they can engage on behalf of children. Civil society groups can initiate government, non-governmental organization, and community action on social determinants of ecd. They can advocate on behalf of children to assure that governments and international agencies adopt policies that positively benefit children’s well-being. Finally, civil society groups are instrumental in organizing strategies at the local level to provide families and children with effective delivery of ecd services, to improve the safety, cohesion, and efficacy of residential environments, and to increase the capacity of local and relational communities to better the lives of children. Although research on the direct effect of civil society on ecd is limited, the strong statistical association between the strength of civil society and human development in societies around the globe leaves little doubt about its importance to ecd.
Introduction

The early child period is considered to be the most important developmental phase throughout an individual’s lifespan. Healthy early child development (ecd)—physical, social–emotional, and language–cognitive—is fundamental to success and happiness not only for the duration of childhood, but throughout the lifecourse. ecd strongly influences well-being, obesity/stunting, mental health, heart disease, literacy and numeracy skills, criminality, and economic participation throughout life—all issues that have profound implications for economic burden on countries. If the window of opportunity presented by the early years is missed, it becomes increasingly difficult, in terms of both time and resources, to create a successful lifecourse. Governments must recognize that effective investments in the early years are a cornerstone of human development and central to the successfulness of societies. Indeed, our planet provides no examples of highly successful societies among those who have ignored development in the early years. It is therefore critical for governments, international agencies, and civil society partners to move from knowledge to action in ecd.

Governments must recognize that effective investments in the early years are a cornerstone of human development and central to the successfulness of societies.

ecd is important in all countries, resource-rich and -poor alike, but special attention needs be paid to the potential benefits to the resource-poor, where a child has a four in ten chance of living in extreme poverty and 50.5 million children die before age 5 from preventable diseases. Such children are likely to suffer from poor nutrition and poor health. They are also at high risk of never attending school (unesco 2007). The recent Lancet series on ecd estimates that there are 559 million children under 5 in developing countries—including 155 million who are stunted and 62 million who are not stunted but are living in poverty—for a total of over 200 million children under five years of age who are at extreme risk of impaired cognitive and social–emotional development. Most of these children—89 million—live in ten countries (India, Nigeria, China, Bangladesh, Ethiopia, Indonesia, Pakistan, Democratic Republic of Congo, Uganda, and Tanzania) that account for 145 million (66%) of the 229 million disadvantaged children in the developing world. Many are likely to do poorly in school and subsequently as adults will likely have low incomes, high fertility, and provide poor health care, nutrition, and stimulation to their own children, thus contributing to the intergenerational transmission of disadvantage (Grantham-McGregor et. al., 2007). The loss of human potential that the above statistics represent is associated with more than “a 20% deficit in adult income and will have implications for national development” (Grantham-McGregor et. al., 2007, p. 67).

The overarching message of this report to governments, international agencies, and civil society partners is this: the agenda to improve child survival and health is indivisible from the agenda to improve early child development.

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the Millennium Development Goals (MDGs) for poverty reduction, education, and health.

Governments should adopt a strategy of investing in early child development in order to meet the Millennium Development Goals for poverty reduction, education, and health.

Economists now argue on the basis of the available evidence that investment in early childhood is the most powerful investment a country can make, with returns over the life course many times the amount of the original investment. Globally, societies—rich or poor—that invest in children and families in the early years have the most literate and numerate populations. These are also the societies that have the best health status and lowest levels of health inequality in the world. Societies with the most successful policies and programmes for ECD spend approximately 1.5%–2.0% of GDP per year on it (OECD, 2006). One study has estimated that every dollar spent to help a child reach school age while thriving can generate up to $17 in benefits to society over the following four decades (even after controlling for inflation) (Schweinhart, Barnes & Weikart, 1993, Schenckhart, 2004).

While the academic and grey literature provides compelling evidence about the importance of the early years, in practice, ECD is not at the centre of international, national or local policies, programming and practice. Despite the strength of the evidence, adequate investments in ECD have been slow, particularly, in resource-poor countries where the greatest number of vulnerable children would benefit the most.

Within the work of the Commission on Social Determinants of Health (CSDH), ECD has strong links to other social determinants of health, particularly Urban Settings, Gender, Globalization and Health Systems. Areas of common concern with these determinants are made clear, though implicit, throughout this document. Moreover, we argue that Child Survival, Child Health, Education for All, and Child Rights agendas are indivisible from ECD. Again, taking a developmental perspective on the early years provides a framework of understanding that incorporates issues of survival and health as well as education and rights.

**Scope of Work**

This work includes evidence related to infants and children, from prenatal development through to eight years of age, specifically considering how social determinants influence health across the life course. It is of relevance to children on a global scale. We discuss the limitations to the application of these ideas where appropriate.

**Purpose**

The purpose of this document is to synthesize knowledge to inform the CSDH about opportunities to improve action on a global scale in the area of ECD. The evidence assembled here focuses on priority associations between social determinants of health and health inequities across different country contexts. It comments on the extent to which the social determinants of ECD can be acted upon, is intended to stimulate societal debate on the opportunities for acting on social determinants of health and to inform the application and evaluation of policy proposals and programmes in the area of ECD—nationally, across regions and globally. The areas of focus for each of the Commission’s Knowledge Networks—Globalization, Social Exclusion, Health Systems, Gender, Urban Settings, Employment Conditions, Priority Public Health Conditions and Evidence & Measurement—are critical to understanding the social determination of ECD, and as such are integral to this review.

**Conceptual Framework**

The Total Environment Assessment Model of Early Child Development (TEAM-ECD) has been developed for the CSDH as a means of framing the types of environments (and therefore experiences) that are integral to healthy ECD, and linking these to the biological processes with which they interact to shape children’s outcomes (Siddiqi, Irwin & Hertzman, 2007). The TEAM-ECD model builds on a diverse literature, including previously described frameworks that have addressed ECD from a social environmental perspective. These sources include Urie Bronfenbrenner’s Biocological Model (1986), developmental psychology perspectives on ECD (Brooks-Gunn, Duncan & Maritato, 1997; notions of “biological embedding” (Hertzman 1999); frameworks of understanding regarding social epidemiology and social determinants of health (Dahlgren & Whitehead, 1991; Emmone, 2003); research regarding social relations in human society (Putnam, 2000; Weber, 1946); a vast literature in the political economy domain (for a review of this literature, see Siddiqi, Irwin & Hertzman, 2007); and the World Health Organization (WHO) Framework on Social Determinants of Health (Solat & Irwin, 2005). Because the WHO Equity Team framework considers ECD as a determinant of health, it becomes crucial here to address the factors influencing ECD itself. By expanding the notion of environmental spheres of influence, adding a temporal component, and placing children’s well-being at its centre, TEAM-ECD offers the strongest means of understanding (and therefore acting upon) social determinants of ECD.

**Spheres of Influence on Early Child Development**

In this schematic (see figure 1), a variety of interacting and interdependent spheres of influence are instrumental for development in early childhood. They include the individual, family, and dwelling; residential and relational communities; ECD programmes and services; and regional, national and global environments. In each sphere of influence, social, economic, cultural and gender factors affect its inextricable qualities.
Methods

The process of synthesizing the available evidence raised the question of what counts as evidence. We paid attention to the quality of the source, the context of the research, the nuances of particular programmes and populations served, and the ecological factors associated with the studies. Accordingly, our evidentiary base is derived from three primary sources:

1. peer-reviewed scientific literature,
2. reports from governments, international agencies, and civil society groups and
3. international experts in eCD (including the United Nations Knowledge Network for ECD that is representative in both international and intersectoral terms).

This Final Report is a summary of a broader life course evidence document entitled, like the model, TEAM-ECID (Siddqi, Irwin & Hertzman, 2007), so when in-depth information is an issue, we refer back to TEAM-ECID. Although there is a wealth of literature related to eCD, only a limited number of studies focus upon eCD in resource-poor countries. In addition, although we believe that qualitative research findings contribute a unique and important source of information to a review such as this, the availability of studies employing qualitative methods was limited. There is also a heavy weighting of evidence in the literature for "at risk" or special populations, but these studies are also concentrated in resource-rich nations.

We took a broad view of what literature was relevant to eCD (see Appendix A), investigating databases from multiple disciplines, including medicine, developmental psychology, sociology, nursing, population health, economics and anthropology. For each, evidence that pertained to any aspect of children’s well-being was included. In addition, papers addressing the interconnectivity of family, residential, relational and broader societal contexts were reviewed, even when these papers did not make direct reference to effects on children. Whenever possible we used "causal evidence" in the scientific sense and complemented it with practical and personal experiences drawn from a wide variety of sources. While we have used the highest quality research evidence available, we also are aware that not all high-quality research is of practical significance or equally applicable in all global contexts. This multi-source, multi-method approach helped to ensure that the conclusions and recommendations of this report are consistent with the perspectives of a diverse array of stakeholders, and are broadly applicable to societies throughout the world.

We acknowledge both the limitations posed by many of these studies being focused in resource-rich nations, and the many challenges that limit the extent to which experiences, programmes and research findings from one global context can be applied to others.

Results: TEAM-ECID Spheres of Influence

The Individual Child

The earliest years of life are characterized by the most important development that occurs in a human lifespan. There are several bases for the bold and unequivocal nature of this statement. The early years are marked by the most rapid development, particularly of the central nervous system. The "critical periods" for the development of the brain almost exclusively occur during this time. During these early years, the experiences (e.g., good quality nutrition) and the environmental exposures (e.g., attachment to a caregiver) that a child receives will be instrumental in the successful development of early brain function. Not only will the child be shaped by these experiences physiologically, but the child will also shape these experiences.

The development that occurs in the early years provides the essential building blocks for a lifetime of success in many domains of life, including economic, social and physical well-being.

Biological Embedding

The interaction that occurs between individual characteristics (genetic and physiologic) and experiences and exposures drawn from the environment are basic to the development of the child. The human brain, in particular, is the "master organ" of development. Early in life, genetically programmed sensitive periods occur in the brain, during which time the developing child is disproportionately sensitive to the influences of the external environment (Barker, 1992; Bronfenbrenner, 1986, Wadsworth, 1997). The interplay of the developing brain with the environment is the driving force of development; its legacy is a unique configuration of synapses in the brain that influences cognitive, social and emotional functions thereafter. The process of early experience becoming solidified and influencing health and development over the long-term is known as biological embedding (Hertzman, 1999).

Nurturing

Children’s optimal growth and development requires adequate nutrition, and receiving adequate nutrition is a fundamental right of children (see General Comment 7 on the Convention on the Rights of the Child [CRC] United Nations Office of the High Commission for Human Rights [CRC], 1990) and begins in utero with adequately nourished mothers. During the first months of life, breastfeeding is an important role in providing children with the necessary nutrients. In fact, exclusive breastfeeding is thought to reduce the chances of early post-natal stunting (Smith et al., 2003). Breastfeeding carries with it the dual role of adequate nutrition and healthy infant development through stimulation and attachment as part of the breastfeeding process.

Despite what the evidence—both scientific and traditional—tells us about adequate nutrition for infants and children, there are approximately 150 million children under the age of five years in the developing world alone who suffer from malnourishment. Children who are malnourished are more likely to suffer the consequences of poor physical and mental development; have poorer school performance (Pelto, Dickin & Engle, 1999; Powell et al., 1998; Winicki & Jemison, 2003); be susceptible to the effects of infection; have more severe diarrhoeal episodes; have a higher risk of pneumonia; have lower functioning immune systems; and often have low levels of iodine, iron, protein and vitamin A.
Nutritional deficiencies at all stages of growth have long-term damaging effects on the intellectual and psychological development of children.

Malnutrition is also implicated in more than half of all child deaths worldwide. Although this is a worrisome figure, it is also essential to recognize that nutritional deficiencies at all stages of growth have long-term damaging effects on the intellectual and psychological development of children. Unacceptable loss of human potential (Granham-McGregor et al., 2007). Malnutrition is therefore one of the most important factors in poor development and loss of development potential for children. We know that stunting as a result of chronic malnutrition is shaped by a complex combination of environmental, social and economic factors, which begin in utero and affect both physical growth and mental development. Here is a prime example of where child survival, food security, ECD, education and gender equity agendas converge. It is essential to reduce malnutrition globally, especially in a 1 to 3 year olds, but this requires systematic action at all levels of society (including adequate nutrition and health care; food security, with adequate micronutrient intake; safe water, access to education for all; and protection from illness such as provided by immunization programmes. While attention to these factors is important, it is equally important to ensure the presence of a systematic, community-based follow-up and support for malnourished children and their families—especially the most vulnerable children.

Relationships

Although adequate nutrition is essential for development, the quality of relationships is equally important for children's development. Existing literature leads us to consider children as social actors (Boyd and Levison, 2000; Irwin, 2006; Irwin et al., 2007; Irwin & Johnson, 2005; Mayall, 1996) who are not only shaped by their environment but, in turn, shape it as well. A child's individual development is transactional, reciprocal and mutually constituted. Young children develop best in warm, responsive environments that protect them from inappropriate disapproval and punishment, environments in which there are opportunities to explore their world, to play, and to learn how to speak and listen to others (Ramey & Ramey, 1998). Notwithstanding the complexity of ECD, the many factors that influence ECD come down to these simple attributes of the child’s day-to-day experience. Improving the quality of children’s day-to-day experience through relationships needs to be a primary goal of all initiatives regarding of parenting, childcare, and monitoring rights in early childhood under the CRC.

The Science of Play

The central role of play in children's development is not always appreciated. Play processes influence synaptic formation and are linked to secure attachment with caregivers and relationships with other children. Play provides an important socializing function, beyond the merits of being physically active, in which children learn about and negotiate identity and the social subtleties of relationships (James, 1993). Play may vary according to individual children's temperaments, gender, culture or their families' parenting and caregiving practices, but the impact of play on developmental processes is universal across cultures (Bornstein et al., 1999). Play can be structured or unstructured; it can be done alone, with a caregiver or in a group; it evolves over time; it requires, at a minimum, a safe environment and developmentally appropriate resources. Stimulation (e.g., mothers and children playing with homemade toys) has an independent effect on perceptual motor development outcomes among stunted children, over and above nutritional supplementation (Granham-McGregor et al., 1997). McArthur suggests that "play is marginal to the plans of governments and local authorities" (2003, p. 512) and not viewed as a "serious" activity. Potentially, one of the most efficient strategies for improving ECD is to find ways to convince parents and caregivers of the importance of play and the ways they can promote it.

The Family

The family is the primary influence on a child’s development (UNICEF, 2007) ("Family" is defined here as any group of people who dwell together, eat together, and participate in other daily home-based and leisure activities together). The new CRC General Comment 17 on Early Childhood restates the CRC's position on family as, the "fundamental group" and the "natural environment" for growth and well-being but recognises that the concept of family extends well beyond the "nuclear" model. Parents and caregivers are identified as principal actors in the construction of identity and the development of skills, knowledge and behaviours, and as shapers-in-the-realm of the young child's rights (GCY para. 15). (White, 2006, p. 17). Family members provide most environmental stimuli for children, and families largely control a child's contact with the distal environment (Richter, 2004). The most salient features of the family environment are its social and economic resources. Social resources include parenting skills and education, cultural practices and approaches, intra-familial relations, and the health status of family members. Economic resources include wealth, occupational status and dwelling conditions. Social and economic resources for children are highly intertwined, yet imply different strategies for intervention

Relationships

A strong body of research demonstrates the significance of primary caregivers (and by extension, families) on children's long-term development (Shonkoff & Phillips, 2000). Those factors that facilitate healthy social bonds and the character of caregiving practices that matter most for children are now well understood. A key requisite for healthy ECD is secure attachment to a trusted caregiver with consistent caring, support and affection early in life (Bowby, 1986). Securely attached infants and toddlers use their emotional and physical security as a base from which to explore their environment. Successful attempts at exploration increase
The gradient effect of family resources on ECD is the most powerful explanation for differences in children’s well-being within societies, and these resources profoundly affect all other aspects of the family environment.

The Family

The role of fathers as part of the family-level sphere should not be underestimated, and is often regrettably marginalized. The United Nations Commission on the Status of Women “[encourages] men to participate fully in all actions towards gender equality and [urges] the establishment of the principle of shared power and responsibility between women and men at home, in the community, in the workplace, and in the wider national and international communities” (United Nations Office of the High Commission for Human Rights (UNCSW), 2004, p. 1). Certainly, this includes the role of fathers in nurturing their children (UNICEF, 1997). In fact, engaging and working effectively with fathers and other men who affect the well-being of children and families is now firmly emphasized in policy frameworks as a strategic requirement for all children’s services (Fathers Direct, 2006).

Gender

Inequities within families may be significant from the standpoint of the social determinants of health, especially with respect to gender. “Women’s access to power at the household level has the most direct impact on families and children ... [through lack of control over] allocation of resources for food, health care, schooling and other family necessities” (UNICEF, 2007, p. 22). As a result, female children are more likely to receive less food, and to be denied essential health services and education. Household chores and caregiving keep adult women out of the paid labour force and girls out of school. Moreover, for their parents and siblings. Many children have experienced orphanhood or become the heads of their households due to the death of their parents. In particular, this may influence girls’ development to a greater extent, since they are more likely to bear the responsibility of household matters, and may therefore forego schooling (Richter, 2006). Here, we call for recognition that programmes supporting the health of the caregivers of young children are also investments in ECD, and should be evaluated as such.

Fathers

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It is clear that women’s roles (decision-making power) within the family, as well as their educational levels, play an important part in promoting ECD. Women’s education not only contributes to lower mortality rates but also long-term education for girls. Gender equity at the family level contributes to reducing the intergenerational transmission of poverty through improved development, access to education, and proper feeding (UNICEF, 2007).

**FAMILY DWELLING**

The family dwelling also contributes to (or detracts from) nurture for children. Physical and mental health are linked to housing conditions such as overcrowding, indoor air pollution, and dampness in the household (Dunn & Hayes, 2000). Conditions in shanty-towns can present further risks for children. Studies of homeless families and children find much higher rates of physical and mental illness and worse developmental outcomes among this population (Dunn & Hayes, 2000). These conditions exacerbate the other socioeconomic challenges that many families face on a daily basis.

**FAMILY SUPPORT**

Families need to be able to access the resources that enable them to make choices and decisions in the best interests of their children, including services such as parenting and caregiver support (Richter, 2004), quality childcare (Goelman, 2003; Lamb, 1998; NICHD, 1996; 2002; Vandell & White, 2000), and primary health care and education. Globally, one particular area where families require social protection is in resolving the demands of work and home life. Heymann’s (2006) research on children and families in resource-poor countries demonstrates the importance of access to quality childcare for families the world over (see Appendix D). Her research demonstrates that millions of children are left home alone, left in informal childcare (often in the care of other children), or being brought to work and exposed to unsafe working conditions. Public provision of quality, affordable childcare is part of the solution to this problem.

**RESILIENCE**

Many families that face daily challenges because of their socioeconomic disadvantages are nevertheless able to create the essential nurturant environments for their children. Resilience refers to the capacity of a child to thrive, despite growing up facing adversity. Bartley’s review of research on this issue points to “the importance of social relationships, of ties to the community, and social interactive ‘relationship’ skills as key sources of protection” (2006, p. 5). The family provides the most important social relationships for children’s resilience (Grotberg, 1995). Children all over the world face situations such as witnessing and experiencing violence in their families and the broader community, bullying, disability, divorce, and witnessing or experiencing the effects of alcohol and substance abuse in their families, while others confront catastrophic events or day-to-day atrocities such as war, poverty, disease, famine, floods, HIV/AIDS, and forced labour. How a child emerges from these situations depends upon multiple factors at the individual, family, community, and broader societal levels (Bartley, 2006; Grotberg, 1995). Studies of the experiences of children exposed to war and children of battered women demonstrate that the family can provide a buffer against extreme circumstances (Berman, 1996). Berman’s and other studies point to the importance of enhancing the family’s capacity to support young children in times of stress and atrocity (Pinheiro, 2006). Families require proper safety nets, such as social protection policies, access to appropriate services, and sufficient income, to enhance their ability to bolster children’s resilience.

Resilience can be enhanced through the relationships that families, caregivers, and children establish with others in their locality or relational communities (e.g., religion-based communities), as well as through ECD, health, nutrition, and other services that are provided by governmental and non-governmental organizations (NGOs), and through larger policies that facilitate educational attainment, income transfers, health care, and access to safe housing. Institutional features of society that strengthen the “connectedness” of citizens in positive ways will enhance resilience in children and families (e.g., Positive Deviance [UNICEF, 2005]). Accordingly, governments, international agencies, and civil society groups should use the criterion of “connectedness” to judge programme and policy proposals.

KEY MESSAGES: THE FAMILY

1. The family is a key nurturant environment for children, and caregiving is a strong determinant of children’s outcomes. The family acts to modulate the impact of the broader social environment on the child. It is centrally important, as it is the primary source of stimulation, attachment, social bonds, and support for the child, and children learn in and through relationships.

2. The notion of gradients is most salient at the family level, because the association between socioeconomic status (SES) and children’s developmental outcomes is globally consistent.

3. Families require access to a range of services, such as parenting and caregiver support, quality childcare, primary health care, and basic education. The family requires social protection in areas related to work- and home-life balance.

4. There are inequities within families that are significant from the standpoint of the social determinants of health, especially with respect to gender. For instance, gender biases in feeding practices will influence the growth and nutrition of girls, and a gender bias in attitudes to social roles will lead to boys and girls having differential access to education. An increase in maternal decision-making power relative to males can positively influence children’s long-term outcomes.

**Gender equity at the family level contributes to reducing the intergenerational transmission of poverty through improved development, access to education, and proper feeding.**

When mothers do work, female children are more likely to be kept home from school to care for other siblings, especially when there is no option for substitute caregivers such as childcare. Also according to the recent UNICEF report, nearly one of every five girls who enrolls in primary schools in a developing country does not complete a primary education. Missing out on a primary education deprives a girl of the opportunity to develop to her full potential. Research has shown that educated women are less likely to die in childbirth… are more likely to send their children to school… and that the under-five mortality rate falls by about half for mothers with primary school education. (UNICEF, 2007, p. 4)
In both resource-rich and resource-poor countries, local access to essential services for children should be used as a criterion for urban development.

Relational Communities

The relational community is a primary influence on how children identify themselves and others, and how outsiders identify children; therefore, it is a primary source of social inclusion and exclusion, sense of self and self-worth, self-esteem, and gender socialization. The extent to which adults and children in communities are linked to one another, whether there is reciprocated exchange (of information, in-kind services, and other forms of support), and whether there is informal social control and mutual support, are determined at this level. These characteristics, known variously as social capital or collective efficacy, have been shown to be nurturant for children and their families, both in the context of urban neighborhoods in resource-rich nations (Sampon, Morenoff & Earls, 1999) and in the village context in resource-poor nations (Carter & Mahuccio, 2003). Essentially, child outcomes relate to the social ties between community residents that facilitate the collective monitoring of children related to shared community norms and practices, as well as positive role modelling (Bourdieu, 1984; Coleman, 1988; Jencks & Mayer, 1990; Putnam, 2000). Relational communities are often a main mechanism through which information regarding child rearing practices, and child health and development are transmitted.

Early Child Development: A Powerful Equalizer

KEY MESSAGES: RESIDENTIAL AND RELATIONAL COMMUNITY

1. The physical spaces accessible to children create both the opportunities and the constraints for play-based learning and exploration, which are critical for motor, social/emotional, and cognitive development (Irwin, 2004; James, 1993). Similarly, the availability of high quality services will vary according to the socioeconomic circumstances of communities, including institutions and facilities for learning and recreation, childcare, medical facilities, access to transportation, food markets, and opportunities for employment (Leventhal & Brooks-Gunn, 2000). In both resource-rich and resource-poor countries, local access to these essential services for children should be used as a criterion for urban development.

AN EXAMPLE FROM A KENYAN COMMUNITY’S LIVED EXPERIENCE

In one of the largest shanty-towns surrounding Nairobi, Kenya, there was a crisis. Teenage boys from each of two rival ethnic groups were regularly raping girls from the other group. This activity not was not only ruining the lives of the girls affected, it was creating a climate of distrust and fear that made it impossible to create a sense of collective efficacy for the people living there—young and old alike. A few years ago, the boys called a truce and started to patrol the area to prevent violence, not only to protect girls from the other group. This activity not was not only ruining the lives of the girls affected, it was creating a climate of distrust and fear that made it impossible to create a sense of collective efficacy for the people living there—young and old alike.

2. Children’s long-term developmental outcomes are affected by children’s feelings of safety, the level of cohesion experienced by those living in proximity, the SES mix, access to services, the resources available, the integration or segregation of their relational community, as well as political and institutional participation or discrimination.

3. The relational community is a primary influence on how children identify themselves and others, and how outsiders identify children; therefore, it is a primary source of social inclusion and exclusion, sense of self and self-worth, self-esteem, and gender socialization. The extent to which adults and children in communities are linked to one another, whether there is reciprocated exchange (of information, in-kind services, and other forms of support), and whether there is informal social control and mutual support, are determined at this level. These characteristics, known variously as social capital or collective efficacy, have been shown to be nurturant for children and their families, both in the context of urban neighborhoods in resource-rich nations (Sampon, Morenoff & Earls, 1999) and in the village context in resource-poor nations (Carter & Mahuccio, 2003). Essentially, child outcomes relate to the social ties between community residents that facilitate the collective monitoring of children related to shared community norms and practices, as well as positive role modelling (Bourdieu, 1984; Coleman, 1988; Jencks & Mayer, 1990; Putnam, 2000). Relational communities are often a main mechanism through which information regarding child rearing practices, and child health and development are transmitted.

Traditions regarding child rearing are passed down through generations, not only within families but also throughout broader socially bonded groups.
**ECD Programmes and Services**

Quality ECD programmes and services are those that nurture all aspects of children’s development—physical, social, emotional, language, and cognitive. Governments need to integrate quality ECD programmes and services into social protection policies1 to ameliorate the effects of growing up in poverty for millions of children worldwide and to meet the Millennium Development Goals. The evidence is disturbing: 40% of children in resource-poor nations live in extreme poverty; 10.5 million children die from preventable diseases before they are 5 years old; many children never attend school; 20–25% of children in resource-poor countries suffer from malnutrition and poor health (Grantham-McGregor et al., 2007). Evidence shows that conditions in resource-poor countries that foster poverty, illness, lack of access to schooling, and malnutrition lead to an intergenerational transmission of poverty affecting the productivity of future adults and putting an increased burden of cost on the economic resources of a country. In resource-rich countries, the conditions are not as dramatic and the implications for future development are not as dire, but the differences are really just a matter of degree. Across the resource-rich world, developmental vulnerability rises as one goes down the socioeconomic spectrum, such that, in most OECD countries, 25% or more of children reach adulthood without the basic literacy and numeracy skills required to cope in the modern world (Williams, 2003). Thus, ECD is an issue for all societies, not just the resource-poor.

Kamerman and Gable’s global overview of social protection policies found that in OECD countries, policies that had a positive influence on outcomes for children included “increasing children’s access to reasonable quality early childhood care and education” (2006, p. 17). They also found that in countries where resources were limited (and policy data is also sparse) priorities must be set such that the most vulnerable are targeted, while universal coverage should remain the longer term goal.

**Economic Arguments**

Economists now argue on the basis of the evidence that investment in early childhood is the most powerful investment a country can make, with returns over the lifetime of many times the size of the original investment. ECD programmes foster and promote the quality of human capital: that is, individuals’ competencies and skills for participating in society and the work force (Knudsen, et al., 2006). The competencies needed and skills fostered through ECD programmes are not limited to cognitive gains, but also include physical, social, and emotional gains, all of which are determinants of health over the life course (Carneiro & Heckman, 2003). Much of the burden of disease worldwide (e.g., cardiovascular disease, obesity, HIV/ AIDS, depression) begins in early childhood (Marmot & Doldenworth, 1997). Accordingly, ECD programmes—which incorporate and link health-promoting measures (e.g., good nutrition, immunization) with nurturance, participation, care, stimulation, and protection—offer the prospect of sustained improvements in physical, social, emotional, language, and cognitive development, while simultaneously reducing the immediate and future burden of disease, especially for those who are most vulnerable and disadvantaged.

According to the recent UNICEF Global Monitoring Report, in every country, 21% of children from the poorest communities who are least likely to have access to ECD programmes—“those most exposed to malnutrition and preventable diseases”—yet who would also benefit the most (UNESCO, 2007).

Engle et al. remind us “to achieve the Millennium Development Goals of reducing poverty and ensuring primary school completion for girls and boys, governments and civil society should consider expanding high quality, cost-effective ECD programmes” (2007, p. 239). Early interventions can alter the lifetime trajectories of children who are born poor or are deprived of the opportunities for growth and development available to those more fortunate. ECD programmes and services (e.g., childcare for working parents, preschool, access to primary school) have high rates of return, and are an effective route to reduce poverty, to foster health, productivity, and well-being.

If governments in both resource-rich and resource-poor societies were to act while children were young, by implementing quality ECD programmes and services as part of their broader social protection policies, they would each have a reasonable expectation that these investments would pay for themselves many times over (Schweinhart, et al., 1993; Schweinhart, 2004). In resource-rich countries where the issue has been studied directly, savings come from reduced remedial education and criminal justice costs (Schweinhart, et al., 1993; Schweinhart, 2004). Economic gains come from improved access of mothers to the labour force (Cleveland & Krushinsky, 1998) and increased economic activity in adulthood among those whose developmental trajectories were improved through intervention (Schweinhart, 2004—follow-up to age 27). The economic benefits of ECD intervention over the long term have not been directly studied in resource-poor countries; however, it is widely understood that the transformation of the “Tiger Economies” of Southeast Asia from resource-poor, low life expectancy to resource-rich, high life expectancy societies was accomplished primarily through investment in children, from conception to school leaving. During this period, conditions for young children markedly improved, with infant mortality dropping from approximately 140/1000 in 1946 to less than 5/1000 in 2000 (Hertzan, Siddique, Siddique, & Hertzman, 2001). From 1975 to 2002, the average cost per capita in the Tiger Economies increased from approximately $4,000 to $13,000 (Hertzan, Siddique, 2000; Siddique & Hertzman, 2001). Thus, the scale of potential economic gain for resource-poor societies in adopting child development as a cornerstone to their development strategies can be measured not just in cost-benefit terms at the micro level, but in multiples of economic scale (Schady, 2005; Behrman, Cheng & Todd, 2004).

The scale of potential economic gain for resource-poor societies in adopting child development as a cornerstone to their development strategies can be measured not just in cost-benefit terms at the micro level, but in multiples of economic scale.
Rather than provide a “laundry list” of specific ECD programmes that have evidence of effectiveness, the following paragraphs present generic characteristics as well as strategic and organizational principles of quality, sustainable programmes that are transferable around the globe.

ECD programmes and services address one or more of the following key issues: breastfeeding, childcare, early childhood education, nutrition, and other forms of family support. These include services directed to children, such as daycare, preschools, community-based child development centres, and other such programmes and services. There are also programmes and services that focus on children indirectly, through their support for parents and caregivers; these include parenting programs, home support or home visiting, and other family support programmes. In addition, health care services are a very important point of contact for young children and their families. When ECD programmes and services are added to the delivery of established health care services, they become a highly effective way of promoting ECD.

The quantity and appropriateness of programmes and services is a central consideration in determining whether such programmes lead to good outcomes for boys and girls: in opportunity, expectations, and aspirations (UNICEF, 2007). In addition to these fundamental aspects of quality, ECD programmes and services should be based on consensus as to the nature of successful child development and a set of valid, reliable indicators of ECD (Ramey & Ramey, 1998). Nutrurant environments include those where children are encouraged; mentoring in basic skills is provided; the child’s developmental advances are celebrated; development of new skills is guided and extended; there is protection from inappropriate discipline; and the language environment is rich and responsive (Ramey & Ramey, 1998). Nutrurant environments should also include equity in treatment of boys and girls: in opportunity, expectations, and aspirations (UNICEF, 2007). In addition to these fundamental aspects of quality, ECD programmes and services should be based on consensus as to the nature of successful child development and a set of valid, reliable indicators of ECD (Ramey & Ramey, 1998). Nutrurant environments include those where children are encouraged; mentoring in basic skills is provided; the child’s developmental advances are celebrated; development of new skills is guided and extended; there is protection from inappropriate discipline; and the language environment is rich and responsive (Ramey & Ramey, 1998).

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Early Childhood Development: A Powerful Equalizer

Spheres of Influence: Programmes and Services

THE EARLY CHILDHOOD DEVELOPMENT VIRTUAL UNIVERSITY

The Early Childhood Development Virtual University (ECDVU) represents an innovative approach to the leadership and capacity-building requirements of countries seeking to enhance their social and economic development through addressing the human development needs of their youngest citizens, and the families and communities which nurture them. The ECDVU is a key South–North institution currently working closely with academic institutions in Ghana, Malawi and Tanzania, and with academic, governmental and non-governmental groups in other parts of Sub-Saharan Africa (SSA) and the Middle East and North Africa (MENA). The ECDVU was made possible through support received from The World Bank, UNICEF, UNESCO, the Bernard van Leer Foundation (BvLF), CIDA, a host of local organizations in a dozen ECDVU-participating countries in SSA, and four countries in MENA. International and local partner funds have allowed the delivery of combination web- and face-to-face leadership courses designed to advance country-identified, inter-sectoral early childhood initiatives. These have included, for example:

- country level policy development (see Chalaman-da, HIV/AIDS and single mothers’ programme development (see Niyigenwa and Mabula), and innovative parent-support training (see Habtom). These and other activity descriptions can be found at www.ecdvu.org (ECDVU, 2007), and in Penne & Marafi (2004). The ECDVU is one facet of a three-pronged capacity building effort—the other two being two-week ECD seminars and a major, Africa-wide conference series (Penne, Habtom & Chalama, in press). The ECDVU program was developed to work with communities, cultural groups, and countries in ways that respect local knowledge but also provide interaction with other sources of knowledge. The work of the ECDVU helps to advance the major international development objectives, including the MDGs, Education for All, and the CRC, as well as regional and local objectives (e.g., PFRBS, SWAP, national MDG objectives).

An external Impact Evaluation (see the World Bank Evaluation [ECDVU, 2009]) concludes that the conclusion of the 2004-2004 pilot delivery noted that, “By any measure ECDVU has been singularly successful in meeting and exceeding all of its objectives ... there is every reason to believe that future activities will achieve even greater results for expanding and improving ECD” (ECDVU, 2005).

Linking ECD programmes and services with health care systems will improve child survival rates.

HEALTH CARE SYSTEMS

Health care systems (HCSs) are a unique position to contribute to ECD at a population level, given that HCSs are already concerned with the health of individuals and communities, employ trained professionals, provide facilities and services, and are a primary contact for child-bearing mothers. In many instances, health care providers are the only health professionals whom families come into contact with in the early years of the child’s life; they thus reach the majority of children in a community. When the HCS is used as a linkage point, health care professionals can be highly effective in promoting ECD.

The critical intersection of the ECD and child survival agendas happens in HCSs. While this report has included devastating statistics about millions of children dying through age 5 years, a look at preventable and manageable causes—here we suggest that linking ECD programmes and services with HCSs will improve child survival rates. The example of Kangaroo Care from Bogota, Colombia, is instructive here. Kangaroo Care is based on mothers, fathers and caregivers providing skin-to-skin contact for low birth-weight infants as part of early stimulation, which

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Spheres of Influence: Programmes and Services

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has been shown to improve survival rates of the most vulnerable infants. Through skin-to-skin contact, infants gain the early stimulation that matters for their survival; costs of this intervention are minimal, but benefits are immeasurable.

KANGAROO CARE: BEGINNINGS IN BOGOTA, COLOMBIA

Each year about 20 million infants of low birth weight are born worldwide, which imposes a heavy burden on healthcare and social systems in developing countries. (Ruiz-Pelaez, Charpak & Cueru, 2000)

Premature babies (under 2000 grams) born in poorly resourced settings may not have access to incubators and those that do are separated from their mothers. Kangaroo Care was first developed in 1978 to help premature babies with temperature regulation and bonding in Bogota. Mothers, fathers or caregivers carry/sleep with newborn babies skin to skin in upright positions 24 hours a day. Kangaroo Care has been shown to be as effective as traditional care in incubators at a fraction of the costs. It is a practice with roots in local traditional child rearing that has been taken up in many industrialized nations (e.g., France, Sweden, USA, Canada and more). Kangaroo Care has been shown to:

- deliver ideal conditions for premature infants
- reduce costs of caring for premature infants
- improve breastfeeding rates
- improves bonding
- in some settings reduce morbidity and hospital stay

While the case of Kangaroo Care is a unique hands-on early stimulation programme, developed in hospitals and carried out within and beyond the walls of institutions, health care providers can facilitate ECD in various other ways as well. ECD can serve as a platform for information and support to parents around ECD; they can integrate ECD into existing programmes such as IMCI (Integrated Management of Childhood Illness) / Care for Development, ACDSD (Accelerated Child Survival and Development), BFHI (Baby Friendly Hospital Initiative) (UNICEF, 2007), and nutrition/growth monitoring and promotion that exist in most countries; they can then link children and families to existing community-based ECD services. Examples of this process include head and community development programmes that have added an early stimulation and care component, and ECD programmes that have been coupled with other health services such as a women’s health programme or a reproductive health programme. They are an important point of contact that can extend ECD programming to children and families who would otherwise have no access, and can often do so for relatively small marginal costs.

A notable exception to using the HCS as a point of contact is in the case of remote rural areas or urban slums of resource-poor countries, where ECD services are inaccessible or too weak. In these situations, most community-based interventions for women, children, and families are delivered by NGOs and voluntary organizations (e.g., SEWA, programmes delivered by Save, and the BITEF, Aga Khan, and Soros Foundations’ community development projects). Further details can be found about Equal Access: Using Communications to Reach Parents and Communities on Early Child Development in Nepal and Village-Based ECD Curriculum Development in Lao PDR in Appendix B.

Local, regional, and national governments, with the support of international agencies and civil society partners, must be the key players in developing, promoting, and funding a basket of quality ECD programmes and services.

1. Programmes and services should be based on well-established quality frameworks and include a strategy for monitoring the quality of services. This also includes monitoring for equity in treatment of and opportunities for both girls and boys.
2. Governments have a central role to play to ensure that ECD programmes and services are fully integrated into social protection policies.
3. The overall objective is to provide universal access to inclusive, appropriate quality services and programmes that offer strong nurturing environments. To be sustainable, these services should build on existing infrastructures (especially health care systems) and mobilise national resources (human, institutional and financial).
4. There are multiple entry points for ECD programmes and services, including health care systems, community-based childcare, and preschool education.
5. Health care systems (HCS) are in a unique position to contribute to ECD at a population level, given that HCS are already concerned with the health of individuals and communities, employ trained professionals, provide facilities and services, and are a primary contact point for child-bearing mothers.
6. HCS must ensure that development programmes combine health and nutrition services with early learning, rely on families as partners, and have adequate quality, intensity, and duration in order to affect children’s development cost effectively.
7. HCS must include effective interventions for the physical and mental health of mothers and children within the current maternal and child health strategies (e.g., Making Pregnancy Safer Initiative and the Integrated Management of Childhood Illness), which should be widely implemented in resource-poor countries.

Regional and National

The influence of the regional and national environment is fundamental in determining the extent of services and resources that are available to communities and to families. Many interrelated aspects of regional environments may be significant for ECD, including the physical (e.g., degree of urbanization, the health status of the population), the social, the political, and the economic environments. These aspects of the regional environment affect ECD through their influence on the family, community, and ECD services.

Most of the research performed thus far on regional characteristics in relation to human welfare concerns the impact of the socio-political environment. For instance, a rich literature (primarily derived from the United States) demonstrates an association between state-level income inequality (i.e., distribution of income) and a variety of health outcomes. This research suggests that, above and beyond the wealth of a region (in this case, the state), the greater the inequality in the distribution of income between households, the worse the health and related outcomes of the population, including adult mortality, infant mortality, low birth weight, malignant neoplasms, coronary heart disease, expenditure on medical care, homicide, and violent crime (Kawachi & Prothrow-Stith, 1996; Kennedy, Kawachi & Prothrow-Stith, 1996; Spencer, 2004). The extent of income inequality, in turn, is determined by decisions made partially at the regional level regarding wage rates, income tax, transfers, social expenditures, and other mechanisms of redistribution and distribution (Zuberi, 2001).

We know that in low- and middle-income countries, inequalities in child health outcomes—for example under-five mortality rates—vary according to geography, such as between rural and urban areas and between provinces. In regions where violence is the case, the inequalities are often due to unequal allocation of resources (Howelkin, Kunz, et al., 2005). Regional inequalities in ECD can also be seen in resource-rich countries, as is the case for the province of British Columbia, Canada (Kershaw, Irwin, Trafford & Hertzman, 2006). The map in

KEY MESSAGES: ECD PROGRAMMES AND SERVICES

• Programmes and services should be based on well-established quality frameworks and include a strategy for monitoring the quality of services. This also includes monitoring for equity in treatment of and opportunities for both girls and boys.
• Governments have a central role to play to ensure that ECD programmes and services are fully integrated into social protection policies.
• The overall objective is to provide universal access to inclusive, appropriate quality services and programmes that offer strong nurturing environments. To be sustainable, these services should build on existing infrastructures (especially health care systems) and mobilise national resources (human, institutional and financial).
• There are multiple entry points for ECD programmes and services, including health care systems, community-based childcare, and preschool education.
• Health care systems (HCS) are in a unique position to contribute to ECD at a population level, given that HCS are already concerned with the health of individuals and communities, employ trained professionals, provide facilities and services, and are a primary contact point for child-bearing mothers.
• HCS must ensure that development programmes combine health and nutrition services with early learning, rely on families as partners, and have adequate quality, intensity, and duration in order to affect children’s development cost effectively.
• HCS must include effective interventions for the physical and mental health of mothers and children within the current maternal and child health strategies (e.g., Making Pregnancy Safer Initiative and the Integrated Management of Childhood Illness), which should be widely implemented in resource-poor countries.
Figure 2 demonstrates a three-fold difference in rates of vulnerability (14.0-45.9%) for children reaching school age (5 years) according to the Early Development Instrument (see Appendix C). The pie charts layered on top of the regional areas describe the social and economic characteristics of the given region. Figure 2 shows the scale of social and economic inequality across regions and the associated inequalities in child outcomes. In many regions, however, n.e.x does not seem to predict vulnerabilities in ecd. The research to understand how some low SES communities “buck the trend” and produce good ecd outcomes is, itself, in its infancy. We are confident that when the characteristics of these “resilient communities” are better understood, they will provide useful lessons for communities around the globe. Figure 2 also demonstrates what a powerful tool the mapping of ecd by locality and geographic region can be for the purposes of public discussion and policy-making.

At the sub-national level, regional and relational communities can intersect in ways that create conditions for families and children that are systematically different from the rest of the country. For example, in southern India, a large body of research has found that the norms of this region, in contrast to the norms of northern India, “provide women more exposure to the outside world, more voice in family life, and more freedom of movement than do the social systems of the north” (Jejeebhoy & Sathar, 2001). In fact, recent research findings refute the notion that differences in women’s autonomy in South Asia can be ascribed to religious differences (with the main suggestion that Hindu women are more autonomous than Muslim women), these findings show that the north–south regional differences are much more salient (Jejeebhoy & Sathar, 2001). Women’s autonomy itself is determined largely by women’s education, which is much more accessible in southern regions of India, such as the state of Tamil Nadu (Jejeebhoy, 1995; Jejeebhoy & Sathar, 2001), we know that women’s autonomy influences the opportunities for optimal ecd (unesco, 2007).

The national environment serves as a powerful influence on ecd. The basis for this statement comes in part from direct evidence on national-level factors and in part from an inescapable logical extension of the profound impact of socioeconomic factors at the family and neighborhood levels on children’s well-being. In other words, if socioeconomic conditions matter, then so too do the societal factors that create the conditions themselves (Siddiqi & Hertzman, in press). These conditions are largely a function of the institutional and structural aspects of the nation. The most salient feature of the national environment is its capacity to affect multiple environments (and thus determinants) of children’s well-being through policies and laws. Cross-national studies have found an association between the dispersion of income at the national level and a variety of population health indicators, including life expectancy and infant mortality (Rogers, 1979; Hegg, 1982). In fact, the effect of income inequality on infant mortality withstands the effects of other powerful predictors of mortality during the first year of life, including doctors per capita, nurses per capita, urbanization, female literacy, and reproductive rates (Waldman, 1993).

Socioeconomic conditions matter, as do the societal factors that create the conditions themselves.

To date, the most comprehensive review of social policies in relation to inequities in child welfare across countries examines the impact of policy on child (i.e., family) poverty among the OECD nations (Kamerman et al., 2003). Kamerman’s review identified five primary policy domains of significance:

1. Income transfers (cash and tax benefits),
2. Employment policies,
3. Parental leave and other policies to support maternal employment,
4. Early childhood education and care services, and
5. Prevention and other interventions related to teen pregnancy and births.

Data from the Luxembourg Income Study has demonstrated that, based on market income (i.e., prior to taxes and transfers), at 5%, poverty rates1 in the United States are up to

Figure 2: Early Development Instrument (EDI) Vulnerability Map

Vulnerable on One or More Scales

<table>
<thead>
<tr>
<th>Percentage of children vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>14.0 - 21.3 %</td>
</tr>
<tr>
<td>21.3 - 24.7 %</td>
</tr>
<tr>
<td>24.8 - 27.0 %</td>
</tr>
<tr>
<td>27.1 - 31.1 %</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>31.1 - 45.9 %</td>
</tr>
</tbody>
</table>

Sources: ECDI Cycle 1 (2002 - 2016) Human Development Networks, 2018. Notes: The total sample size is 43250. For Annex Tables, see Appendix. Data from 1992 to 2003 includes data from 2003 in order to increase the sample size. Socio-economic data were obtained from Statistics Canada, 2016 Census of Population, See Statistics Canada’s Public Use Microdata Samples, Which is available at the Statistics Canada’s website. For more detail, please see the data source documentation in the figure legend. 1. Poverty rate measured using relative standard of 45% of median income, and 50% of median income.

1 Poverty rate measured using relative standard of 45% of median income, and 50% of median income.
The Global Level

It is often difficult to characterize globalization, let alone its influence on children. There are many types of stakeholders that shape the global environment, including nations, international organizations, business, non-governmental development agencies, and civil society groups. The global environment can influence ECD through its effects on the policies of nations. A major feature of the global environment in relation to children’s well-being is the element of power in economic, social, and political terms. Power differentials between types of actors, and particularly between nations, have many consequences, including the ability of some nations (mainly resource-rich ones) to influence the policies of other nations (mainly resource-poor ones). This in turn may mean that the ability of resource-poor nations to enact policies that are optimal for ECD is compromised. Efforts to enable nations to gain independence over their own futures, and encouragement of multilaterals to favour policy directions that benefit children are major elements in promoting ECD.

Efforts to enable nations to gain independence over their own futures, and encouragement of multilaterals to favour policy directions that benefit children are major elements in promoting ECD.

One well-known set of policies that was introduced to many resource-poor nations in the 1980s and early 1990s was the Structural Adjustment Programme (SAP) of the World Bank and International Monetary Fund. The purpose of SAP was to increase the economic prosperity of low-income nations for the purpose of paying debts to high-income nations. SAP involved increasing privatization and decreasing the role of the government in many aspects of national economic and social endeavours, including reductions in social welfare programmes, such as education, health care, and other services that benefit ECD, as a means of increasing “efficiency” and spurring economic growth in the resource-poor nations. Ghana’s experience with structural adjustment is briefly described here. It is particularly compelling, since it is often viewed by international agencies as perhaps the most successful case of structural adjustment in Africa. Ghana’s SAP commenced in 1983 and involved reducing government expenditures by cutting social services, adjusting the exchange rate through devaluation of the national currency, abandoning price controls, privatizing state-owned enterprises, and increasing the export-based portion of the economy. On a macro level, the SAP of Ghana has improved, inflation has dropped, and foreign investment has increased, but the social welfare of Ghana’s citizens has worsened. Of particular interest to this report, access to basic services for many children and families was compromised. The devaluation of the currency has meant an increase in cost of imported goods; poverty has decreased slightly, but socioeconomic inequalities have increased (Konadu-Agyemang, 2000).

SAPs have influenced children (directly or indirectly) in the areas of survival, immunization, prevalence of health attentants, nutrition, and balanced urbanization (Bradshaw et al., 1993). Although the evidence of policy effects on health requires further specific study, the experience of Ghana and other nations is instructive.

The global environment is also characterized by important declarations that affirm the rights of children (CRC, 1990) and of women (United Nations Convention on the Elimination of All Forms of Discrimination against Women [CEDAW], 2007), which, by extension, influences the well-being of children. In particular, the new General Comment #7 on Implementing Rights in Early Childhood of the CRC (2005) creates an opportunity to hold “state parties” responsible for the physical, social, emotional, and language/cognitive development of children.
The international community needs to agree on valid ways to measure ECD that are analogous to existing global measurements of health and human development, such as IMRs, U5MRs, stunting, and the HDI.

The importance of global ECD indicators

The international community needs to agree on valid ways to measure ECD that are analogous to existing global measurements of health and human development, such as Infant Mortality Rates (IMRs), Under Five Mortality Rates (U5MRs), stunting, and the Human Development Index. This is essential to achieving national and international recognition of the scale of the ECD challenges we face, and to establishing credible international goals. We are currently able to measure IMR and U5MR across whole societies in a valid, reliable, and credible fashion. As a result, individual states and the global community recognize the scale of the child survival problem and have set the MDGs to address it. Similarly, the level of early childhood nutrition across populations is estimated through rates of stunting. This act of measurement, too, has led to national and international recognition of the scale of the problem, and an MDG has been set. The problem is that we have no comparable indicators for ECD, and therefore no measurement, no data, no data, no problem, no problem, no action. Creating a

The WHO Commission on the Social Determinants of Health has a special role to play, since its broad population health perspective allows it to understand the importance of global monitoring of ECD.

global measurement system to monitor ECD needs to be an essential component of every nation’s ECD strategy. Now that signatory countries are required to report progress in fulfilling General Comment 14 of the CRC (Implementing Rights in Early Childhood), there is an incentive for the international community to create a global ECD measurement system. The elements of such a system are described in Appendix C. The WHO Commission on the Social Determinants of

of young children, as well as eradicating child labour. Other sections of the CRC also have varying degrees of relevance to ECD. For example, Article 6 explicitly decrees that state parties (which primarily refers to nations) are responsible for ensuring “to the maximum extent possible… the development of the child.” CEDAW “was adopted in 1979 by the [United Nations] General Assembly, and is often described as an international bill of rights for women” (United Nations Division on the Advancement of Women, CEDAW 2007). Since the convention is aimed at improving the circumstances of women, it clearly has implications for the well-being and development of children. In addition, the Global Monitoring Report from UNESCO ties Education for All (EFA) to ECD.

One of the most alarming concerns for today’s children is the issue of child labour. Data from 2002 compiled by the ILO suggest that approximately 246 million children are engaged in some form of child labour, which is defined as most productive activity of children, but “excludes the activities of children 12 years and older who are working only a few hours a week in permitted light work and those of children 15 years and above whose work is not classified as ‘hazardous’” (2002). Of these, 171 million child labourers were working in hazardous situations or conditions. The overwhelming number of child labourers (over 175 million) is concentrated in the Asia-Pacific region, followed by Sub-Saharan Africa (48.8 million) and Latin America and the Caribbean (77.4 million). Among child labourers, boys slightly outnumber girls (132 million versus 113 million), but even more disproportionately (95.7 million compared to 74.8 million) bear the burden of work that is characterized as hazardous (2002).

The use of children to perform labour in order to produce commodities to be sold on the market is certainly nothing new; however, the world’s capacity to ameliorate child labour has increased (although we may not always act on this capacity), primarily owing to more avenues for advocacy and institutional support for the protection of child well-being. Article 32 of the CRC makes it imperative that state parties recognize the right of the child to be protected from child labour, particularly work that is harmful to her or his development.

The world’s capacity to ameliorate child labour has increased, primarily owing to more avenues for advocacy and institutional support for the protection of child well-being, e.g. Article 32 of CRC.

The role of civil society

At the global level, the role of non-governmental international bodies and civil society is critical for creating the economic, social, and political conditions that support ECD and children’s welfare more broadly. Civil society makes a particularly strong contribution to ECD and population health. Civil society groups are conceptualized as being organized at, and acting on, all levels of social organization, from local residential through global. The ability of civil society to act on behalf of children is a function of the extent of the social capital, or connectedness of citizens, and the support of political institutions in promoting expressions of civil organization. When civil society is enabled, there are many avenues through which it can engage on behalf of children. Civil society groups can initiate government, NGO, and community action on social determinants of ECD. They can advocate on behalf of children to ensure that governments and international agencies adopt policies that positively benefit children’s well-being. They can be instrumental in organizing strategies at the local level to provide families and children with effective delivery of ECD services; to improve the safety, cohesion, and efficacy of residential environments; and to increase the capacity of local and relational communities to better the lives of children. Although research on the direct effect of civil society on ECD is limited, the strong statistical association between the strength of civil society and human development makes it imperative that state parties recognize the right of the...
Discussion and Recommendations

A child requires nurturant conditions to thrive. The process of development is influenced not only by a child’s nutritional and health status but also by the kind of interactions—beginning in utero—infants and children develop with caregivers in their environments. We know that early environments influence individual children’s development independent of and in combination with their biologic characteristics, and there is a growing awareness of specific periods in children’s brain development that affect health outcomes over a lifetime. Enriched environments and the quality of stimulation, security, and support during sensitive periods of development are of utmost importance from conception to eight years of age. The environments responsible for fostering nurturant conditions for children range from the intimate realm of the family to the broader socioeconomic context shaped by governments, international agencies, and civil society. These environments and their characteristics are the social determinants of ecd. An essential precondition for ecd is the child’s basic right to exist; thus, national governments have an essential predisposing role to play by ensuring that all children are registered at birth, through maintaining a functioning, comprehensive birth registry.

We now understand that the transactional nature of young children’s relationships are far more important for their growth and development than has traditionally been recognized. Children do not just grow up according to internal laws of biology; they grow and develop through the interplay of human relationships in the environments where they live. In order to provide nurturant environments for their children, all families need support from community and government. The quality of support received by families should be monitored by local NGOs as part of the reporting under the CRC. The goal is universal access to a range of ecd services: parenting and caregiver support, quality childcare, nutrition, social protection, primary healthcare, and basic education. To be effective, these services need to be coordinated at the regional level, and delivered at the local level in a way that puts the child at the centre. Children benefit most when national governments adopt child-and family-friendly policies that guarantee adequate income for all, and allow parents and caregivers to balance their time spent at home and work. Governments should take up the challenge of creating a work-life/home-life balance, by putting systems in place to ensure that quality community-based childcare relevant to local culture and context is available for the children of working mothers.

In order to achieve a global consensus on the importance of ecd, there is a need to foster a broader and more profound understanding of what is involved in ecd, and to a much wider audience than in the past. This would have to take shape as a social marketing campaign that expands to include audiences not traditionally thought of as ecd stakeholders: finance and planning departments of government, the economic sector, the corporate world, and media. In addition, WHO, UNICEF, UNICEF, the World Bank, and key NGOs should form a consortium to ensure broad dissemination of the science of ecd in conjunction with the social marketing campaign.

The CSDD should model ways to promote an understanding that the MDGs will only be achieved if ecd is addressed seriously.

The CSDD should model ways to promote an understanding that the MDGs will only be achieved if ecd is addressed seriously. In order to do this, and because of its global

**Recommendation 1**

- The current international climate is propitious for advancing ecd. Heightened awareness of the importance of ecd and convergence of initiatives at the international level are creating a new momentum.

**Recommendation 2**

- Alliances that are independent of state parties should be encouraged among those who are concerned with the well-being of young children. These can occur at the level of the family (e.g., the grandmother to grandmother program) or at the level of the local community (e.g., networks like those developed by the WCF, Aga Khan, and Soros Foundations).

**Recommendation 3**

- Because of its global responsibility in population health, the WHO should strengthen its commitment to ecd as a key social determinant of health.

**Recommendation 4**

- The international community has a role to play in creating consensus on how to monitor child development through indicators that can be analyzed at the national, regional, and community levels, and tracked over time.

**Recommendation 5**

- The CRC’s new General Comment #7 on Implementing Rights in Early Childhood creates an opportunity to hold States Parties responsible for physical, social/emotional, and language/cognitive development of young children, as well as enacting child labour.
Responsibility in population health, the WHO should strengthen its commitment to ECD as a key social determinant of health, beyond the c2000, by subsuming its child survival and health programmes globally under the developmental perspective articulated in this report.

Governments, by prioritizing the CRC, have committed themselves to realizing rights in early childhood. This means that local, regional, and national governments should incorporate the “science of early child development” into policy. Most countries require capacity building to meet this goal. Given the overlap in underlying determinants, governments should be building upon an established child survival and health programmes to make ECD programmes accessible through existing platforms. The health care system is often the most cost-effective platform and most universal point of contact.

Governments should create an inter-ministerial policy framework for ECD that clearly articulates the roles and responsibilities of each sector and how they will collaborate. Governments should also integrate ECD policy elements into the agendas of each sector to ensure that they are considered routinely in sectoral decision-making. Governments will need to reallocate resources to decrease inequities in access to high-quality ECD programmes and services; to facilitate this, our review has identified evidence that can be used as a benchmark for judging the quality of ECD programmes and services. Community involvement is an important component of successful ECD programming. Because of this, governments should involve local communities in developing and implementing ECD policies, programmes and services. This does not absolve governments from their responsibilities but ensures stronger relationships between government and the local communities where service delivery occurs.

ECD programmes should be monitored for quality and effectiveness. This should include an assessment of barriers to and opportunities for access, with a particular focus on decreasing inequity in ECD. Mechanisms need to be developed and implemented to insure that communities and central agencies work together to collect reliable data on outcomes.

Governments need to develop strategies for “scaling up” effective programmes from the local to the national, without sacrificing the characteristics of the programme that made it effective. Implementation integrity and accountability at the local level must be sustained, even when programmes are scaled-up to the national level.

The social determinants of health operate from the most intimate sphere of influence for children—the family—to the most distant—the global sphere. While governments can do much to change the circumstances of the world’s children and families, this review has also demonstrated the need for global collaboration in the area of ECD. We propose an expanded global interagency collaboration (herein, the Global Alliance for ECD, or GA-ECD), that will build upon existing informal networks of agencies currently working on ECD internationally, such as UNICEF, UNESCO, World Bank, UNFPA, Soros Foundation, the Aga Khan Foundation and the WHO.

A more formal partnership would facilitate developing an interactive global knowledge platform for communities and individuals to share knowledge related to ECD; monitoring country work through facilities such as the CRC, and providing advocacy for ECD and advice to countries on the science of ECD. The GA-ECD could become an effective site of advocacy for increased investment in child- and family-friendly policies. It should work towards linking ECD to the MDGs, especially to MDG3 on poverty reduction, education, gender equality, and child survival. The GA-ECD should take responsibility for strengthening the ECD “watchdog” function that needs to be performed by independent agencies within countries. In practice, this would require the GA-ECD to play a role in aiding and ensuring that countries remain accountable through the CRC’s General Comment #7, including the voices of children in their country reports; and demonstrating how they have considered the evolving capacities of children.

A global funding strategy needs to be put in place to allow effective monitoring of General Comment #7. Although this is an ambitious goal, it need not be an expensive one. It is estimated that an endowment that generates US $1–$3 million revenue per year would permit these functions to be fulfilled.

UNICEF, with the concurrence of the GA-ECD should develop a common formula for calculating national expenditures on ECD, as well as per capita investment in children. An economic analysis that indicates the “return on investment” that society can anticipate from different types of ECD programmes and services should be created and disseminated.

Local, regional, and national governments should incorporate the “science of early child development” into policy.
Conclusions

What a child experiences during the early years sets a critical foundation for the entire life course. ECD, including physical, social/emotional, and language/cognitive domains, strongly influences basic learning, school success, economic participation, social citizenship, and health. The principal strategic insight of this document is that the nurturant qualities of the environments where children grow up, live, and learn matter the most for their development, yet parents cannot provide strong nurturant environments without help from local, regional, national, and international agencies. Therefore, this report’s principal contribution is to propose ways in which government and civil society actors, from local to international, can work in concert with families to provide equitable access to strong nurturant environments for all children globally. Recognizing the strong impact of ECD on adult life, it is imperative that governments recognize that disparities in the nurturant environments required for healthy child development will impact differentially on the outcome of different nations and societies. In some societies, inequities in ECD translate into vastly different life chances for children; in others, disparities in ECD reach a critical point where they become a threat to peace and sustainable development. The result of our efforts suggest two primary directions for the future:

1) continued research to provide a better understanding of the effects of environments on biological embedding and ECD, particularly that of broader environments, and

2) the use of available information to inform action to further the goal of a “grass-roots to global” child-centered social investment strategy.
References


References
References


Appendix A: Critical Appraisal of the Underlying Evidence

Elsewhere, it has been convincingly argued that, for several reasons, the traditional hierarchy of evidence may not be suitable for “appraising the evidence for social or public health interventions.” One particular case in which this is especially true is in the search for evidence concerning social determinants of health. That traditional evidentiary hierarchies are incompatible (or, at least, not completely compatible) with the available and desirable types of information in this area is supported by the prominence given to measurement and evidence issues by the WHO’s CSDD. The evidence gathered by the Knowledge Network for Early Child Development (KN-ecd) draws on several notions of what constitutes valid and reliable “evidence.” The aim is to provide meaningful ways of weighing the available data and information in the field. The following provides an overview of the manner in which evidence was weighed for inclusion in this report. It is organized according to the “spheres of influence” outlined in the TEAM-ecd framework, since “types of evidence” cluster along these lines as well.

At the level of the individual, much of the recent evidence that is available in the literature has developed out of the broad acceptance of the CRC. With children recognized as fully human beings with evolving capacities to contribute to their lives, researchers have also recognized the value of including children’s perspectives in knowledge generation. A major limitation in interpreting this body of evidence (yet also its strength, in that it is methodologically appropriate) is that the small sample sizes and nature of qualitative research limits the generalizability of the work. Despite this scientific limitation, the moral and ethical value or obligation to consider the wishes/perspectives/needs of children in this evidence was paramount. We therefore do not make broad claims that extend beyond the evidence; rather, we suggest that, from the body of literature regarding children’s perspectives, children deserve to be considered social actors, and that it is our duty to consider their views in our work. The biological responses to environmental stimuli that result in developmental outcomes for young children have undergone numerous and rigorous investigations. This is especially true compared to the body of knowledge regarding biological–environmental interactions for adults. Our knowledge of “biological embedding” comes from well-controlled experimental conditions that have been completed both in primates (including humans) and non-primates. In this way, information at this level meets the traditional “gold standard” of evidence.

With the family as a sphere of influence, the evidence-base is virtually void of experimental evidence. This is largely because it is neither feasible nor ethical to randomize or control family conditions. There are exceptions to this, such as experimental (or quasi-experimental) evidence obtained from studies of siblings and orphans. Where possible, these studies have been included. For the most part, studies conducted about the effect of family characteristics/structure/parenting on children have been observational. Within observational research, both descriptive studies (e.g., ecologic and cross-sectional studies) and analytic studies (e.g., cohort studies) have been completed. Wherever possible, results obtained from cohort studies were favoured over those obtained from descriptive studies. In comparison to cross-sectional studies, cohort studies enable the establishment of temporal order: that the cause arose before the outcome. At the family-level, there was also an explicit desire to demonstrate population-level patterns between socioeconomic conditions and child development, and moreover, to demonstrate variation in these patterns across populations or societies. Therefore, at this level, for this
task, cross-sectional, ecologic information was included. The trade-off here was in sacrificing temporal order to highlight an important aspect of developmental distribution that could not be captured without an ecologic perspective. Temporal order has been well established in the aforementioned cohort studies, which were also included to provide an individual-level perspective on socioeconomic conditions and ecd.

Evidence for the residential and relational communities, for similar reasons, arises primarily from prospective cohort investigations. Studies chosen for review were those which arose from the strongest research design; those which were the best controlled, and most free of other forms of bias, as judged by the authors. Of the studies in which they appeared and their known scientific reputation in the field.

In order to maintain a social determinants perspective on the evidence we included in this report, in the ecd programmes and services section, rather than provide a “laundry list” of specific ecd programmes and services that have evidence of effectiveness, we chose to present generic characteristics as well as strategic and organizational principles of quality and sustainability that are transferable around the globe. One rationale behind this decision is that, despite the best evidence of a programme or service’s effectiveness, we cannot support the practice of taking a successful program or service from one context and expecting it to work as effectively (or at all) in another context. What we can support is consideration of generic characteristics and principles that have crossed contexts, or characteristics of nurturing environments that we know have been proven to support children’s development.

To answer the question of criteria for inclusion of examples of programmes and services in this report, we turn to many sources: 1) to our ecd experts who have been on the ground and experienced the effects of particular programmes—this includes the notion of “best practice”; 2) to the grey literature; 3) to the evidence of program and services effectiveness; and 4) to consideration of whether programs meet the criteria which we articulate in the ecd programmes and services section for creating nurturing environments for children. In some cases, the examples were chosen to support a particular point, such as with the Kangaroo Care; in other cases the inclusion was based upon the availability of information on the programme or service. We endeavoured to include the highest quality programmes and services where available.

For the studies included in the regional, national, and international spheres, scientific rigour was much more difficult to ensure. As mentioned in the broader TEAM-ecd evidence document (Siddiqi, Irwin & Hertzman, 2007), this is largely due to the lack of robust evidence at this level. The literature review yielded very little experimental information, of which the prime example is the PROGRESS study. Beyond that, most of the information gathered comes from cross-sectional or other forms of descriptive observational studies. These studies, though they don’t provide definitive evidence, were included because they make strong suggestions about future areas to be investigated, and because there are strong plausible links between micro-levels for which we have data (such as the family) and macro-environments such as the regional, the national, and international environments. In traditional scientific terms, plausibility is often assessed in biological terms. We contend here that what is apparent is a sociological plausibility.

Appendix A

Appendix B: Examples of ECD Programmes and Services

The following programmes and services are presented as examples of “good practice” towards creating nurturing environments in a diversity of contexts.

Linked to Health Care Systems

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (IMCI)

The WHO’s IMCI program seeks to reduce childhood mortality, illness, and disability as well as promote health and development among children aged 0–5 years. IMCI has both preventive and curative aspects, which are designed to be implemented at the level of the family, the community, and through the HCS. IMCI prioritizes the proper identification and treatment of childhood illnesses within a variety of settings, including homes and health facilities, but also provides counselling for parents and caregivers, and referral services for severely ill children. The main implementation involves the following steps:

• adopting an integrated approach to child health and development in the national health policy
• adapting the standard IMCI clinical guidelines to the country’s needs, policies, available drugs, and to the local foods and language
• upgrading care in local clinics by training health workers in new methods to examine and treat children, and to counsel parents effectively
• enabling upgraded care by ensuring a sufficient supply the right low-cost medicines and simple equipment
• strengthening care in hospitals for those children too sick to be treated in outpatient clinics

• developing support mechanisms within communities for preventing disease, for helping families to care for sick children, and for getting children to health clinics or hospitals when needed.

(Sources: http://www.who.int/child-adolescent-health/index.htm)

CARE FOR DEVELOPMENT

In partnership with UNICEF, the WHO has developed a special early childhood development component, called the Care for Development, intended to be incorporated into existing IMCI programs. Care for Development aims to enhance parents’ and caregivers’ awareness of the importance of play and communication with children by providing them with information and instruction during children’s clinical visits. Evidence has shown that Care for Development is an effective method of supporting parents’ and caregivers’ efforts to provide a stimulating environment for their children by building on their existing skills. Health care professionals are encouraged to view children’s visits for acute minor illnesses as opportunities to provide the messages of Care for Development, such as the importance of active and responsive feeding to improve children’s nutrition and growth, and the importance of play and communication activities to help children move to the next stages in their development.


BREASTFEEDING AND INFANT STIMULATION

A pilot project in southern Iran aims to reach the national development goals of safe pregnancies and deliveries, promote breast-feeding and birth spacing, provide early psychological stimulation, as well as help parents avoid developmental delays among young children. The project attempts to support and promote breastfeeding practices, both in the hospital and after discharge (receiving a home health nurse visit and consultation), by offering lactation consultants, interaction with and support of new mothers, and providing relevant training for
new mothers who require more information, which has shown significant impact on breastfeeding success. In the region, women’s literacy level is generally low, especially in rural areas. The program’s aim is to bridge the gap between tribal and cultural patterns and beliefs about breastfeeding, child nutrition, health, and development; and the practice of correct breastfeeding, by providing support for consistent, high-quality information on breastfeeding. This hcs point of contact provides an opportunity for parents to access lactation consultation and early childhood education classes. The mid-term evaluation of the project, in the form of a KAP (Knowledge/ Attitude/Practice) study revealed that the hcs’s involvement in the breastfeeding and nutritional education efforts in the region significantly improved mothers’ knowledge, which led to their health promoting behaviours in terms of their children’s health and nutrition. Further evaluation is still required to provide evidence about the impact of the program on children’s developmental outcomes.


NURSE HOME VISITING
Kazakhstan

Through its existing nurse home-visiting system, Kazakhstan has introduced an ecd education module to increase parents’ understanding of their children’s psycho-social and cognitive developmental needs—without additional costs. The Care for Development Module of the mect Training Package, jointly developed by WHO and UNICEF, were used as the basic training package. The project is supported jointly by the Ministry of Health, and is carried out under the leadership of the Kazakhstani Ministry of Health. It builds on the country’s existing hcs, and aims at improving the capacity of service providers. During implementation, the program involves local medical training institutions, local administration, and community participation. Nurses visit newborn babies almost every week during the first month, and regularly afterwards. A Healthy Life Style Centre is also involved in knowledge development, training, monitoring, and evaluation. The Healthy Life Style Centre is a para-governmental training centre with strong academic links to medical and social research institutions. This program has recently been evaluated and the report will be available soon.

This program, and several similar initiatives supported by international ngos, the World Bank, and others, can play an important role in furthering Kazakhstan’s hcs reform.

Turkey

The Mother-Child Education Program (mocce), started in 1993, provides children from disadvantaged communities with early enrichment programs and helps to strengthen parenting skills. This approach supports and encourages parents and caregivers, who are recognized to be a child’s first teachers, in providing children with the experiences they need to develop their competencies. The program attempts to empower families to make and act on informed decisions about their children’s education. It provides professional caregivers to better support children’s cognitive, physical, and socioemotional development. It combines home visiting by registered nurses with parent education. Home visits allow the nurses to observe mothers in interaction with their children. The program works with mothers in relation to their various needs while addressing child development information and parenting. 

(Source: http://www.scve.org/english/training/ect.html)

Australia

Maternal and child health/community nurses visit young children regularly over the first 5 years of life in Australia. 4 and one of the goals of this activity is to promote ecd. In addition to monitoring development and responding to any parental concerns about development and behaviour, many nurses provide anticipatory guidance and suggest ways of promoting development. They run first-time mothers’ groups, and provide parents with a range of written materials about roro.


COMMUNITY DEVELOPMENT EMPowerment (cde)

The Community Development Empowerment (cde) Program in Malaysia was established to address the needs of children and families in resource-poor communities in an attempt to improve the environment within which children are raised. cde includes the following activities:

- expanding preschool programs with emphasis on stimulating cogni-
  tive, physical, and socioemotional development
- health care workers conducting meetings with community members to identify and map the existing formal and informal services that meet the particular needs of families

Once identified, the priorities for the communities are to establish a childcare program and immunization plan for young children, as well as income-generating activities for women and single mothers. Parents participated in the development and coordination of the interventions, such as pediatric assessment, educational services, intervention services, and childcare coordination. A major feature of the program is to strengthen the links between parental values, the community’s social structure, and the hcs. This program builds on existing community resources and has been shown to be cost effective. cde addresses children’s particular ecd needs in combination with health care services and programs, and supports mothers to engage in income-producing activities.

4 Home visiting programs like the Australian model can be found in many countries, the scope and age range of the visits may vary.

REACH Out and READ (roro)

Reach Out and Read (roro) is a U.S. national non-profit organization that promotes early literacy by giving new books to children and advice to parents attending pediatric examinations about the importance of reading aloud. roro programs make early literacy a standard part of pediatric primary care and as such are a point of contact with the hcs, one that has proven to support children’s early development. Following the roro model, physicians and nurses advise parents that reading aloud is the most important thing they can do to help their children love books and to start school ready to learn. Pediatricians and other clinicians are trained in the three-part roro model in an effort to promote pediatric literacy:

1. At every well-child check-up, doctors and nurses encourage parents to read aloud to their young children, and offer age-appropriate tips and encouragement. Parents who may have difficulty reading are encouraged to invent their own stories to go with picture books and spend time naming objects with their children.

2. Providers give every child between the ages of six months and five years new, developmentally appropriate children’s book to keep.

3. In literacy-rich waiting room environments, often with volunteer readers, parents and children learn about the pleasures and techniques of looking at books together.

Research findings evaluating the impact of roro’s efforts have been remarkably consistent. Compared to families that have not participated in roro, parents who have received the roro intervention are significantly more likely to read to their children and have more children’s books in their home. Most importantly, studies examining language in young children found an association between the roro intervention and statistically significant improvement in children’s language scores, a good predictor of later literacy success.

There are currently roro program sites located in all 50 states, the District of

Appendix B

Early Child Development: A Powerful Equalizer
IMMUNIZATION

Expanded Programme on Immunization (EPI)

The WHO’s Expanded Programme on Immunization (EPI) was originally launched in 1976, at a time when less than 5% of the world’s children received immunization against the six most easily preventable diseases: diphtheria, tetanus, pertussis (whooping cough), polio, measles, and tuberculosis. Over the past 30 years, the EPI has increased its coverage to the point where there are now an estimated 500 million immunization contacts with children around the world on an annual basis. Disease prevention is a major component of reducing child mortality, and the long-term international success of the EPI has resulted in significant and measurable reductions in preventable disease.

The scale of the WHO’s EPI, as well as its near-universal coverage, are now being recognized as potentially valuable opportunities with which to bundle other child health promotion activities. The time at which 50% of the world’s children receive immunization, usually within their first two years of life, is a potential contact point for other health interventions or monitoring. Kenya has been especially proactive in utilizing this early contact point. The Kenyan Ministry of Health has recently decided to collect information about developmental indicators during immunization visits as a way of monitoring the progress of ECD in Kenya, on a population basis. Immunization visits are also viewed as an opportunity to distribute information about ECD and infant health to parents. Other innovative projects that use immunization visits as the key contact point within the health sector include the large-scale distribution of insecticide-treated bed nets in Togo, designed to further reduce the spread of diseases like malaria.

The importance of universal immunization programs, both in terms of reducing childhood disease and providing opportunities for additional early childhood interventions, should not be underestimated. Immunization programs are often reliant upon a combination of public, private, national, and international funding sources, and as such these programs often compete with other programs and priorities of national health agendas. While the 50-year history of the EPI has yielded worldwide success, variations and fluctuations in immunization coverage at the national level indicate the difficulty involved in maintaining the universality of immunization programs.


Integrated Child Development Services (ICDS)

Another similar initiative in India, Integrated Child Development Services (ICDS), is a multi dimensional, community based effort aimed at improving the quality of life of women and children living in poverty. The program grew out of the recognition that all infants require developmental assessment, and that the established immunization clinic offered a point of contact with the ICDS. As such, a more comprehensive early childhood development program was established. The clinics function in connection with health facilities’ during babies’ immunization visits, mothers are given information about development - a Developmental Observation Card (DOC) to help them monitor their infant’s development, and an opportunity to seek detailed assessment guidance if necessary. The aim of the plan is to empower families, in particular mothers, to learn more about their infant’s health and developmental issues by offering on-site education and the possibility of follow-up home visits.

As immunization programs become coupled with other child health services, such as early childhood interventions and ECD monitoring, there may be increased opportunities to find permanent public funding for these programs.

(India Development Observation Card

In Absence of Health Care Systems

EQUAL ACCESS RADIO IN NEPAL

The Equal Access Initiative uses appropriate and low cost technology (satellite broadcasting, AM/FM broadcasts) and community outreach to disseminate information to families living in remote rural areas. Equal Access creates customized communication strategies and outreach solutions to educate and inform target audiences. It uses radio, television, community outreach, and print and online materials to raise awareness of topics including prevention of MNDs, women’s health, and early childhood development.

By designing and producing compelling local language audio and multimedia programs in-country, the program educates and catalyzes behavior change in target audiences.

A new ECD radio program called Kheldata Sikdo (“Learning While Playing”) is now broadcast in Nepal via FM and satellite radio to ECD centers and a broadcast audience of millions. Kheldata Sikdo helps parents and communities create positive environments for children under the age of six. Through the program, parents learn about the importance of their children’s intellectual and emotional development. This entertaining and engaging program reaches out to parents and workers in children’s centers with ways to better identify, address, and support the needs of children. By bringing together educators, parents and trained ECD facilitators, “Learning While Playing” transforms the underlying lack of knowledge about early childhood development that perpetuates cycles of poverty throughout Nepal. While frankly discussing and contextualizing the impact of child rights, play-based learning, and parental and community roles in a child’s education, the program works to change the way in which children’s early education
is conceived and implemented. A large part of this effort is working with educators and parents to move beyond the traditional rote teaching methods often referred to as the “three R’s: Reading, Riting and ‘Rithmetic’ and to convince parents that quality play-based programs, stories, and songs are appropriate, valid, and accelerate children’s intellectual development. Additionally, the programs use interviews with community members and education specialists, as well as songs and stories, to transform the mentality of educators, the government, and—most importantly—the parents of young children throughout Nepal, by creating an understanding of the appropriateness and long-lasting positive benefits of ecd for children prior to attending primary school. Episodes also discuss topics like safe motherhood, nutrition, and immunization. (Source: Equal Access, Global Program Report 2006. http://www.equalaccess.org)

Village-Based ECD Curriculum Development in Lao PDR

The Women’s Development Project worked to promote various development initiatives for women in five provinces of Lao PDR. After five years, interest developed and a need was identified to more directly address child development issues. The Early Childhood and Family Development Project (ECDP) grew out of this experience. Project Planning Workshops for ECDP were organized in villages in the initial steps of development and implementation. Village-level planning resulted in agreement on needs and objectives, an understanding of overall design, assessments of resources and constraints, activity planning, setting up the project committee, and criteria for selecting village volunteers. The community-based curriculum development process focused on participatory input at the local level to create a curriculum that could be adapted to the particular needs of different ethnic groups. The process focused on village data collection and needs assessment. Analysis of existing traditional knowledge was used as a basis for curriculum development. One of the most unique activities in the Lao PDR experience was a village engagement agreement signed by village members and the village development committee. It was based on a child rights framework and included actions that could be taken immediately while waiting for needed external assistance. (Description taken from: Programming experiences in ecd, First edition, November 2006, UNICEF p. 23, and World Bank, Early Childhood Counts: Programming Resources for Early Childhood Care and Development (CD-ROM), The Consultative Group on ECD, World Bank, Washington DC, 1999.)

Appendix C: Population-based Measurement of Early Child Development from a National Perspective

In the international development community, there have been multiple efforts to assess social welfare in ways that facilitate comparison across societies. To date, many approaches have been developed, each with its own set of assumptions regarding the factors that contribute to, and reflect, well-being. The World Health Organization (WHO) Commission on Social Determinants of Health, Knowledge Network on Early Child Development, proposes that early child development (ecd) is an outcome (or rather, a set of outcomes) that is fundamentally reflective of the social success of societies. Ecd is also an indicator of future societal success, as it is associated with learning skills, health, and other measures of well-being throughout the life course, as such, it can be considered a fundamental measure of the potential for societies to flourish in multiple social domains. The extent to which a nation provides opportunities for healthy child development is the extent to which the well-being of its most vulnerable members is supported.

Prior literature suggests that individuals within societies are differentially affected by adverse conditions such as lower levels of GDP, high levels of income inequality, and the like. We suggest here that children are often a vulnerable group, due to a variety of factors, from their stage of biological development, to their compromised ability to exercise life choices. Knowledge of ecd levels in a society provides a direct measure of societal welfare by highlighting well-being during the early years, but in the process also addresses societies’ future prospects for well-being. Thus, we are promoting population-based measurement of ecd with the aim of constructing a globally accepted social indicator.

Despite an extensive literature review, we have been unable to locate prior efforts to frame ecd in this manner. The reason seems to be that, until now, ecd research has been an individual-oriented field, dominated by psychological and educational approaches and focused on curriculum and programme implementation strategies. The advent of the Knowledge Network on ecd, under the auspices of the WHO, provides an opportunity to add a different perspective—the population health perspective—to the mix. Population health sees ecd as a social determinant of health, requiring that we come to understand, through acts of measurement, where systematic differences in the prospects for healthy child development are emerging among clearly defined populations of children around the world. Once identified, these systematic differences become the basis for understanding the modifiable determinants of ecd, for measuring progress in ecd over time, and for measuring equity of access to the conditions that support healthy child development.

Coming to agreement on an internationally comparable ecd indicator will not be easy. The indicator must meet the following criteria:

- encompass those domains of early child development that influence health, well-being, learning, and behaviour across the life course
- be based upon a common international conception of the relevant domains of ecd, consensus as to the specific elements within each domain that must be measured the same way everywhere in the world, and recognition of those elements that are distinct in different contexts
- notwithstanding the above challenges, be transferable to diverse global contexts, recognizing that the conditions under which children are living are the same conditions under which children are living
- provide valid and comparable information for children of a given age, regardless of whether or not they are in school
In light of these challenges, the ecd indicator cannot be a single attribute, like infant mortality; instead, it must tap into multiple attributes of child development. Perhaps the most notable successful precedent on the international stage to date is the Human Development Index (HDI), introduced by the United Nations Development Programme (UNDP) in 1990. The HDI assesses the status of societal welfare using a composite score based on three measures: life expectancy, adult literacy, and purchasing power adjusted per capita gross domestic product. It is fair to say that the HDI has had a marked influence on discourse regarding international development. With respect to ecd, the multiple attributes must be broad enough to meet the first criterion above; that is, to encompass those domains of early development that influence health, well-being, learning, and behavior across the lifecourse. In practice, there are three broad domains of development that meet this criterion: physical, language/cognitive, and social/emotional.

The process of reducing such diverse domains as physical, social/emotional, and language/cognitive development to a single, transferable, and comparable index is known as “commensuration.” That is to say, by reducing each domain to a number, we can then compare them directly with one another and, by reducing these numbers to a single multi-attribute index, we can compare ecd across societies, just like we currently do with infant mortality. Calls for commensuration are obviously controversial and have caused intellectual divisions for as long as there has been intellectual discourse. For example, Plato was in favor of commensuration and Aristotle was opposed to it. Not surprisingly, this division is alive and well in the ecd international development community today.

The four criteria listed above reflect a compromise between—on the one hand—the need to succeed in an act of commensuration, in order to allow ecd to compete with other childhood priorities (like survival) on an “epistemologically level playing field” while—on the other hand—not letting the reductionist tendency necessary for commensuration to somehow defeat global diversity by making ecd appear to be a matter of “one size fits all.”

Appendix D: Children and Families in Global Perspective: Discussion of and excerpts from Heymann’s Forgotten Families

Introduction

With the tremendous connectedness of people and societies worldwide, a global perspective on the issues facing children and their families is critical. There are two primary factors that serve as the impetus for a global lens of examination. First, that with greater links between societies comes better information about the state of people and their environments everywhere. Second, that with increased complexity of the global economy, the policy decisions made in one nation or region have far reaching implications all over the world. In these regards, the work of Jody Heymann has made major contributions. Studies conducted by Heymann’s Project on Global Working Families have ranged from in-depth interviews of more than 1,000 families in Latin America, Africa, Asia, North America, and Europe, to analyzing survey data on 55,000 families around the world, to examining the extent of public policies supporting working parents and their children in 180 countries. The following are some highlights from Forgotten Families: Ending the Growing Crisis Confronting Children and Working Parents in the Global Economy (Oxford University Press, 2006). More information can be found at www.mcgill.ca/ibhp/.

Empirical Findings on Caregiving Patterns for Young Children

Extended family

“One, then, is the global reality? There is no doubt that both having two parents in a nuclear family and having extended family can make an enormous difference to children’s care. Among families we interviewed, 33 percent of single parents had left their young children home alone compared with 2.2 percent of parents living with a preschooler, they have similar answers: ‘Grandparents play a large role in our culture.’ When pressed, they make clear that they mean grandmothers. What about when grandmothers aren’t available, you ask? ‘There’s lots of informal care,’ they inevitably reply, ‘other family members, neighbours, women in the community.’ Many mothers can bring their children to work: ‘The answers are vague because they describe a world that has been kept out of sight, unexamined. [When stating to a large teaching hospital in Gabarone that] we were looking at the conditions that working families face— a hand went up. ‘Those issues don’t affect us here. Everyone has extended family members they can rely on so they never have any problem getting care for their children.’ Though the belief was satisfying, the problem was that the experience of the families we had interviewed in Botswana belied it. We interviewed many families in which parents had no choice but to leave young children home alone, pull older children out of school to provide free care, or take children to the workplace even when doing so threatened the children’s health and development or the parents’ jobs. But before I could respond to the fantasy the first speaker relayed by sharing the experiences of some of the 250 we had already interviewed, a Motswana surgeon raised his hand and interjected: ‘A lot of parents have no one they can rely on. I see the children who, because of that, end up being left home alone when they come into the emergency room or into my operating room with broken bones and burns.”’
In informal care settings, far fewer subsidies and little public provision or supervision exist in informal settings. As a result of this and of parents’ low wages, those low-income parents using informal childcare typically could afford to pay little. This resulted in their having extremely limited choices in childcare providers. The low wages they could afford to provide meant that, in general, they were hiring either adults who could not find other work or adults who provided the informal care while working at another job. The low skill level of those hired and the fact that those hired were, at times, simultaneously doing other work led to poor-quality care when it was provided. Moreover, problems that began with the poor quality of childcare providers in the informal sector were exacerbated by the lack of supervision in the informal sector. Parents who had repeatedly recounted stories of going home to find that informal childcare providers had left their children home alone for all or part of the day...

"In countries we studied, many parents reported that they had to leave their young children in the ‘care’ of other children. In Vietnam, 10 percent of the working parents..."
we interviewed had to leave children home alone or in the care of an unpaid child, and 4 percent relied on a paid child for childcare. In Mexico, 37 percent of the parents we interviewed had to leave children home alone or in the care of an unpaid child, and 9 percent left their two sons and daughters with another child who was paid as a provider. While Botswana had a nearly identical rate per capita to Mexico and one that was more than seven times as high as Vietnam’s, Botswana families had the highest rate of leaving children home alone. With next to no publicly supported childcare, 48 percent of working parents in Botswana had to leave a child home alone some or all of the time or in the care of an unpaid child…

“There was a clear social class gradient in informal care. Parents who were poor and parents who had the least educational opportunities themselves were the most likely to have to leave their preschool children in the care of another child. Parents with a middle school or less education were twice as likely (22 versus 9 percent) to have to leave their children in the care of other, unpaid children as parents with a high school education or more. “

Developmental Consequences of Poor Quality Childcare

The developmental consequences of lack of quality childcare are tremendous. In Botswana, 35 percent of parents responded that their children had experienced accidents or emergencies while a parent was at work, as did 47 percent in Mexico and 39 percent in Vietnam. Thirty-five percent of parents in Botswana reported a negative impact of their working conditions on their children’s health. In Mexico and Vietnam, these figures were 21 percent and 25 percent, respectively. “We as a global community, have agreed that all children have a right to a free public primary education. However, by doing nothing for most children in the critical developmental years from birth to five, we have effectively left hundreds of millions of children globally with little chance to succeed in school. Before they are six, they have no adequate chance to develop in a healthy way, let alone learn the requisite basic skills for beginning school.”

The Need for Early Child Development Programmes

“We need to ensure that all children have access to early childhood care and education. The public sector in some countries and the private nonprofit sector in others have begun to address this problem. However, the gap between the care that is available and the number of families that need it is enormous.”

Household surveys in several nations provide contrasting information on the percentage of children three to five years of age in early childhood education (ECE) programmes, by comparing to 40 percent in Brazil, where municipalities have programmes, and 21 percent in Botswana, where there are no major public early childhood programmes. In both Vietnam and Brazil, 44 percent of dual-earner families had children enrolled in ECE programmes, compared to 25 percent in Botswana. In Vietnam, 46 percent of children living in extended-family households with all resident adults working were enrolled in ECE programmes, compared with 30 percent in Brazil and 19 percent in Botswana. Forty-two percent of children living in extended-family households with not all resident adults working were enrolled in ECE programmes in Vietnam, compared with 31 percent in Brazil and 11 percent in Botswana.

Effects on Families

“Clearly, the dramatic changes in adult work lives are transforming the lives of children around the world. . . . but what effect has the labor force transformation, the rise of urbanization, and an increasingly globalized economy had on the economic [and related social] well-being of families?” Each brings opportunities and risks, but it is critical to reiterate that the negative impact of these factors fall disproportionately on those with fewer socioeconomic resources, and on women.

“On nearly every measure, from the availability of paid leave to adequate flexibility at work, the parents living in poverty we interviewed were facing worse working conditions.” Among those parents who earned less than 10 dollars per day (purchasing power parity adjusted), only 50 percent were granted paid leave from work for caregiving. Ten percent of those earning less than 10 dollars could alter their work schedules and were able to get paid leave for caregiving, compared to 18 percent of those earning more than 10 dollars. Only 36 percent of parents earning less than ten dollars per day had access to health insurance through their jobs, compared with 75 percent of those earning more than 10 dollars per day.

Single working mothers are much more likely to work longer hours than single men. Data from national living standards surveys demonstrates that in Brazil, 65 percent of single working mothers average sixty or more hours of paid and unpaid work weekly. This proportion drops to 43 percent for single working fathers. In Mexico, the numbers are 76 percent and 64 percent, respectively.

Conclusion

Governments have begun to employ potential solutions. Vietnam, with a higher availability of public childcare services, had, overall, more families with access to formal childcare as well as the smallest differences across income groups in use of formal childcare. Fifty-seven percent of lower-income families in Ho Chi Minh City were able to send a child to formal childcare, as were 62 percent of higher-income families.” In Mexico, the government has a mandate to provide childcare for employees in the formal sector to help narrow income disparities. The figures show that, indeed, the gap in the use of formal childcare between poorer and middle-income parents is less in the formal sector, where child care is part of social security (48 percent compared to 55 percent) than in the informal sector (58 percent compared to 21 percent).

“When young children are left home alone or in substandard care, the potential for tragedy is real.” This includes the risk of children suffering accidents or emergencies while their parents were at work and becoming the victims of violence. “But there is another, slower, but equally devastating type of tragedy that is transforming the lives of tens of millions of preschool children. Unable to find or afford decent care, needing to work and only finding jobs under the worst conditions, these parents are forced to leave their preschool children in care which jeopardizes their health and development as well as their safety. The quality of the care they receive is so poor that with each day that passes, their health and development slowly deteriorate, and their life-chances decline further.”

Early Child Development: A Powerful Equalizer