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Investing against Evidence

The Global State of Early Childhood
Care and Education

EDUCATION ON THE MOVE



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The Global State of Early Childhood Care and Education

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Foreword

This book is part of UNESCO's Education on the Move series which was created to provide policy-makers, educators and other stakeholders with state-of-the-art analyses of topical issues. Early childhood care and education (ECCE) is one of these contemporary issues requiring close attention given its critical role in laying the foundation for lifelong learning and development, and in closing the achievement gaps between the disadvantaged and advantaged.

ECCE has had somewhat an ambiguous place within the education sector. Ministries of education have often limited their purview to one or two years of preschool provision prior to primary schooling, while other ministries cover the provision for younger children's care and protection. Generally, these provisions evolved separately without policy and programmatic coordination. Preschool programmes in the past were often considered either 'luxury' or an 'unserious business' where children played under adults' supervision.

However, this is changing.

Owing particularly to the 1989 Convention on the Rights of the Child, young children have become explicitly defined as right-holders. Indeed, regardless of their age, children have rights, including the right to adequate education. Moreover, the principle of the indivisibility of rights, which is fundamental to international conventions and human rights treaties, has given support to cross-sectoral approaches to promoting human development and well-being.

The notions of learning beginning at birth and of ECCE as an integral part of basic education – inscribed in the 1990 Jomtien Declaration on Education for All (EFA) and reflected in the first EFA goal within the 2000 Dakar Framework for Action – were also significant in broadening the education agenda. They have given rise to a multitude of efforts, including the 2007 EFA Global Monitoring Report *Strong Foundations* and the 2010 World Conference on ECCE, *Building the Wealth of Nations*, organized by UNESCO in cooperation with the Russian Federation and partner organizations.

A decisive push toward heightening attention to ECCE by education stakeholders may be the mounting research evidence on its benefits for children's capacities, educational achievement and life prospects.

Brain development is most remarkable in early childhood. Providing supportive conditions for early learning and development is more effective and less costly than trying to remedy the consequences of early adversities later. With quality ECCE, children are healthy, happy and curious, and well-prepared for primary school. They achieve more and grow into successful lifelong learners. Through its compensatory effects, ECCE helps children from disadvantaged backgrounds to have an equally strong start in school and in life. The best results are gained when ECCE caters to the child's holistic development – facilitated by multisectoral collaboration – and provides developmentally and contextually relevant educational experiences.

Thus, ECCE is unambiguously a key concern for education stakeholders. It is a critical starting point in realizing equitable, quality education and lifelong learning – an aspiration framing the post-2015 global education agenda.

This book features these and other lessons from research and experience from different continents. Its thematic orientation addressing investment rationales, equity and quality reflects that of the World Conference on ECCE.

It argues for reversing the trend of 'investing against evidence' so that children – especially the disadvantaged ones – and societies can reap the proven benefits of quality ECCE. The current picture is still sobering: 6.3 million children died before their fifth birthday in 2013. Sub-Saharan Africa and South and West Asia are home to three-quarters of the world's malnourished children. A wide pre-primary enrolment gap exists between the richest and poorest. Across world regions, the disadvantaged are least served by quality ECCE, despite the fact that they benefit most from such intervention. Pre-primary tends to be allocated the lowest level of public education funding among other levels.

UNESCO is sincerely grateful for the contribution by the authors, who are leading researchers, thinkers and professionals in the field of ECCE, as well as for the time and efforts taken by numerous peer reviewers.



Qian Tang, Ph.D.

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Repositioning ECCE in the post-2015 agenda

Mmantsetsa Marope and Yoshie Kaga

Positioning ECCE in the global development dialogue

Caring for and educating young children has always been an integral part of human societies. Arrangements for fulfilling these societal roles have evolved over time and remain varied across cultures, often reflecting family and community structures as well as the social and economic roles of women and men (UNESCO, 2006). Historically, such arrangements have largely been informal, involving family, household and community members. The formalization of these arrangements emerged in the nineteenth century with the establishment of kindergartens for educational purposes and day nurseries for care in much of Europe and North America, Brazil, China, India, Jamaica and Mexico (Kamerman, 2006; Jones et al., 2011; Nunes et al., 2011).

State-led expansion of Early Childhood Care and Education (ECCE) services first emerged in the Russian Federation in the early twentieth century as part of the socialist project to foster equal participation of women and men in production and in public life, and to publicly provide education from the youngest possible age (Taratukhina et al., 2006). This development extended to socialist or former socialist countries such as Cambodia, China and Viet Nam (Haddad, 2002). France was another early starter having integrated pre-school into its education system as early as 1886 and expanded its provision in the 1950s (Kamerman, 2006). In real terms, the significant expansion of ECCE services began in the 1960s with the considerable growth in women's participation in the labour market and extensive developments in child and family policies in Europe and the United States of America (USA) (Kamerman, 2006).

The 1990s opened a new page in the history of the development of ECCE catalysed mainly by the rapid and successive ratification of the 1989 United Nations Convention on the Rights of the Child (CRC). By its explicit mention of ‘the child’ – meaning every human being under the age of eighteen or majority – the CRC reinforced the 1960 UNESCO Convention and Recommendation against Discrimination in Education which should have covered young children in any case. With its moral force and near universal ratification, the CRC formally recognized children as holders of rights to survival and development, to be heard and to participate in decisions affecting them in accordance with their evolving capacities with their best interests and non-discrimination as overarching principles. While the CRC in Article 18 also recognizes the primary role of parents and legal guardians in the upbringing and development of children, it obliges States Parties to help them carry out these duties (see also Lee et al., in Chapter 1).

To further clarify the obligations of States Parties vis-à-vis young children, and to provide guidance in the implementation of the rights enshrined in the CRC, the Committee on the Rights of the Child issued General Comment 7: *Implementing Child Rights in Early Childhood* (2006). The committee interpreted ‘the right to education during early childhood as beginning at birth and closely linked to young children’s right to maximum development’ (Paragraph 28, art. 6.2). Therefore, States Parties’ obligations include the development of comprehensive policies for young children and the need to assist parents and carers through, for instance, quality childcare services and parenting (see Lee et al., in Chapter 1).

The second boost to the development of ECCE was the adoption of the World Declaration on Education for All (EFA) in March 1990 in Jomtien, Thailand. Reflecting General Comment 7, the Jomtien Declaration explicitly stated that ‘learning begins at birth’, and called for ‘early childhood care and initial education’ (Article 5). This novel recognition of ECCE as an integral part of basic education featured again in the major goals adopted at the 1990 UN World Summit for Children. Ten years later in 2000, this expanded vision of basic education was reaffirmed in the Dakar Framework for Action on EFA, adopted at the World Education Forum as the first of the six EFA goals: ‘*Expanding and improving comprehensive ECCE especially for the most vulnerable and disadvantaged children*’. Regrettably, unlike other EFA goals, this was stated as a broad and aspirational goal without numerical targets or clear benchmarks.

ECCE was further reinforced by the Millennium Development Goals (MDGs), albeit only partially. Adopted at the UN Millennium Summit in 2000, two of the MDGs had direct relevance to early childhood development: (i) improving

maternal health, with the targets of reducing the maternal mortality rates by three-quarters and providing universal access to reproductive health (MDG4), and (ii) reducing the under-five mortality rate by two-thirds between 1990 and 2015 (MDG5). Thus, the child and maternal health aspects of ECCE became part and parcel of a global 'effort to meet the needs of the world's poorest' while childcare and early education aspects were left out.

In recent decades, ECCE has further received attention from diverse stakeholders including research communities, civil society and intergovernmental organizations which furthered understanding of its holistic and multisectoral nature as shown later in the volume. Research continues to document the multifaceted development benefits of ECCE for health, education, social and emotional well-being, social equity and cohesion, the economy, employment and earnings. Growing evidence on the impact of ECCE has been complemented by improvements in the monitoring of global progress in the status of young children and ECCE provision. In 1980, UNICEF initiated its periodic review of the *State of the World's Children*. UNESCO included the monitoring of the first EFA goal on ECCE in its annual *EFA Global Monitoring Report*, launched in 2002, with the 2007 edition, *Strong Foundations: Early Childhood Care and Education*, specifically focusing on ECCE.

The 2010 World Conference on ECCE (WCECCE) convened by UNESCO in Moscow in collaboration with its partners was another watershed in the development of ECCE. Impelled by the abysmal global state of ECCE provision and the unacceptably slow progress toward attaining this first EFA goal, the WCECCE sought to heighten global advocacy and political commitment to ECCE (see Box 1).

Box 1. Overarching goals of the WCECCE

- Reaffirm ECCE as a right of all children and as the basis for development;
- Take stock of the progress of Member States towards achieving the EFA Goal 1;
- Identify binding constraints towards making the intended equitable expansion of access to quality ECCE services;
- Establish, more concretely, benchmarks and targets for the EFA Goal 1 towards 2015 and beyond;
- Identify key enablers that should facilitate Member States to reach the established targets; and
- Promote global exchange of good practices.

Source: Concept Paper: the World Conference on Early Childhood Care and Education (UNESCO, 2010).

Acknowledging ECCE as an indispensable investment in 'building the wealth of nations', it identified constraints that prevented the world's nations from 'harnessing this wealth', such as: lack of political commitment, inadequate funding, poverty, sociocultural barriers, conflicts, disasters, inadequate integration of ECCE in national policy, legal, institutional and financing frameworks, and poor programme delivery capacity. The WCECCE culminated in the adoption of the *Moscow Framework for Action and Cooperation: Harnessing the Wealth of Nations*¹ through which the world committed itself to redressing identified constraints. Moreover, it committed to: (i) fully integrating ECCE in national legal, policy and strategic frameworks, (ii) reinforcing equity, inclusion and quality of ECCE services, (iii) scaling up and expanding access to exemplary ECCE programmes, (iv) reinforcing delivery capacity, (v) strengthening strategic partnerships and cooperation, (vi) increasing resources, and (vii) strengthening research, monitoring and evaluation (ibid.).

Global progress towards equitable provision of ECCE

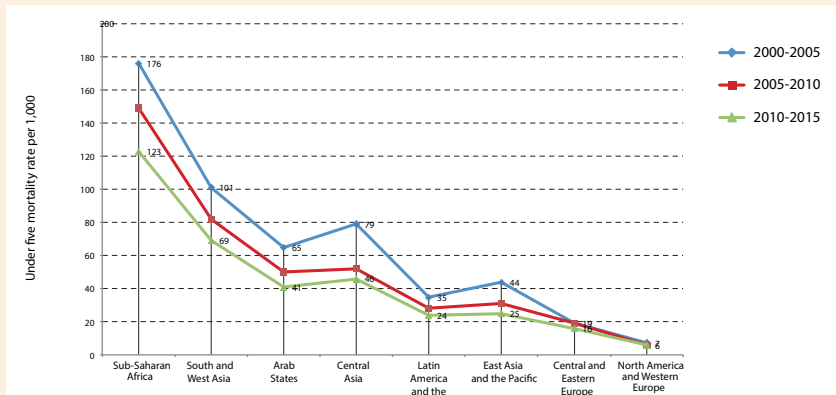
Despite national progress in expanding and improving ECCE, growing international advocacy and recognition of the importance of ECCE and mounting positive research evidence, existing data paints a troubling picture of early childhood provision worldwide – especially in the least developed world regions – that compromises young children's learning and developmental potential.

Malnutrition is known to hinder children's cognitive development and capacity to learn and to manifest itself in the form of stunting (UNESCO, 2012). Nevertheless, in 2005-2012, close to one-third of the world's under-fives suffered moderate to severe stunting, with South and West Asia and sub-Saharan Africa averaging nearly 40 per cent (UNESCO, 2014). Although remarkable progress has been made globally in reducing under-five mortality (i.e. 90 to 48 deaths per 1,000 live births in 1990-2012) the 2015 MDG target of reducing it by two-thirds will not be attained². As shown in Figure 1, the least developed regions continue to trail behind.

1 <http://unesdoc.unesco.org/images/0018/001898/189882e.pdf>

2 <http://www.who.int/mediacentre/factsheets/fs290/en/>

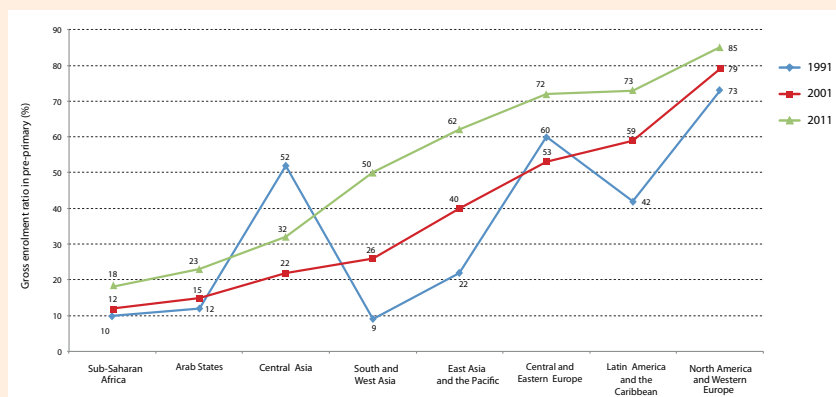
Figure 1. Under-five mortality rate per 1,000



Source: UNESCO EFA Global Monitoring Report 2007, 2011, 2014.

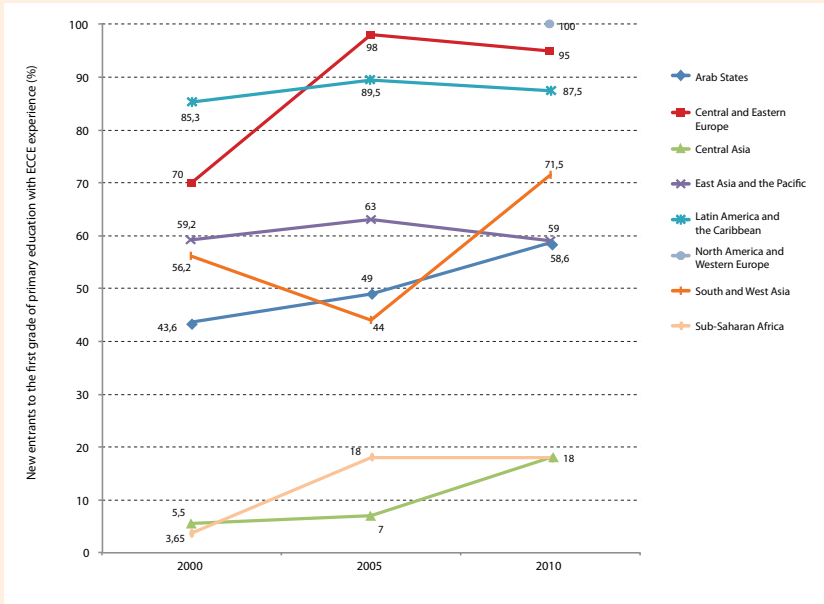
Half of the world's children currently do not have access to pre-primary education and this situation is unlikely to change dramatically by 2015. As shown in Figure 2, sub-Saharan Africa and the Arab States show the lowest levels of access: 18 and 23 per cent respectively in 2011. In sub-Saharan Africa and Central Asia, less than 20 per cent of new entrants to primary school had prior ECCE programme experience in 2010; in Arab States and East Asia and the Pacific, it was little less than 60 per cent (Figure 3). The limited access to pre-primary education in these regions is, to a large extent, provided by the private sector, which normally makes quality assurance difficult (Figure 4). Furthermore, the average expected duration of pre-primary schooling is 0.48 years for sub-Saharan Africa compared to 2.52 and 2.58 years for North America and Western Europe and Central and Eastern Europe and Central and Eastern Europe respectively (Figure 5).

Figure 2. Access to pre-primary education



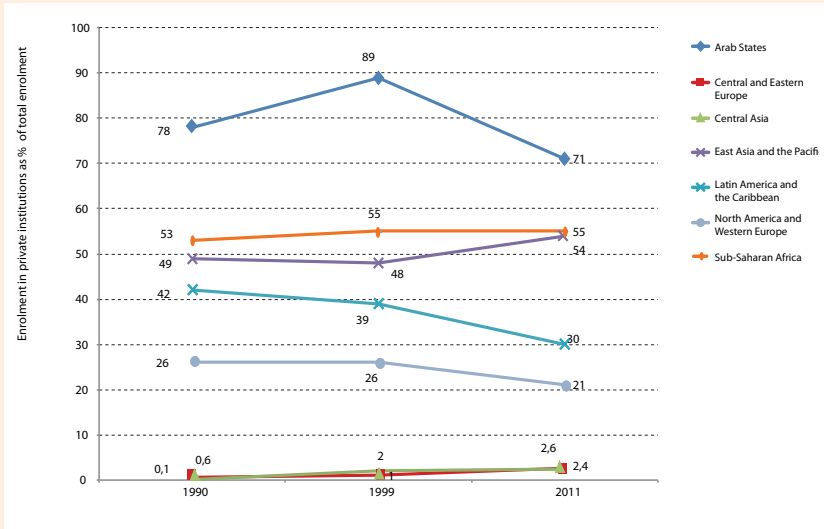
Source: UNESCO Institute for Statistics Database.

Figure 3. Entrants to primary education with ECCE experience



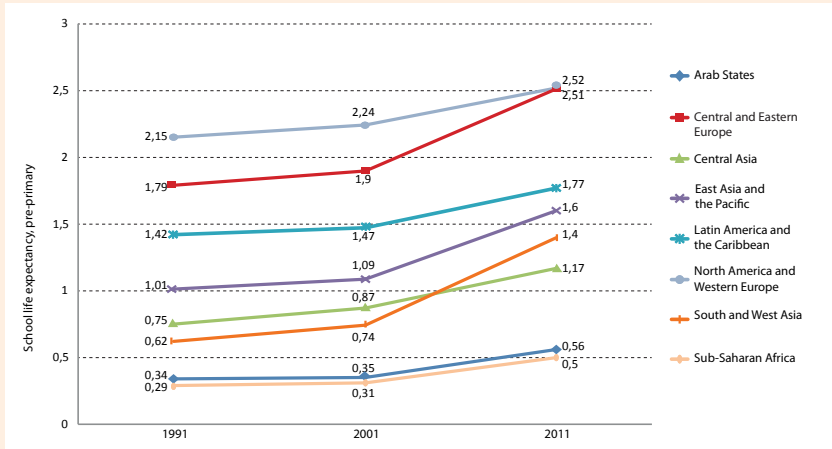
Source: UNESCO EFA Global Monitoring Report 2003/4, 2008, 2012.

Figure 4. Pre-primary enrolment in private institutions



Source: UNESCO EFA Global Monitoring Report 2007, 2012, 2014.

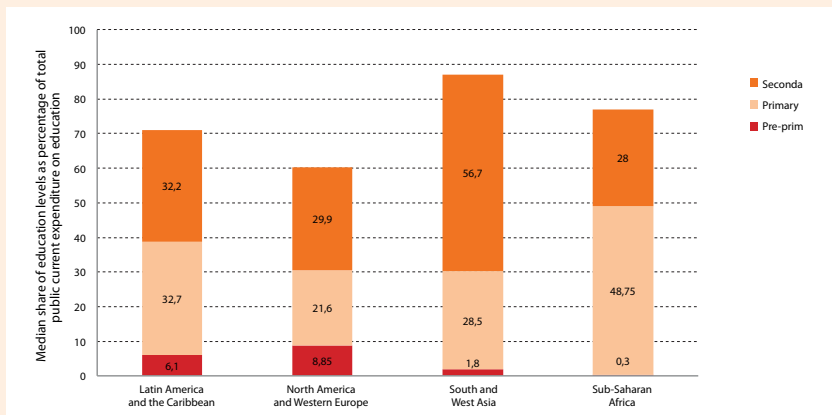
Figure 5. School life expectancy, pre-primary level



Source: UNESCO Institute for Statistics Database.

Compared to other areas of basic education, globally comparable data on pre-primary education financing remain scarce. While much of existing non-formal and private programmes may not be fully accounted for, it can be deduced from the level of provision that pre-primary financing remains inadequate, especially when considered against expected benefits. Public pre-primary education financing provides the closest example. Figure 6 shows a regional comparison of the proportions of pre-primary, primary and secondary education public financing. As some of the regional aggregations are based on data from a lesser number of countries than others, this comparative picture is highly approximate. Nevertheless, it indicates that, across regions, pre-primary education accounts for the lowest proportion of the total public expenditure on education, in spite of the much-documented positive impact of quality ECCE on later learning and other social outcomes.

Figure 6. Government expenditure on pre-primary education



Source: UNESCO Institute for Statistics Database (2011).

ECCE is partially legislated as the first stage of education in about 80 countries, while 30 countries have made at least one year of pre-primary education compulsory, two-thirds of which have legislated since 1990 (UNESCO, 2006, p. 130; UNESCO, 2010, p. 5). Yet, Figures 2 and 5 above cast doubt on the effect of these legislative achievements.

Children's learning potential and outcomes are negatively affected by exposure to violence, abuse and child labour. Thus, protecting young children from violence and exploitation is part of broad educational concerns. Due to difficulties and sensitivities around the issue of measuring and monitoring child protection violations and gaps in defining, collecting and analysing appropriate indicators (UNICEF, 2010), data coverage in this area is scant. However, proxy indicators can be used to assess the situation. For example, ratification of relevant international conventions indicates countries' commitment to child protection. By April 2014, 194 countries had ratified the CRC³; and 179 had ratified the 1999 International Labour Organization's Convention (No. 182) concerning the elimination of the worst forms of child labour⁴. But, many of these ratifications are yet to be given full effect through actual implementation of concrete measures. Globally, 150 million children aged 5-14 are estimated to be engaged in child labour (UNICEF, 2010). In conflict-affected poor countries, children are twice as likely to die before their fifth birthday compared to those in other poor countries (UNESCO, 2010). In industrialized countries, 4 per cent of children are physically abused each year and 10 per cent are neglected or psychologically abused (UNICEF, 2010).

In both developed and developing countries, children of the poor and the disadvantaged remain the least served. This exclusion persists against the evidence that the added value of ECCE services is higher for them than for their more affluent counterparts, even when such services are of modest quality (see the discussion on benefits of ECCE below). While the problem is more intractable in developing countries, the developed world still does not equitably provide quality ECCE services for all its children. In many European countries children, mostly from low-income and immigrant families, do not have access to good quality ECCE (Eurydice, 2009). Substandard quality of institutional care for vulnerable and disadvantaged children persists in Central and Eastern Europe and in the Commonwealth of Independent States (Legrand et al., Chapter 10). Children with disabilities do not always

3 https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-11&chapter=4&lang=en

4 http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO::P11300_INSTRUMENT_ID:312327

receive standard immunization and basic health care even in rich countries (Lata, Chapter 7).

At the current rate, the first goal of the EFA Dakar Framework for Action will not be met by 2015. As called for in the *Moscow Framework for Action and Cooperation*, concerted efforts are required if the world is to equitably 'harness its potential wealth' through investment in the provision of quality ECCE services to all. The stark inequalities in the current provision is particularly disconcerting given that disadvantaged and marginalised children benefit most from quality ECCE. The lost opportunity for positively affecting learning potentials and realizing full potentials through neglect of ECCE goes well beyond the individual child to their families, households, communities, countries and, ultimately, to the world.

Overview of the volume

This fourth volume of UNESCO's *Education on the Move* series is rooted in the 2010 WCECCE. It focuses on most of the themes addressed during the conference which remain pertinent. These themes are used to organize the volume into three parts: the development rationale for investing in holistic ECCE, equity and inclusion in ECCE, and the quality of ECCE. The volume is timely as it comes when the world is collectively evaluating progress towards achieving internationally agreed development goals and targets for 2015 – including those related to EFA – and reflecting on the shape of the post-2015 global development agenda. It provides a retrospective and evidence-based assessment of ECCE in the wake of 2015, from its maturing conceptualization to the global state of its provision. Prospectively, the volume offers a strong case for positioning quality ECCE for all as the basis for human and by implication overall development within the post-2015 global development agenda.

ECCE as a holistic and multisectoral service

As noted above, the conceptualization of ECCE as holistic and multisectoral is gaining acceptance. Unlike other areas of education, ECCE places strong emphasis on developing the *whole* child – attending to his or her social, emotional, cognitive and physical needs – in order to establish a solid and broad foundation for lifelong learning and well-being. 'Care' includes health, nutrition and hygiene in a warm, secure and nurturing environment; and 'education' includes stimulation, socialization, guidance, participation, learning and developmental activities. ECCE begins at birth and can be organized in a variety of non-formal,

formal and informal modalities, such as parenting education (Britto and Engle, Chapter 8), health-based mother and child intervention (Sall, Chapter 9), care institutions (Legrand et al., Chapter 10), child-to-child programmes (Serpell and Nsamenang, Chapter 12), home-based or centre-based childcare, kindergartens and pre-schools (e.g. Rao and Sun, Chapter 11). As pointed out by Vargas-Barón (Chapter 14), different terms to describe ECCE are used by different countries, institutions and stakeholders, such as early childhood development (ECD), early childhood education and care (ECEC), early childhood care and development (ECCD), with Early Childhood Care and Education as the UNESCO nomenclature.

As research shows, children's care and educational needs are intertwined. Poor care, health, nutrition, and physical and emotional security can affect educational potentials in the form of mental retardation, impaired cognitive and behavioural capacities, motor development delay, depression, difficulties with concentration and attention (Sall, Lata, Legrand et al., El Zein and Chehab in this volume). Inversely, early health and nutrition interventions, such as iron supplementation, deworming treatment and school feeding, have been shown to directly contribute to increased pre-school attendance (UNESCO, 2006). Studies have demonstrated better child outcomes through the combined intervention of cognitive stimulation and nutritional supplementation than through either cognitive stimulation or nutritional supplementation alone (Barnett and Nores, Chapter 3). As underscored by Rao and Sun, quality ECCE is one that integrates educational activities, nutrition, health care and social services (Chapter 11).

The importance of coordinated approaches and strategies in ECCE across policy sectors is highlighted by several authors in this volume. Shonkoff (Chapter 2) emphasizes the benefits of more coordinated approaches to early education, public health, child protection, social welfare, and economic development that are guided by well-established, knowledge-based principles. Legrand et al. (Chapter 10) point out that vulnerable and disadvantaged families generally require multisectoral support to maintain themselves and to cope with sudden changes in their circumstances. Such support is made possible through different sectors working together to address diverse vulnerabilities related to housing, health, welfare, family support, employment and education. Palmer (Chapter 13) asserts that comprehensive programmes addressing health, nutrition and development have proven most effective in early childhood, especially when directed at very young and vulnerable children. She points out that achieving a cross-sectoral approach is a key curricular challenge as it involves building workable collaborative platforms among different sectors and individuals with differing expectations and institutional cultures. Although substantial effort is required to achieve a cross-sectoral approach, Palmer

highlights its potential to improve effectiveness as well as sustainability. Success requires 'a new multisectoral institutional culture' that 'rewards leaders for multisectoral coordination and designates responsibilities to key personnel for forming collaborations, partnerships and networks to plan and implement services' (Vargas-Barón, Chapter 14, p. 285).

Echoing Lee et al. (Chapter 1), Vargas-Barón (Chapter 14) points to the importance of setting up purposeful institutional frameworks and governance structures for ECCE that facilitate children's holistic development through effective multisectoral coordination and collaboration. She stresses that appropriate institutional frameworks and governance can greatly help avoid duplication and wastage of resources, and effectively address diversity, equity and quality. According to Vargas-Barón, education ministries are frequently designated as the lead ECCE agency, but some countries designate ministries of planning, health, social protection or combined ministries of gender, children, families and community development as the lead. When education ministries are designated as lead and broaden their scope of action to include the very early years (a growing trend), care should be taken to address possible risks such as poorer relations with other service ministries (e.g. health and protection) and turning ECCE into 'early primary' which employs developmentally inappropriate content and methods, particularly for the years immediately preceding school entry (Kaga et al., 2010). It is clear that expectation towards education ministries regarding ECCE is growing, and this brings challenges and opportunities. Challenges lie in the need for effective leading and coordinating, especially in low-resource and -capacity contexts; while there are opportunities to construct lifelong learning systems concerned with the development of the whole person from early childhood throughout different levels of education.

In sum, the emphasis on developing the whole child is the cornerstone of ECCE and a requirement for fostering successful lifelong learners. Research shows that children's 'care' and 'education' needs are intertwined and affect each other. Notably, improvements in health and nutritional attention have been shown to have a concrete positive impact on children's participation in ECCE and their performance. Research also demonstrates that programme approaches that combine educational and nutritional support have yielded better child outcomes than those providing one single component. When successful, the potential benefits of coordinated approaches to ECCE policy and provision seem to outweigh the often considerable effort and time needed to put them in place. Institutional sectoral cultures and traditions can be among the biggest barriers, and effective ECCE requires a strong lead agency or sector that can include all players and work effectively with them. The education sector is increasingly expected to play a key role in ECCE that involves adherence to a

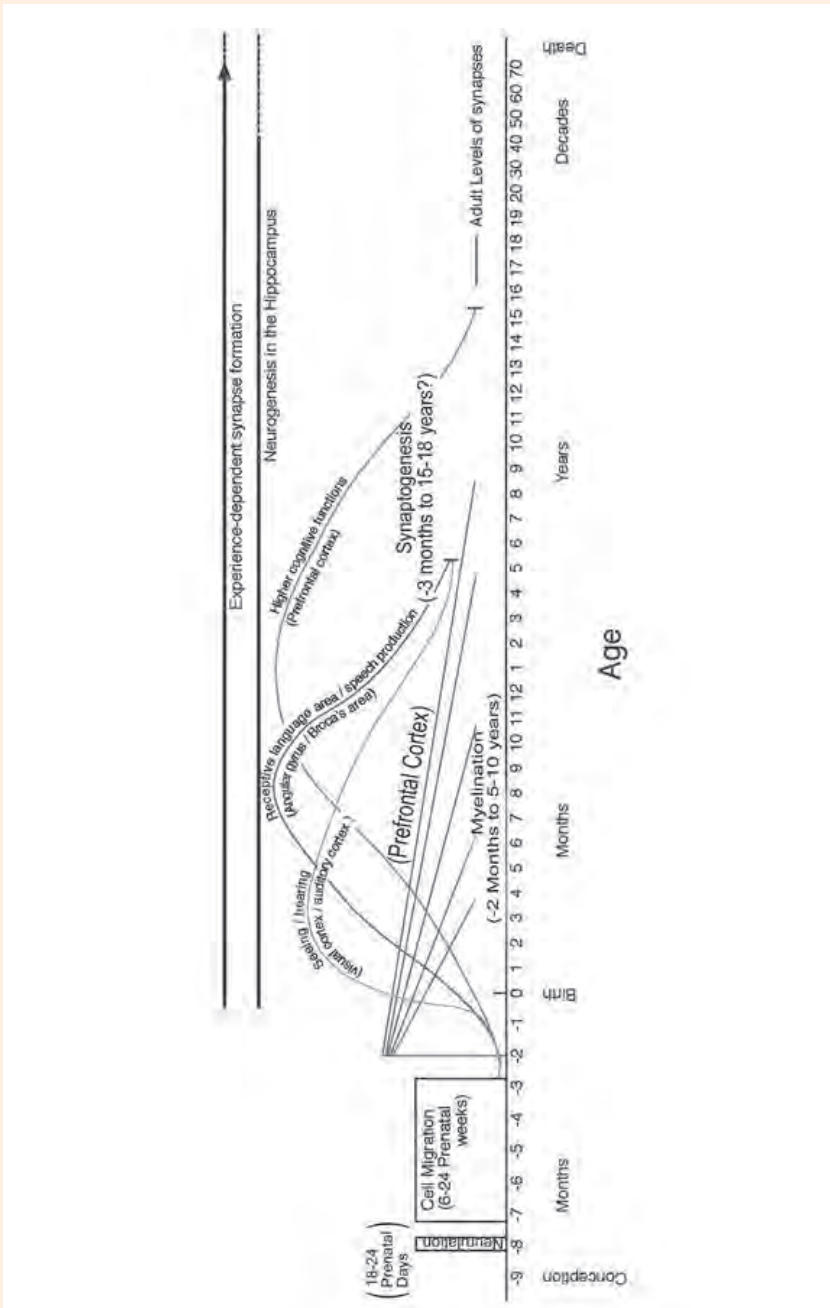
broader definition of 'education' that allows a holistic attention to the child and an ability to collaborate cross-sectorally.

The development rationale for investing in ECCE

Neuroscience research provides powerful evidence of the importance of ECCE for lifelong learning and well-being. Shonkoff (Chapter 2) presents core concepts of early brain development and their effect on lifetime individual development, health and learning. For example, brain development occurs over time, with a substantial proportion constructed over successive 'sensitive periods' that begin before birth (see Figure 7). The brain is described as a remarkably integrated organ with its multiple functions operating in a coordinated manner. Also presented in the chapter is the inextricably intertwined nature of cognitive, emotional and social capacities; the damaging effects of toxic stress (e.g. poverty, malnutrition, neglect, abuse) experienced early in life; and the phenomenon of decreasing brain plasticity and ability to change behaviour over time. Shonkoff emphasizes that a good start in life helps children develop capacities to cope successfully and contribute to the social fabric and economic development of their societies, while early disadvantages can have lifelong consequences that are difficult and costly to reverse.

Barnett and Nores (Chapter 3) summarize research on the economic benefits of ECCE as well as other studies on the effects of ECCE that underlie the economic argument for public investment. According to the authors, economic returns from investment in ECCE can equal roughly ten times its costs. This substantial return on investment arises from the child care aspect that enables mothers to work and the education elements and other supports for child development that increase subsequent effective learning during schooling, labour force productivity, prosocial behaviour and health. The gains documented first include those at *individual* levels, e.g. better cognitive and non-cognitive skills, improved school readiness and academic achievement, prosocial behaviour (Rao and Sun, Chapter 11; Britto and Engle, Chapter 8), better health (Sall, Chapter 9) and psychological healing and resilience (El Zein and Chehab, Chapter 6). Second, they include *collective* levels, such as decreased costs of public education, health, welfare and criminal justice systems, improved school climate and positive peer-modelling, increased tax revenues, and enhanced social, economic and gender equalities (see the section below for related discussion). James Heckman, Nobel Laureate in economics, has demonstrated that investment in the early years has the highest investment return of any level of education and training (Heckman, 2008).

Figure 7. Sensitive periods in early brain development



Source: Thompson, R.A., and Nelson, C.A. (2001). Developmental science and the media. Early brain development. American Psychologist.

The notion of education as public good (UNESCO, 2013) extends to ECCE. The high externalities associated with ECCE shown by the studies support the claim that ECCE is 'a public good deserving government investments and going beyond the responsibility of individual families to provide' (Barnett and Nores, Chapter 3, p. 76). Moreover, the benefits of ECCE are probably higher than shown in measurable economic analyses of ECCE. Therefore, as Barnett and Nores note:

Policy-makers should recognize that even the more comprehensive benefit-cost analyses are conservative because they do not take into account all benefits. Benefits that have been observed but not included in the dollar value of benefits include reductions in substance abuse and mental illness, lower child mortality, impacts on siblings, peer effects on school climate and effects on future generations of improved parenting practices including improved timing and birth spacing, and decreased inequality. Although not formally included in benefit-cost analyses to date and difficult to value with any precision, decreased social inequality (including gender inequality) is accorded substantial value in many countries (Chapter 3, p. 82).

It is noteworthy that most of the often-cited cost-benefit studies were conducted in the USA. Furthermore, the validity of the research methods and the risk of extrapolating findings to other countries have been highlighted (OECD, 2006; Network of Experts in Social Sciences of Education and Training, 2009). However, the international evidence base has broadened recently to include studies from Europe (Vandenbroeck, Chapter 5) and some developing countries. Refreshingly, 'the results of cost-benefit analyses are remarkably consistent across the years and countries' (Barnett and Nores, Chapter 3, p. 75). While some studies find larger effects for disadvantaged children, others find consistent positive effects for all children.

Several authors in this volume emphasise the importance of quality vis-à-vis programme impact (Rao and Sun, Vandenbroeck, Legrand et al., Barnett and Nores). They underscore that quality is affected by policy and programme designs (e.g. Barnett and Nores, Rao and Sun, Legrand et al., Leo-Rhynie). Poorly designed policies can result in increased participation in ECCE of minimal quality that supports maternal labour force participation but has negative consequences for child development. Such policies may be low cost but may generate considerably lower rates of return for society than somewhat more costly policies that improve access to effective ECCE.

The authors also highlight the complexity of measuring quality of ECCE and argue that 'absolute measures of programme quality are not as important as the extent to which additional support for child development is an improvement over what is available to the child without the programme' (Barnett and Nores, Chapter 3, p. 84). In very high poverty settings where family and community resources may be limited, even very modest ECCE programmes might offer benefits. This is one of the conclusions presented by Rao and Sun (Chapter 11) who provide analyses of the studies comparing quality of pre-school services and child development outcomes in three low resource-level countries in Asia. They note that 'the quality of the programmes we observed in Cambodia, China and India would be deemed rather low by Euro-American standards... However, in these poor and rural contexts, where maternal education is low and there are fewer resources for learning in the family and community, these programmes make a difference to children's school readiness' (Chapter 11, p. 226). Nevertheless, continuous effort to improve quality of ECCE is crucial for all services and programmes (Barnett and Nores, Chapter 3) regardless of circumstances, as, several authors concur, children participating in higher quality programmes would have better cognitive, language and social developmental outcomes than their counterparts.

In sum, the benefits of ECCE are multiple and go beyond the individual and family sphere, supporting the view of ECCE as a public good that warrants public investment and leadership. As quality of ECCE is strongly related to its outcomes, it is important to ensure that appropriate policy and programme designs are in place for ECCE to be of sufficient quality so that it can achieve the desired short-term and long-term outcomes. Even more so, it is critical to ensure the equity of that quality. The specifics of the 'optimal' policies and programmes will differ from context to context, as discussed in the subsequent sections.

Equity and inclusion in ECCE

Evidence shows that equity of the quality ECCE promotes greater social equity and that disadvantaged children benefit most from ECCE (Barnett and Nores, Chapter 3; Vandenbroeck, Chapter 5). This volume presents evidence related to multiple factors of disadvantage including gender (Leo-Rhynie, Chapter 4), disabilities (Lata, Chapter 7), migrant backgrounds (Vandenbroeck, Chapter 5), emergency and conflict situations (El Zein and Chehab, Chapter 6), varying institutional care (Legrand et al., Chapter 10), and poverty and rural dwelling (Rao and Sun, Chapter 11). ECCE is shown to promote gender equality by

enabling mothers to work (Barnett and Nores, Chapter 3) and by freeing girl siblings from childcare to go to school. It contributes to gender equality by supporting gender-sensitive and -equal practices at home, in the community and in ECCE programmes (Leo-Rhynie, Chapter 4). Timely provision of appropriate intervention and support reduces the level, or prevents the incidences of, learning difficulties and disabilities (Lata, Chapter 7; Sall, Chapter 9). It lessens trauma suffering while also strengthening resilience, psychological well-being and cognitive development among children affected by emergencies and conflicts (El Zein and Chehab, Chapter 6). ECCE programmes that support positive parenting are shown to mitigate the impact of poverty, chronic disease, violence and conflict as well as improve children's outcomes to equal those from economically advantaged families (Britto and Engle, Chapter 8). ECCE contributes to social equality and democracy by socializing children and families in contexts of diversity and by promoting living together (Vandenbroeck, Chapter 5).

However, we cannot overemphasize that for ECCE to genuinely contribute to social equality, its provision should be equitably accessible and of quality. As Vandenbroeck (Chapter 5) argues, it is difficult to rely on ECCE to transform societies into more equal ones while poor and disadvantaged children are far less enrolled in ECCE of high quality, which is necessary to attain the expected positive results. We further underscore that ECCE should not be presented as a panacea for all forms of social and economic inequalities. Like any other investment, the tradeoffs of investing in other measures for combating social and economic inequalities have to be carefully weighed. Citing the well-known study of Wilkinson and Pickett (2009) that income inequality is a salient predictor of many indicators of well-being, Vandenbroeck stresses that ECCE is not an alternative to redistributive measures: at best, it is part of a more comprehensive welfare policy. 'Only then can it really become an effective instrument to create more equal societies and to realize the full potential of the largest parts of the population' (Chapter 5, p. 112).

The differential impact of ECCE programmes on the disadvantaged is an important argument for a targeted approach, particularly when resources are limited (UNESCO, 2006). The most common targeting is by income. This can take such various forms as restricting eligibility below an income threshold, subsidizing the enrolment of children of the poor and providing vouchers. Targeting can also be geographical (e.g. urban slums, tribal areas, remote rural areas), or for specific groups (e.g. children with disabilities). Support for the disadvantaged can come through non-financial means, such as the provision of multilingual education (UNESCO, 2006). Some potential disadvantages and risks have been pointed out, such as segregation of

children and concentration of the disadvantaged in certain programmes, and labelling of target populations as disadvantaged thereby reinforcing negative perceptions of them. By its very nature, targeting is often highly imperfect (Barnett and Nores, Chapter 3), and as such, universal coverage tends to ensure greater inclusion of the disadvantaged. Programme effects for the disadvantaged may be more important if other children also participate because children learn from interacting with each other (ibid.). Universal coverage combined with additional support to the disadvantaged is adopted in some European countries but is less applicable for developing countries where ECCE coverage is still limited to a few. Under such circumstances, a phased approach where countries develop a national ECCE policy applicable to all children and settings but start by focusing public resources on the most disadvantaged may be most feasible (UNESCO, 2006).

In sum, by compensating for disadvantage in the home and community, quality ECCE can offer disadvantaged children a good beginning in life and help them start primary school on an equal footing with the advantaged children. It can support their physical and psychological well-being, resilience and better life prospects, as well as values that favour gender and social equality. Quality ECCE is an important strategy for working toward equal societies and should be made available particularly for disadvantaged children. Universal coverage combined with additional support to the disadvantaged, rather than a targeted approach, seems a more effective inclusion strategy. In low-resource settings, a phased strategy that involves the focusing of public resources on the most disadvantaged children in the near to intermediate term, within a national policy that aims for universal coverage in the long term seems more feasible.

Quality of ECCE

Quality is a relative concept and thus what constitutes quality is a critical question, especially in a complex area like ECCE. Unsurprisingly, the definition of quality ECCE varies across levels of economic development, resource availability, values and cultural beliefs (European Commission Childcare Network, 1996; Rao and Sun, Chapter 11). Thus, if ECCE is to genuinely serve young children in evolving contexts, it is necessary to acknowledge as many viewpoints as possible (Dahlberg and Moss, 2005, cited in Vandenberg, Chapter 5) and arrive at a shared, operational definition of quality through a participatory and democratic process that involves parents, ECCE professionals and other stakeholders, and to regularly review and update the definition (European Commission Childcare Network, 1996).

There is some agreement about the factors that define quality regardless of circumstances. Such factors include the physical and psychological environment, curriculum, teaching and learning approaches, teacher-child interaction; staff/child ratios and group size; staff qualification, training and professional development, working conditions, stability and continuity; programme management and community integration (Barnett and Nores, Rao and Sun, Vandenbroeck in this volume). Palmer (Chapter 13) notes that the quality of curriculum greatly influences programme quality. Leo-Rhynie (Chapter 4) argues that the promotion of gender equality is part of quality concerns. In essence therefore, quality ECCE is rendered when most, if not all, of the critical factors that comprise the fullness of this service come together to optimally facilitate the holistic development of a child of 0 to 8 years of age.

Overall, quality ECCE is one that ensures the child's holistic development, provides relevant educational and social interactions, and works collaboratively with parents, communities, support services and primary schools to foster well-being, inclusion, social cohesion and continuity of learning and experiences. The authors in this volume diversely characterize quality focusing on some of its enablers. For instance, Barnett and Nores (Chapter 3) present quality as essentially meaning that the child has enriching experiences and predominantly those with the teacher. Therefore, they place child-teacher interaction at the centre. Positive child-interaction has been expressed in concepts such as 'shared and sustained thinking' (Siraj-Blatchford, 2009), 'serve and return' (Shonkoff, Chapter 2), and 'sensitive responsiveness' (Oates, 2007). Staff competencies required to engage in such interaction include the ability to empathetically understand children and to share and to broaden their interest taking into account their cognitive and emotional needs (Vandenbroeck, Chapter 5). Rao and Sun (Chapter 11) conceptualize quality in terms of following dimensions that articulate the home-ECCE programme-school continuity: quality ECCE (a) offers support to parents; (b) integrates educational activities, nutrition, health care and social services; (c) provides relevant educational experiences; and (d) eases the transition to primary school.

There are specific teaching and learning practices proven by research to produce large cognitive and social gains for children. These include reflective teaching practices, intensity and continuity as well as strong emphasis on language development. They also cover a school-like discourse pattern including initiation-reply-evaluation sequences and categorization, facilitated by a proven curriculum, training and professional development, reasonable ratios and adequate monitoring and supervision (Frede, 1998, cited in Barnett and Nores, Chapter 3). A balanced mix of teacher- and child-initiated activities has been shown to enhance a wide range of abilities related to academic

achievement and socio-emotional development including self-regulation and executive function (Barnett and Nores, Chapter 3; Vandenberg, Chapter 5). Age-appropriate activities, stimulating learning materials and appropriate learning environment are also shown as important for child outcomes in the Asian studies described by Rao and Sun (Chapter 11).

Several authors of the volume emphasize the importance of nurturing self-worth and well-being for successful learning and socialization, particularly in contexts of difficult circumstances and diversity. In other words, they recognize 'care' (as in fostering a warm and responsive relationship with and expressing interest in the child) and 'education' (as in acting as role model, offering guidance and stimulating learning opportunities) as inseparable in everyday practice. El Zein and Chehab (Chapter 6) point out that for children affected by emergencies and conflicts, ECCE can play a valuable role in supporting recovery and development by offering routine, structure, a sense of normality and a safe space to express feelings. Writing about ECCE in contexts of ethnic diversity in Europe, Vandenberg argues that even children in an enriched environment will not learn without a feeling of well-being or inclusion which is closely related to a feeling of belonging and being welcomed:

For most children, enrolment in an early childhood service represents a first step into society. It presents them with a mirror reflecting how society looks at them and thus how they should look at themselves, since it is only in a context of sameness and difference that identity can be constructed. In this public mirror, every child is confronted with critical existential questions: who am I and is it ok to be who I am? A positive self-image is closely linked to well-being and the capacity to succeed in school (Laevers, 1997). For all humans and especially for all (young) children, well-being is derived from a feeling that one's multiple 'belongings' are also accepted and a central 'belonging' is one's family (Chapter 5, p. 109).

Palmer (Chapter 13) speaks of the tension likely to be encountered in curriculum development in a multicultural society, which has a diversity of beliefs, values and perspectives. She states that space can be created in curricula to honour and reflect divergent stakeholder views. At the national level, curriculum writers should explore diversity, identify common ground and reach consensus on what is in the best interest of all children; and at the community level, educators should have 'the freedom to follow individual pathways while striving to meet goals based on societal norms and values' (Palmer, Chapter 13, p. 257). Vandenberg (Chapter 5) highlights two pitfalls in curriculum development in contexts of diversity: denial of diversity, whereby

educators treat all children the same with the implication that they address what they consider as an 'average' or 'good' child who is usually white and middle class; and essentialism, whereby children are reduced to their family and ethnic or cultural background.

A similar tension can exist between 'foreign' and 'indigenous' values, perspectives and practices. On the importance of making ECCE culturally relevant in Africa through the use of local concepts and strategies of child development and socialization, Serpell and Nsamenang (Chapter 12) warn against using imported approaches and tools without local adaptation, a point also raised in Palmer's chapter. The challenge of local relevance in Africa, they note, partly stems from the fact that the majority of scientific studies available today have been conducted with children of middle class North American and European families and address western audiences. Serpell and Nsamenang state that great caution should be exercised when extrapolating the concepts and theories originating from this geographically limited body of research for children and their families in Africa. In the same vein, imported assessment measures can be highly inadequate in African settings as they presuppose exposure to particular mediums and practices, such as written texts, pictures, puzzles, building blocks, TV, and adult-child joint book reading practices, that are often absent in Africa. Acknowledging wide variation in the conception of child development across different ethno-cultural groups in Africa, the authors recognize the danger of essentializing the African conception. In sum:

Psychosocial intervention to optimize the development of young children cannot be operationalized with the same degree of cross-cultural equivalence as a vaccine or breast-feeding. Importing a culturally alien package of cognitive stimulation would only be justifiable if research showed that existing, local stimulation techniques were less supportive of children's development... The design of appropriate, effective ECCE services for African societies requires close attention to prevailing sociocultural conditions especially in rural areas, including the strengths and limitations of local child-rearing knowledge, attitudes and practices (Chapter 12, p. 235).

Parents are the first educators and principle caregivers of young children, and therefore, constitute a major influence on their development. ECCE starts at home with parents and other family and community members providing for the care, protection, upbringing and education of young children. Britto and Engle (Chapter 8) refer to five, interdependent domains of parenting: caregiving (health-, hygiene- and nutrition-related practice), stimulation (interactions, learning activities, modelling), support and responsiveness (trust, attachment,

sense of security, etc.), structure (discipline, supervision, protection from harm) and socialization. Importantly, research shows that the quality of parenting and home environment is predictive of later academic achievement and success. Particularly in countries with nascent organized ECCE provision, a programme approach that supports good parenting using, for example, existing non-formal education, adult literacy, and primary healthcare structures and networks, becomes a valuable strategy. In the absence of parental care, welfare institutions step in to provide care and education for young children. Legrand, Grover and Schwethelm (Chapter 10) call for urgent attention to improve the quality of institutional placement in Central and Eastern Europe and the Commonwealth of Independent States – a traditional practice dating from the Soviet era – and to make parallel efforts in shifting from the mentality of ‘the state-knows-all’ to developing alternative approaches.

Parental involvement is a key ingredient in raising the quality of ECCE provision. Building a welcoming programme for the child is not possible without welcoming his or her parents. However, involving and welcoming parents can be challenging especially in contexts of diversity as it requires building genuine reciprocity in an asymmetrical relationship between the educator and parents. Vandebroek (Chapter 5) states that, while some determinants of high quality can be defined, those in contexts of diversity cannot because quality needs to be negotiated with parents and local communities. This, he claims, entails a democratic process that can lead to unpredictable results. Therefore, ‘highly qualified educators are needed and must be supported to work in contexts of unpredictability and uncertainty’ (Chapter 5, p. 113).

With more children in ECCE programmes and with growing knowledge about early learning, there is increased concern about what young children should be learning. This has resulted in a focus on standards and accountability – a shift from the past whereby many teachers focused on activities – with many countries developing their own standards (Palmer, Chapter 13). According to Palmer, standards/outcomes can positively affect pre-school teaching and learning by supporting teachers to provide ‘a richer, more purposeful and comprehensive curriculum’, ‘realistic expectations for children’s learning and development’, and ‘more thoughtful suggestions for experiences that might help them achieve those outcomes’ (Chapter 13, p. 260). In providing standards, it is critical to keep in mind that young children learn largely through play and exploration (Palmer, Chapter 13). Potential risks include the difficulty in developing standards that reflect children’s differing rates and approaches to learning, stigmatisation of children not living up to the standards as ‘failures’, and the use of inappropriate methods to achieve the desired outcomes, such as fear, punishment, and

teaching practices that are ill-suited to young children's characteristics and capacities (UNESCO, 2006; Meisels, cited in Palmer, Chapter 13).

In sum, given that there are many possible viewpoints on what quality may be, it should be defined from the desired outcomes for children through multi-stakeholder, participatory processes. Some agreement exists as to factors and dimensions that enable quality and the centrality of the child's experience and child-adult interaction in thinking about quality. A key here is to invest in ECCE educators with the recognition that they are professionals who require specialised and updated knowledge and skills and adequate working conditions to be able to provide warm and stable relationship as well as engaging activities for young children. Effective learning cannot take place without the presence of 'care' that nurtures self-worth and well-being. In contexts of diversity whereby different beliefs, values, perspectives and languages exist, opportunities to explore this diversity and to identify common ground are essential, and the principle of best interest of the child can provide guidance. Quality ECCE is necessarily informed by the local understanding and practices of childrearing and socialisation, and using the wealth of local cultures and resources in programme development enhances relevance, meaningfulness and sustainability. Given their highly influential role in the lives of children, working with and supporting parents is a crucial ingredient of quality. The standard-based approach to ECCE can positively affect educators' practices and children's outcomes, and requires well-trained educators to duly implement curricula while attending to all developmental areas, responding to children's differing needs, and empathetically understanding them.

Conclusion

ECCE emphasizes the development of the whole child, attending to his or her 'care' and 'educational' needs in an integrated manner. It lays the foundation for lifelong learning and well-being. Quality ECCE optimally facilitates holistic early child development. Such facilitation is best when building on and reinforcing positive local understandings of childrearing and socialisation and when it views positive local cultures and resources as assets. Given the diversity of cultures and socialisation processes, a determination of the positive orientation or lack thereof is best assessed against the intended outcomes of ECCE and, most importantly, the intention and spirit of normative instruments such as the CRC. As suggested by the CRC, the young child should be recognized as an active, competent agent with rights, ready to learn and develop holistically from birth.

Indeed, every young child has an undeniable right to holistic development and a strong start in life. Evidence suggests that quality ECCE, whether provided within families, households and community settings or through more formal institutions, can actualize this right. Beyond a rights-based argument, quality ECCE has immense and multidimensional values for individuals and societies. Thus, a strong, evidence-based case can be made for considering quality ECCE as a global public good. This in turn provides a real imperative for national governments' decisive leadership in investing in quality ECCE and for other local, national and international stakeholders to support and collaborate with governments. However, as shown above, investment levels often appear to be at odds with evidence. This is perhaps one of the best ironies of our times, given the much lauded evidence-based policy development and investment.

The ongoing processes related to the definition of the post-2015 global development agenda are showing some positive signs for young children. In 2014, the United Nations General Assembly Open Working Group on Sustainable Development Goals (SDGs) issued its proposal on the content of the SDGs that comprised 17 SDGs and 169 targets, with 'inclusive and equitable quality education and lifelong learning opportunities for all' as the fourth goal. In line with the Muscat Agreement adopted earlier at the Global EFA Meeting, the Open Working Group's proposal embraces the following as one of the education-related targets: 'By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education'. The proposed ECCE target is to be measured in terms of access, equity and quality of ECCE as well as outcomes, currently defined as 'readiness for primary education' (United Nations General Assembly, 2014).

The focus on ECCE in the *Education on the Move* series is compelling and necessary against the sobering reality that, at the end of the two decades of EFA, 250 million children cannot read, write or count even after four years of schooling. The evidence in this volume calls for resolute attention to ECCE in the post-2015 processes across different sectoral goals and as contributing to children's present and future well-being, learning and development. While the education sector is already making respectable efforts in ECCE, it could do more by making early childhood an educational priority and encouraging its strong repositioning in the national and international agendas in the post-2015 era in cooperation with other relevant sectors.

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Part 1

Understanding ECCE
as a right and
development imperative

Chapter 1

Early childhood care and education is a right

Yanghee Lee, Lothar Krappmann and Agnes Akosua Aidoo

Introduction

This chapter outlines the human rights imperative for ECCE, especially as elaborated in the Convention on the Rights of the Child (CRC) and explained by the Committee on the Rights of the Child (hereafter referred as the Committee). The Committee emphasizes the rights guaranteed for every individual child without discrimination and indicates the interrelated nature of the rights as well as the different spheres – public, private, family and community – in which they are to be enjoyed. The chapter further summarizes the Committee’s monitoring experience with regards to ECCE and shows the guidance it has provided, particularly in General Comment 7 which is relevant for advocates, policy-makers and implementers of ECCE as a children’s right. The need for data collection and indicators for monitoring and evaluation of ECCE is discussed in detail with particular reference to the Indicators project. Also explored are some of the requirements and challenges of operationalizing ECCE as a right at national level as seen from the Committee’s review of State Parties’ implementation reports and dialogues with State Parties.

The legal foundation of children’s right to ECCE

The rights of all children from early childhood stem from the 1948 Universal Declaration of Human Rights. The declaration proclaimed in article 1: ‘All human beings are born free and equal in dignity and rights’. The declaration states that human rights begin at birth and that childhood is a period demanding special care and assistance [art. 25 (2)]. The 1959 Declaration of the Rights of the Child affirmed that: ‘mankind owes to the child the best it has to give’, including education. This was amplified by the International Covenant on Economic, Social and Cultural Rights of 1966 which states that: ‘education shall be directed to the full development of the human personality and the sense of its dignity, and shall strengthen the respect for human rights and fundamental freedoms. [art. 13 (1)]

The World Declaration on Education for All adopted in 1990 in Jomtien, Thailand, states in article 5 that: ‘Learning begins at birth [...] This calls

for early childhood care and initial education.’ A decade later, the Dakar Framework for Action on EFA established six goals, the first of which was: ‘expanding and improving early childhood care and education, especially for the most vulnerable and disadvantaged children.’ Protection of children of all ages from exploitation and actions that would jeopardize their health, education and well-being has also been emphasized by the International Labour Organization in Conventions No. 138 on the Minimum Age of Employment (1973) and No. 182 on the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour (1999). The United Nations contributed to such endeavours by the Declaration of the Rights of the Child unanimously adopted by the General Assembly in 1959.

Efforts aimed at the fullest protection of child rights culminated in the CRC, approved by the General Assembly in its resolution 44/25 of 20 November, 1989. In the preamble the UN General Assembly expressed its conviction that an international convention on the rights of the child was a ‘standard-setting accomplishment of the United Nations in the field of human rights’. The Convention with 193 ratifications is the only international human rights treaty that enjoys near universal ratification. Ratification places the responsibility of compliance and implementation on the States parties and all relevant stakeholders. Monitoring compliance to the Convention is conducted by the Committee comprised of 18 experts elected from around the world and acting in their independent capacity.

The CRC made a very significant departure from most other human rights instruments, declarations and strategies with respect to children. It established that girls and boys from age 0 to 18 years are not simply the property of their parents, caregivers or the state, but citizens, rights-holders and social agents with the right to participate in the shaping of their own development and destiny, according to their age and maturity.

Surprisingly, the CRC contains no article on the right of the child to the development of its capacities during the early years of life. This is of note given that the convention was drafted by an UN working group at a time when a majority of governments were confirming in the draft World Declaration on Education for All (1990) that: ‘learning begins at birth’ (For the history of early childhood care and education, see Kamerman, 2006).

The two substantial articles of the CRC concerning a child’s right to education (arts. 28 and 29) do not mention the obligation States Parties to the convention have to provide educational opportunities or facilities for children before they attend school. This cannot be seen as an oversight

as UNESCO delegates in the UN drafting group had proposed adding a paragraph to the article on education to: ‘facilitate the provision of early childhood care and education, using all possible means, in particular for the disadvantaged child, in order to contribute to the young child’s growth, development and to enhance his or her later success at other levels of education’ (OHCHR, 2007, S. 646).

In fact, the proposal was not incorporated as the majority in the UN drafting group feared that many governments would resist an obligation for states to intervene in educational processes in families with very young children, who were regarded as solely under the protection of their parents. The only exception accepted by the group was where there was a lack of care caused by both parents working outside the home (see CRC article 18, paras. 2 and 3). Also interpretations of research at the time seemed to suggest that young children should not be separated from their primary caregiver except under extreme threat to their well-being and development. It has since become apparent that a child-friendly and culturally sensitive environment can be created outside the family and used to expand the range of stimulating experiences of children in close cooperation with their parents.

The CRC recognizes in article 5 the critical role, duties and responsibilities of parents, the immediate and extended family and community, where applicable, in ensuring the rights of children especially from the earliest years, even though it holds State Parties legally obligated for the fulfilment of the rights of all children. Parents and families must not be excluded from the care and education of their children, unless it is judicially determined that that would be in the best interests of the child. Parents, families and legal guardians are to provide appropriate care, direction and guidance in the exercise by children of their rights in a manner consistent with the evolving capacities of each child. In view of the fundamental role of mothers, the CRC calls for appropriate pre and post-natal health care for mothers [art. 24 (d)]. It also requests adequate education and knowledge in child health, nutrition, breastfeeding, hygiene and environmental sanitation for parents and caregivers [art. 24 (e)], appropriate childcare services and facilities for children of working parents [art. 18 (3)] and appropriate support and assistance to both parents, families and caregivers in child-rearing and child development [arts. 18 (2), 27 (3)]. From a child’s rights perspective therefore, ECCE must include the rights, roles and responsibilities of parents and families in a dynamic partnership with the state, civil society and the private sector to serve the best interests of the child.

The Committee's interpretation of the right to ECCE

Enrolment of children in school, retention and learning achievements are favourably influenced by participation in early childhood education programmes (Lazar, 1983; Montie et al., 2006). Investment in early childhood programmes and facilities yields high returns in developed and developing countries (Schweinhart et al., 2005; Jukes, 2006; Arnold, 2004) and the fact that the benefits far outweigh the cost have also been underscored (Heckman et al., 2010). Investment in the early years is associated with higher earnings, workforce quality and greater social attachment (Heckman, 2000). Individual productivity can also be fostered by investments in young children (Heckman and Masterov, 2007). Research has shown that the learning capacity of the brain develops only if the child's mental processes are adequately stimulated early in life (Shonkoff and Phillips, 2000).

The Committee could not overlook this important subject in its monitoring agenda. While the Committee's Guidelines for Initial Reports of 1991 (CRC/C/51) did not refer to early childhood education, the Guidelines for Periodic Reports revised in 1996 (CRC/C/58) requested States to inform about: 'any system or extensive initiatives by the State to provide early development and education services for young children, especially for young children from disadvantaged social groups' (para. 106). Of note, some States had already begun reporting on early childhood programmes on their own initiative in initial reports. However, attention was predominantly placed on measures taken to lower child mortality rates, reduce preventable diseases, and improve the overall nutritional state of young children (Doek, Krappmann and Lee, 2006). Therefore, from the late 1990s, the Committee began to increasingly issue recommendations with regard to early childhood care and education. The reporting guidelines for periodic reports underwent further revisions in 2005 and more recently in 2010. Pre-school education could no longer be interpreted as the full range of rights in the early years. In its most recent reporting guidelines, the Committee requests States Parties to: 'provide relevant updated information in respect of laws, policies, and their implementation, quality standards, financial and human resources, and any other measures to ensure the full enjoyment of the respective rights from early childhood to tertiary and vocational education and training' (CRC/C/58. Rev.2, para. 37). This information forms the base for the monitoring of compliance with the CRC – the most important mandate of the Committee.

A Day of General Discussion was held in 2004, devoted to the issue of *'Implementing child rights in early childhood'*. A strong consensus was reached that education, care, programmes and other relevant services devoted to early childhood should be considered fundamental human rights. Based on existing research and good practices, it became clear that early childhood education is an indivisible element of children's development and learning. Moreover, young children benefit from such programmes and facilities if they are provided in an appropriate manner for young children, in cooperation with parents, and respecting their culture. Quality early childhood programmes that are multidimensional and multisectoral were identified as being crucial for sound development of children. Moreover, the Committee called on States Parties to allocate sufficient public funds in services, infrastructure and overall programmes in the field of early childhood development. Strong and equitable partnerships were recommended between 'the government, public services, families and the private sector to finance early childhood care and education' (Committee on the Rights of the Child, 2004, para. 4), in line with Article 4, while respecting all the provisions and the principles of the CRC. The Committee incorporated the outcomes of the Day of General Discussion and its interpretation of the child's rights in a General Comment about the rights of the child in early childhood. Although improvements have been made, unfortunately the tendency to view ECCE as not belonging under the ambit of state responsibility continues. Early childhood care and education is a state responsibility, which should not be left largely to private initiatives.

General Comments are the authoritative interpretation by human rights monitoring committees of specific provisions or thematic issues relevant to respective conventions and covenants. Additionally, they provide guidance to States Parties in the implementation of the rights enshrined in the respective conventions and covenants. In 2005, the Committee adopted its General Comment: *Implementing Child Rights in Early Childhood* (CRC/C/GC/7/Rev. 1). The central message is presented in paragraph 28 and reads as follows: 'The Committee interprets the right to education during early childhood as beginning at birth and closely linked to young children's right to maximum development (art. 6.2).' This confirmation was much welcomed by UN agencies and organizations as it helped to strengthen efforts to enhance quantity (availability) and quality of early childhood programmes and facilities.

The Committee underlines that the four general principles in the CRC are crucially important in laying the foundations for children's rights in early childhood. The first principle of non-discrimination (CRC art. 2) requires fully inclusive ECCE for all children. The second principle, ensuring the primary

consideration of the best interests of the child [CRC art. 3 (1)], has to be taken into account by all institutions and persons in charge of ECCE. The third general principle, right to life, survival and development (CRC art. 6) requires a holistic approach to ECCE within the broader context of children's care and development to their full potential through the areas of health, nutrition, psychosocial development, adequate standard of living, education, protection from harm and participation in their own development and well-being. The fourth general principle is the right of the child to be heard and have his or her views taken into account (CRC art. 12). The Committee underscores the importance of ensuring that young children enjoy this right in accordance with their evolving capacities (see also the Committee's General Comment 12 on the Rights of the Child to be Heard issued in 2009).

The concept of the 'evolving capacities' as highlighted in article 5 of the CRC should be viewed as a process of progressive mastery and self-determination – an enabling principle. Undoubtedly, certain adjustments need to be made in providing guidance to the child. While the very young child needs more guidance than the older child, individual variations in capacities exist. Parents or legal guardians have the primary responsibility for providing an optimal environment that promotes children's development and well-being, with the best interests of the child as the guiding principle. The CRC, in article 18 reaffirms this, and it is the obligation of the state to support parents or legal guardians and extended families in the performance of their responsibilities.

In providing the necessary assistance and support, the Committee underscores that all forms of educational measures must take due regard of all factors that impede the rights of children for harmonious development (for example disabilities, violence, poverty, conflict, and other factors). General Comment 7 recommends (para. 31) that states support early childhood development programmes, which includes home and community-based programmes, with 'empowerment and education of parents and (other caregivers)' as main features. Such programmes should be tailored to the circumstances of particular individuals and groups, be developmentally and culturally appropriate, and aimed at the holistic development of children, in close cooperation with parents (including legal guardians and extended family).

Young child's right to education

Concrete consequences and obligations of duty-bearers for the implementation of this essential right to education in the years before children attend school

can be drawn from the solid body of evidence-based insight into children's development of capacities and orientations and the factors and conditions which support or impede such development. The recommendations of the Committee generated in the dialogues with the representatives of the States Parties to the Convention support the following conclusions:

Availability and accessibility

Programmes and institutions have to be available and accessible for all children seeking assistance with regard to the full implementation of their right to education in early childhood.

For this purpose:

States have to establish information campaigns and centres which explain the high relevance and variety of ways of promoting children's cognitive, social, emotional, moral and spiritual capacities from the first years of life for parents and children and the public in general;

States should adopt legal provisions guaranteeing a place in such programmes or institutions for every child wishing to benefit from educational facilities outside the home; states should consider making attendance of such programmes or institutions in the year or the years before entry into school compulsory;

States must make sure that private institutions also observe the standards which are based in young children's rights;

States must assure that there are an appropriate number of such programmes and institutions to ensure access for all children and subsidization or the waiving of fees so that cost is not a preventive factor.

Quality of education

Programmes and institutions have to be of high quality and reflect methodological insights and the best practices of early childhood care and education demonstrated worldwide.

For this purpose:

States should establish training centres and in-service facilities which guarantee that staff of such are well qualified and meet the criteria of child rights-based and child-friendly treatment of young children;

States should assure that children's emotional needs are met in educational programmes or institutions outside the family;

States should ensure that special developmental needs are diagnosed and personal and material resources are available for such;

States shall guarantee that cultural and religious orientations of children and their families are respected by the curricula and taken into account in the social aspect of such programmes and institutions;

States shall make sure that the conditions of health, nutrition and hygiene are adequate for children of young age.

Principles of the CRC

Programmes and institutions for young children, public or private, free or compulsory, have to respect the principles of the CRC in all actions and decisions.

For this purpose:

States have to assure that no young child is discriminated against and deprived of her/his right to education for reasons which are outlawed by the CRC and other universal human rights treaties;

States have to guarantee that the best interest of the child is a primary consideration in all decisions made with regard to education in or outside the family environment;

States shall make sure that in all programmes and institutions for young children the promotion of children's survival and optimal development must always be a priority;

States must establish provisions which give parents and children the right and opportunity to express their views and participate in decision-making processes which affect them.

The Committee has observed progress towards the expansion and qualitative improvement of such educational programmes and institutions for young children, but still calls upon States Parties to the Convention to strengthen their policy and legislative measures and greatly increase their financial investments in this crucial area.

Indicators and accountability

Already in its General Comment 5: *General Measures of Implementation* (2003), the Committee had stated that data collection, data analysis and indicator development had to be an essential element of all efforts to implement human rights obligations (see paras. 48-50). Since reliable statistics are crucial in understanding the challenges and barriers to the full implementation of the CRC, the Committee continued to emphasize the need for data. Henceforth, in its General Comment 7: *Implementing Child Rights in Early Childhood* (2005), the Committee underlined: ‘the importance of comprehensive and up-to-date quantitative and qualitative data on all aspects of early childhood for the formulation, monitoring and evaluation of progress achieved, and for assessment of the impact of policies’ (para. 39). This statement reflected the Committee’s observation that many States Parties did not provide adequate information on young children’s living conditions and development. Thus the Committee was unable to produce recommendations aimed at the core problems of protection, health, standard of living, education and participation or make fact-based and realistic proposals for progress.

The gap in data is also evident with regard to young children’s education despite governments confirming in the World Declaration on Education for All (1990) that ‘Learning begins at birth’, and the call by the Dakar Framework (2000) for the expansion of early childhood care and education particularly for the most vulnerable and disadvantaged children (Kammerman, 2006). Effective policies should be based on a differentiated analysis of how many children from which social background and under which expanded programmes reach conditions of access.

Such analyses have to be based on carefully selected indicators. Methodological advancements in this field mean that all responsible actors must make careful observation of the outcomes of indicator research today, as these outcomes make efforts and results of policy implementation transparent and facilitate the achievement of stated objectives. Long-term indicator studies for the purpose of analysis and evaluation of the implementation processes

are necessary. Other evaluation instruments such as observational studies or expert reports are helpful as well. But establishing evidence depends on valid and reliable indicator outcomes. Indicator studies strengthen the accountability of governments and other bodies and institutions responsible for the implementation of young children's rights.

Unfortunately, carefully collected and thoroughly analysed data on care and education of young children by statistical services of States Parties to the Convention is still rare. Several compilations of data such as UNESCO's *EFA Global Monitoring Report: Strong Foundations* (2006), OECD's *Starting Strong III* (2012) and UNICEF's *The State of the World's Children* (2012) give instructive overviews. Still, better and broader data is needed to examine the interaction of factors which help or hinder development and education of young children, and in particular children from disadvantaged social backgrounds.

Indicators can help to condense the flood of data, direct attention to the most relevant aspects of the field under study and establish continued data collection focusing on change in the field. However, an emerging problem is the abundance of indicators, which are continuously being proposed. There is growing discussion over the need to reduce indicators. This reduction has to be based on well-considered decisions, since indicators, and the trends which they disclose, influence policies and professional activities. The Committee insists that these decisions should take account of the rights of the child and the standards, which the Committee establishes in general comments such as General Comment 7: *Implementing Child Rights in Early Childhood*.

The Committee has cooperated with projects addressing the data gap. One such project initiated by the Office of the High Commissioner for Human Rights (OHCHR) was encouraged by a recommendation of the chairpersons of all human rights committees. All committees felt the lack of good statistical information in the monitoring process (17th Chairpersons meeting, June 2005, UN Document A/60/278).

Subsequently an OHCHR working group constructed illustrative indicator sets for a number of human rights. The examples chosen did not include specific child rights indicators for early childhood, but introduced a system of assigning indicators to different levels of implementation, which is also useful for working with child rights indicators.

The system of indicators refers to:

- Structural level: positive acceptance of human rights provisions and clear commitment to fulfil the norms;
- Process level: efforts to meet the obligations with all available means and resources;
- Outcome level: effects of these efforts with regard to extent and quality of rights implementation (see the Report on Indicators for Promoting and Monitoring the Implementation of Human Rights (HRI/MC/2008/3)).

This widely accepted model also guided the second project with which the Committee cooperated. It was conducted under the supervision of a group of experts from several international non-governmental organizations and UNICEF (originally initiated by the Bernard van Leer Foundation and then managed by the Human Early Learning Partnership (HELP), Vancouver, Canada). A system of 16 indicator sets was constructed closely following the respective articles of the CRC and the explanations of the Committee's General Comment 7. These indicators were successfully tested in pilot studies in low- and middle-income countries, namely the United Republic of Tanzania and Chile, in 2010 and 2011 respectively (GC7 Indicator Group, 2010).

Meanwhile an electronic version of the indicator manual was developed. The approved procedure serves as a model for indicator development with regard to other child rights. The indicator sets proposed by the GC7 group do not provide fixed measuring instructions as these may vary with life circumstances and culture. Instead they allow for investigating which kind of information is available about childhood institutions and services and children's development, and encourage analysis in the contexts of the respective countries. Data gaps are identified and available data consolidated in order to better direct measures aiming at a positive agenda for rights implementation in early childhood as asked for in General Comment 7.

How ECCE should/could be operationalized at national level

For the practical implementation of the CRC, the Committee has outlined important general measures that include legislation, national policies,

coordination, data collection and analysis, allocation of resources, dissemination and awareness-raising, and partnerships including those with civil society (General Comment 5, 2003). In numerous recommendations it is made clear that national commitment to ECCE must be demonstrated in clear legislation, comprehensive policies and adequate allocation of human, financial and technical resources.

As noted above, the Committee's successive guidelines to States Parties for reporting from 1996 to 2010 have requested specific information on the provision of ECCE services and measures to ensure full enjoyment of the respective rights from early childhood. In 20 years of monitoring implementation by the States Parties, it has observed significant but slow progress in the development of ECCE legislation, comprehensive policies and adequate funding. Legislation exists either within comprehensive laws to implement all child rights or within sectoral laws on health and especially on education. Only a few countries have enacted separate comprehensive ECCE legislation. It is interesting that the Committee's assessment is corroborated by data presented to the 2010 Moscow World Conference on ECCE which showed that worldwide only 80 countries have legislation relating to some aspects of ECCE within the education system (Marope, 2010). In all cases there are challenges of enforcement of legislation.

Comprehensive policies have been fewer. The Committee has noted that a major constraint for policy development has been the unavailability of data appropriately disaggregated to show the number, gender, social backgrounds and access of young children to ECCE programmes. More recently the Committee has observed that some countries, estimated at the Moscow Conference to be 30 (Marope, 2010), have adopted policies to incorporate one to two years of compulsory pre-primary education into their basic education programmes. While this is an important step, it does not adequately respond to the lack of comprehensive policies on holistic ECCE covering all young children from birth to school age.

It is noteworthy that the Director-General of UNESCO informed the Moscow Conference that despite the recent policy initiatives, only 15 per cent of children were enrolled in pre-primary education in sub-Saharan Africa, 19 per cent in the Arab States, 28 per cent in Central Asia and 36 per cent in South and West Asia (Bokova, 2010, p. 3). The magnitude of rights denial is further manifested in the 69 million children still missing out of primary school. The Committee is particularly concerned that the pre-primary education initiative does not pay attention to the rights of children from 0 to 3 years who are most often left out and in some cases institutionalized

against their best interests, or children who suffer disparities on account of ethnicity, rural or remote geographical location, disability, gender, poverty background or migrant and refugee status.

Evidence abounds of the multiple human and economic development benefits of ECCE. Greater efforts are therefore required in the development of comprehensive national policies and operational plans to implement holistic ECCE to ensure the rights of young children and capitalize on the positive benefits. It is also necessary to ensure that ECCE policies form part of the long-term national socioeconomic development agenda that seeks inclusion, social justice, growth and sustainable development. Most of the existing ECCE policies and plans of action are disconnected from such major national development policies and strategies including the EFA, MDGs and poverty reduction strategies. An important consequence is that ECCE activities receive little national funding and are often treated as projects dependent mainly on donors and civil society, which is not sustainable.

The Committee strongly recommends that States Parties take a lead role in giving priority to ECCE and investing the maximum level of resources in it, in accordance with article 4 of the CRC. States should leverage, and earmark where necessary, resources from poverty reduction programmes, debt relief, EFA and MDG funding for young poor and marginalized children and their families to ensure equity (Aidoo, 2008, pp. 47-48). With an appropriate mix of incentives and regulations, the private sector can also contribute effectively to the resource pool for essential ECCE programmes.

Coordination of holistic ECCE which is multidimensional and multisectoral and has to be achieved at national, regional and local levels is another fundamental challenge. The sectors of health, nutrition, education and protection of young children, with appropriate support to families, are of equal importance and need to work together in a comprehensive framework of laws and policies with a common vision and appropriate resources. The Committee recommends that coordination of ECCE be vested in a mechanism that has adequate authority to lead evidence-based, high level advocacy and assure effective cross-sectoral, multilevel and multi-partner linkages.

Conclusion

Although no specific article in the CRC addresses ECCE, its requirements are embedded in articles 2, 5, 6, 18, 27, 29, etc. All rights are indivisible, inter-related and interdependent. Realization of a particular right may depend partly, or entirely, on the realization of other rights.

All children, below the age of 18 (unless, under the law applicable to the child, majority is attained earlier), are legally entitled to all the provisions enshrined in the CRC. Rights provided in the CRC are multidimensional and multidisciplinary, including children's civil rights and freedoms (arts. 7, 8, 13-17); family environment and alternative care (arts. 5, 18 (paras. 1-2), 9-11, 19-21, 23, 25, 27); basic health, welfare, child care services and adequate standard of living (arts. 6, 18 paras. 3, 24, 26-27); education, leisure and cultural activities (arts. 28-31); protection from violence, neglect, abuse and exploitation (arts. 19, 32-37, 39); and child-friendly justice (arts. 37, 40).

Increasing attention is paid by the Committee to indicator construction guided by the provisions of the CRC. It is essential that indicator measurements are regularly repeated, since the outcomes demonstrate the effectiveness of a state's efforts and the impact of other factors on rights implementation. Thus, indicator studies strengthen the accountability of those governmental bodies and other institutions responsible for the implementation of young children's rights.

The Committee has established the practice of asking for detailed information on ECCE in the reports of States Parties and has regularly included the topic in the dialogues of government representatives and the Committee. States are encouraged to establish a 'positive agenda for rights in early childhood'. General Comment 7 is a good instrument to provide clear interpretation and guidance for the implementation of the CRC, particularly in the early years, with direct implications for ECCE. The Committee, through this particular General Comment, underscores that ECCE encompasses much more than a catalogue of programmes and services, but is a legal right. High quality, holistic ECCE for all young children without discrimination is an indispensable foundation for lifelong learning.

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Chapter 2

The neurobiology of early
childhood development
and the foundation
of a sustainable society

Jack P. Shonkoff

Introduction

Building a strong foundation for healthy development during the early years of life is an important prerequisite for individual well-being, economic productivity, successful communities and harmonious civil societies (Commission on Growth and Development, 2008). Stated simply, a promising future belongs to those nations that invest wisely in their youngest citizens. Indeed, increasing evidence indicates that the lifelong consequences of early disadvantages can be difficult to reverse, whereas a good start helps children develop capacities to cope successfully and contribute to the social fabric and economic development of their societies. Thus, as progress is made in reducing child mortality, particularly in the poorest countries with the greatest burden of unfulfilled human potential, the failure to address conditions that jeopardize the future well-being of those young children who survive seriously undermines the social and economic development sought by all nations (Keating and Hertzman, 1999).

While setting priorities for mitigating the adverse impacts of poverty, discrimination, exploitation, and/or violence on children is not a simple task, a rich and growing knowledge base in the biological and social sciences can inform innovative strategies to address threats to child survival and well-being, and to improve adult outcomes in ways that did not exist as recently as a decade ago. In order to utilize this scientific knowledge base effectively as a framework for developing stronger policies and programmes, it is critical to understand the basic principles of early childhood development and its underlying neurobiology.

Core concepts of early development

The following concepts are based on decades of rigorous research in neuroscience, molecular biology, developmental psychology and the economics of human capital formation. This overview has been formulated by the National Scientific Council on the Developing Child (NSCDC) – a multidisciplinary, multi-university collaboration designed to bring the science of early childhood and early brain development to bear on public decision-making in North America (NSCDC, 2007).

Brains are built over time, and a substantial proportion of the brain is constructed over a succession of 'sensitive periods' that begins before birth, continues into adulthood, and is associated with the formation of specific circuits associated with specific abilities. A strong foundation in the early childhood period increases the probability of positive outcomes in learning, behaviour and lifelong health, and a weak foundation increases the odds of later difficulties (Shonkoff and Phillips, 2000).

The interaction of genetics and experience shapes the circuitry of the developing brain. Genes determine when specific brain circuits are formed, and experiences shape their formation. This process is deeply influenced by the mutual responsiveness or 'serve and return' interaction between young children and the important people in their lives, particularly in the early childhood years. These emerging relationships begin in the family but often also involve other adults in children's lives (Meaney, 2001; Pianta, Nimetz and Bennett, 1997; Reis, Collins, and Berscheid, 2008).

Skill begets skill as brains are built in a hierarchical sequence from the bottom up, with increasingly complex circuits building on simpler circuits and increasingly complex and adaptive skills emerging over time (Heckman, 2007). Once a brain circuit is up and operating, it stabilizes and participates in the construction of later-developing connections. Brain circuits that process basic information are wired earlier than those that process more complex information. Higher-level circuits build on lower-level circuits and adaptation at higher levels is more difficult if lower-level circuits are not wired properly (Knudsen, Heckman et al., 2006).

Cognitive, emotional, and social capacities are inextricably intertwined, and learning, behaviour, and physical and mental health are highly inter-related over the life course. The brain is a remarkably integrated organ and its multiple functions operate in a richly coordinated fashion. Thus, emotional well-being, social competence, and emerging cognitive abilities all affect one another, and together they are the bricks and mortar that make up the foundation for human development (Shonkoff and Phillips, 2000).

Toxic stress in the early years can damage the developing brain and other organ systems and lead to lifelong problems in learning and increased susceptibility to disease. When threatened, our bodies respond with an increase in heart rate, blood pressure, blood sugar, and stress hormone levels. When a young child's stress response systems are activated within an environment of supportive relationships with adults, these physiological effects are buffered by adaptive coping responses and restored to baseline

levels, which leads to the development of healthy stress management capacities over time. However, if activation of the stress response system is excessive and long-lasting, and protective relationships are unavailable to the child, then developing brain circuits can be disrupted and other physiological systems (e.g. cardiovascular and immune function) can be impaired, with lifelong repercussions.

In an effort to communicate this science effectively, the NSCDC (2005) created a simple taxonomy based on three categories of stress response – positive, tolerable, and toxic – to differentiate normative reactions to adversity that are growth promoting from significant physiological disruptions that warrant intervention. *Positive stress* is characterized by moderate, short-lived increases in heart rate, blood pressure, and levels of circulating stress hormones such as cortisol. Precipitants include the challenges of dealing with frustration and adjusting to a new child care setting. The essential characteristic of positive stress is that it is an important aspect of healthy development experienced in the context of stable and supportive relationships that facilitate adaptive responses to restore the stress response system to baseline.

Tolerable stress refers to a physiological state that could potentially disrupt brain architecture (e.g. through cortisol-induced damage of neural circuits) but is buffered by supportive relationships that facilitate adaptive coping. Potential precipitants include the death of a family member or a natural disaster. The defining characteristic of tolerable stress is the support provided by invested adults that helps restore the body's stress response systems to baseline, thereby preventing neuronal disruptions that could lead to long-term consequences, such as post-traumatic stress disorder.

Toxic stress refers to strong, frequent, and/or prolonged activation of the body's stress response systems in the absence of the buffering protection of stable adult support. Major risk factors include significant child abuse or neglect, severe maternal depression, and parental substance abuse. The defining characteristic of toxic stress is that it disrupts brain architecture, adversely affects other organs, and leads to stress management systems that establish relatively lower thresholds for responsiveness, thereby increasing the risk of physical and mental illness as well as poor behavioural regulation and cognitive impairment well into the adult years.

Two recent documents from the American Academy of Pediatrics underscore the importance of this link between early adversity and later impairments in health and development. The first is a technical report that reviews the underlying science of toxic stress and concludes that many adult diseases

should be viewed as developmental disorders that begin early in life (Shonkoff, Garner et al., 2012). The second is a policy statement that urges the paediatric community to place a 'greater focus on those interventions and community investments that reduce external threats to healthy brain growth' (Committee on Psychosocial Aspects of Child and Family Health et al., 2012). These two documents mark the first time that this premier U.S. organization of paediatricians who care for infants, children, and adolescents has highlighted toxic stress as a topic for urgent attention.

Finally, brain plasticity and the ability to change behaviour decrease over time. Once a circuit is 'wired,' it stabilizes with age, making it increasingly difficult to alter. As the maturing brain becomes more specialized to assume more complex functions, it becomes less capable of reorganizing and adapting to new or unexpected challenges. Thus, although 'windows of opportunity' for skill development and behavioural adaptation can remain open for many years, trying to change behaviour or build new skills on a foundation of brain circuits that were not wired properly when they were first formed requires more costly work and rarely reaches full potential (Knudsen, 2004). Stated simply, getting things right the first time is less costly, to society and individuals, and achieves better outcomes than trying to fix them later.

Understanding the impacts of early adversity

To fully understand the ways in which survival, growth, learning, and health are inter-related and undermined in comparable ways by significant adversity, it is essential to understand the central role of the brain in interpreting and regulating the body's neuroendocrine, autonomic, and immunologic responses to stressful events. The brain is the body's central control centre influencing both physiological and behavioural reactions to threat as well as the development of coping skills in response to adversity. Moreover, the brain is not only an engine of physiological change in other organ systems, but it is itself a target of acute and chronic stress, both physical and psychological. Therefore, it changes both structurally and functionally in response to significant danger (McEwen, 2007).

The biology of adversity demonstrates that significant stressors, beginning *in utero* and continuing through the early years, can lead to early demise or produce long-lasting impacts on brain architecture and function that

are associated with later variations in stress responsiveness, learning and relationships, as well as with alterations in health and the rate of aging. Stress-induced changes have been well documented in multiple brain regions, with the most extensive work focused on the hippocampus (which specializes in circuits associated with simple memory), the amygdala (which mediates fear and aggression) and the prefrontal cortex (which mediates executive functions such as planning, problem-solving and self-regulation). These changes involve stress-induced remodelling of neuronal structure and connectivity, which can alter a range of behavioural and physiological responses, including anxiety, aggression, mental flexibility and memory, among other processes (McEwen, 2007). When stress response systems are over-activated during the early years, they are programmed to adapt to an environment that is 'expected' to remain adverse. As a result, the threshold for activation is lower and the 'hair trigger' nature of the stress response results in greater risk for overly rigid and often aggressive behaviour.

The link between significant adversity in childhood and increasing risk for later disorders in physical and mental health has also been documented extensively (Shonkoff, Boyce and McEwen, 2009; Felitti, Anda et al., 1998). Low birth weight and poor infant growth, for example, are associated with a range of metabolic disorders (Lau, Rogers et al., 2011). Children who have been neglected, abused, or malnourished are more likely to have heart disease as adults (Caspi, Harrington, et al., 2006; Dong, Giles et al., 2004). They are also at greater risk of a variety of health-threatening behaviours such as smoking and substance abuse, as well as depression and anxiety disorders (Horwitz, Widom et al., 2001; Rutter, Kim-Cohen, and Maughan, 2006).

Early and repeated exposure to adversity can also lead to emotional problems, as well as compromised working memory, decreased cognitive flexibility and poor self-control that can have negative effects on learning, school readiness, and later economic productivity. Young children who experience the burdens of multiple economic and social stressors typically enter preschool with lower levels of language development as well as higher rates of emotional difficulties related to fear and anxiety, disruptive behaviours, impairments in executive function and self-regulation and a range of difficulties categorized as behaviour problems, learning disabilities, attention deficit hyperactivity disorder (ADHD), or mental health problems (Shonkoff and Phillips, 2000).

Children who grow up in families or communities of low socioeconomic status also appear to be particularly vulnerable to the biological embedding of disease risk and other developmental disruptions. Some researchers

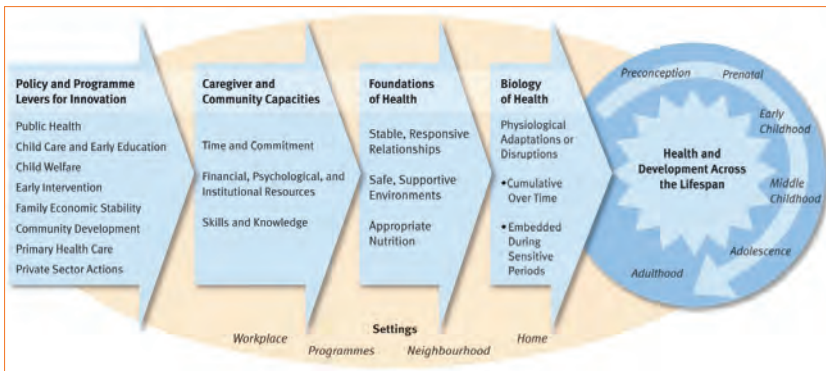
have hypothesized that this association may be the result of excessive stress related to high rates of neighbourhood risk factors such as crime, violence, abandoned buildings and inadequate municipal services, as well as increased exposure to air pollution from automobile traffic and industrial emissions (Evans, 2004). On average, these children also experience less language stimulation and lower-quality parental responsiveness (Hart and Risley, 1995), and are more likely to experience conflictive and punitive parenting (McLoyd, 1998). The cumulative burden of these adverse conditions creates repeated physiological and emotional disruptions that can have long-lasting effects on health and development.

These types of socioeconomically patterned differences in children's emotional, cognitive, and social experiences have been linked to multiple influences on brain development, particularly within those areas of the brain that are tied most closely to the regulation of emotion and social behaviour, reasoning capacity, language skills, and stress reactivity (McEwen, 2007). Children from lower socioeconomic backgrounds are more likely to show heightened activation of stress response systems (Lupien, King et al., 2001) and some emerging research suggests that differences in caregiving related to income and education – such as responsiveness in parent-child interaction – can alter the maturation of selected brain areas such as the prefrontal cortex (Farah, Shera et al., 2006). Animal models of early, stress-related changes in brain circuitry show that such modifications can persist into adult life, altering emotional states, decision-making capacities and bodily processes that contribute to substance abuse, aggression, obesity, emotional instability and stress-related disorders (Kaufman et al., 2007).

Finally, without understating the potential lifelong consequences of early adversity, it is essential that policy-makers understand the extent to which brain circuits that are specialized for selected aspects of learning (particularly related to the development of executive function skills in the prefrontal cortex) can continue to make adaptations in response to new experiences well into the adult years. It is also important to note, however, that changes in mature brain circuits require highly focused efforts and exceptional levels of attention. As stated earlier, it is easier and ultimately more effective to build healthy brain circuits from the beginning, but it is never too late to invest in remediation.

An integrated framework for promoting healthy development

This rapidly growing scientific knowledge suggests new approaches to enhancing the healthy development of young children by reducing the disruptive effects of significant adversity on their developing biological systems. With this goal in mind, the following logic model could inform more effective early childhood investments. The four dimensions of this proposed framework include the following: (1) the biology of health; (2) the foundations of healthy development that promote biological adaptation; (3) caregiver and community capacities that strengthen the foundations; and (4) public and private sector policies and programmes that enhance caregiver and community capacities (Center on the Developing Child at Harvard University, 2010).



Source: Adapted from: Center on the Developing Child at Harvard University (2010). *The Foundations of Lifelong Health are Built in Early Childhood*.

Biology of health

The biology of health is defined by advances in science that explain how personal experiences and environmental influences interact with genetic predispositions, which then result in various combinations of physiological adaptation and disruption that affect lifelong outcomes in learning, behaviour, and both physical and mental well-being. As the previous sections of this paper have described, early childhood is a time of rapid development in the brain and in many of the body's biological systems that are critical to sound health. When these systems are being constructed early in life, a child's experiences and environments have powerful influences on both their

immediate development and subsequent functioning. These effects may be caused by disruptions at particularly sensitive times in the developmental process or as a result of a 'wear and tear' effect from the cumulative build-up of adversity.

Foundations of healthy development

The foundations of healthy development refer to three domains of influence that establish a context within which the early roots of well-being are either nourished or disrupted: (1) the importance of a stable and responsive environment of relationships; (2) the role of safe and supportive physical, chemical and built environments; and (3) the need for sound and appropriate nutrition. These three critically important foundations invite further elucidation, as described below.

Environment of relationships. Human infants are unique among all species in their prolonged period of extreme dependence on adult care and protection for their survival and healthy development. The care that infants receive, whether from parents, extended family members, neighbours or child care professionals, lays the groundwork for the development of a wide range of basic biological processes that support sleep-wake patterns, attention, emotion regulation and, ultimately, all psychosocial functioning (Morris, Silk, et al., 2007). Stable, responsive, and nurturing caregiving early in life is associated with better physical and mental health, fewer behaviour problems, higher educational achievement, more productive employment, and less involvement with social services and the criminal justice system in adulthood (Shonkoff and Phillips, 2000).

Securely attached infants show more positive emotion and less anxiety in early childhood and have an easier time establishing relationships with teachers and peers at school (Bohlin, Hagekull, and Rydell, 2000). Caregivers struggling with depression may be unable to respond sufficiently to a young child during that early period when the foundations of attachment relationships are developing (Center on the Developing Child, 2009). This lack of consistent responsiveness disrupts the 'serve and return' interaction between infants and adults that is fundamental to the development of healthy brain architecture. In biological terms, a child's environment of relationships can affect lifelong outcomes in the regulation of stress response systems, immune system competence, and the early establishment of health-related behaviours.

Physical, chemical, and built environments. Unsafe environments are not only a danger to the immediate physical well-being of young children but also jeopardize their future health and development. These threats can manifest themselves in a variety of forms, many of which are amenable to effective preventive actions that simply await the political will required for widespread implementation. Neurotoxic chemical exposures (e.g. from lead, methylmercury, and organophosphate insecticides) pose a significant risk to immature biological systems, as low-level exposures before or shortly after birth often produce more damaging and longer-lasting harm than exposures at higher levels in later childhood or adult life (Hertz-Picciotto et al., 2008). At the same level of exposure, embryos, foetuses, and children absorb much larger doses of toxins relative to their body weight than adults, which is another reason why the adverse impacts are greater in the prenatal period and early in life, when important developmental processes are underway. Of all the body's organ systems, the brain is especially vulnerable to environmental toxins, as even small injuries can produce significant effects on future health, learning, and behaviour. Early chemical exposures may also prompt changes in other organs and tissues, resulting in structural malformations or greater susceptibility to diseases that may even be passed on to subsequent generations (Grandjean, Bellinger et al., 2008).

Although the danger of toxic chemical exposures presents a significant threat to many children, there is growing evidence that the way a child's physical environment is designed, built, and maintained can also significantly affect the risk of injury, disability and disease (Evans, 2006). Beyond the safety of homes and child care settings, urban neighbourhoods designed with green space, sidewalks and playgrounds away from traffic offer children and their families an opportunity to play and socialize with friends and other caregivers, as well as encourage greater physical activity and decrease the risk of obesity (Davison and Lawson, 2006). Parks and sidewalks also influence the social interactions through which people develop a sense of collective efficacy or social capital, which has been linked to a wide range of benefits, including reduced community violence (Sampson, Raudenbush and Earls, 1997).

Nutrition. Although health at every stage of the life course is influenced by nutrition, severe hunger and malnutrition persist in many of the world's poorest countries, food insecurity remains a problem for a subset of the low-income population in high-income countries, and a worldwide epidemic of obesity is beginning to receive increasing public attention. Adequate intake of both macronutrients (e.g. protein, carbohydrates, and fats) and micronutrients (e.g. vitamins and minerals) is particularly important in the early years, when body growth and brain development are more rapid than

during any other period. Nutrition also serves as an important example of how early influences contribute to developmental patterns of health over time. When mothers do not receive adequate calories and nutrients while pregnant, their foetuses adapt to the need to 'make do' with fewer nutritional resources (Barker, 2004). This response is beneficial if the post-natal environment provides minimal calories but becomes a liability if the post-natal environment provides sufficient nutrients. In the latter case, because they were prepared for a world of scarcity, and their metabolic regulatory systems were programmed to conserve calories, these children are at greater lifelong risk for obesity, hypertension, and cardiovascular disease (Gluckman and Hanson, 2006). Maternal nutrition also affects the development of the foetal and infant immune system, as the adversity of under-nutrition can stimulate the release of maternal stress hormones that impair foetal thymus development, which is associated with higher rates of infection and mortality (Moore, Collinson et al., 2006).

Successful public health efforts to improve women's nutrition, even prior to conception, have had beneficial effects on the health of both expectant mothers and their children. For example, maintaining adequate levels of folate for women in their child-bearing years has important implications for both a healthier pregnancy and the well-being of the newborn child, with folate fortification of foods leading to a 20-to-30 per cent reduction in neural tube defects (Grosse, Waitzman et al., 2005). Despite these gains, however, iron deficiency and inadequate levels of vitamins A and D remain significant health concerns for many children. These types of deficiencies early in life can have adverse impacts on a wide range of cognitive, motor, social-emotional, and neurophysiological development and behavioural outcomes as well as lead to chronic medical conditions such as osteoporosis, asthma and diabetes (Huh and Gordon, 2008; Lozoff and Georgieff, 2006).

Caregiver and community capacities

The multiple, interrelated capacities of caregivers and communities are essential promoters of the foundations of child well-being. Thus, policies and programmes designed to enhance the health and development of young children will be more effective if they bolster these capacities in a wide variety of contexts, including neighbourhoods, parents' workplaces, early care and education settings, health care facilities and, of course, the home. When caregiver and community capacities reinforce each other in positive ways, these foundations are strong. When they function in opposition, or

collectively in the wrong direction, child health is threatened and society's future is at peril.

Because young children develop in an environment of relationships, it is critically important that their caregivers interact with them in a consistent and responsive manner. All adults (both in and outside of the family) bring a range of capabilities and resources to the care and support of young children. These may include variations in such domains as education, training, skills and knowledge, parenting style, physical and mental health, the financial ability to purchase goods and services, and the pressures and demands of balancing parenting and work responsibilities.

Just as children develop in an environment of relationships, families are influenced by the capacities of the communities in which they live, which vary widely in their collective commitment and resources (Leventhal and Brooks-Gunn, 2000). Important capacities at this level include services dedicated to the promotion of children's healthy development (such as child care facilities, medical services, schools, and after-school programmes) as well as political and organizational capabilities (such as enforcement of standards for child injury prevention and the presence of local leaders who can mobilize collective action).

Policies and programmes

Healthy children are raised by people and communities, not by government and professional services. Nevertheless, public sector policies and programmes can enhance the capacities of caregivers and neighbourhoods when they need additional assistance. Relevant investments can be made in a wide range of systems responsible for public health, child care and early education, primary health care, child protection and social welfare, early intervention for children with disabilities, family economic stability, community development, and housing, among others.

It is also important to underscore the role that the private sector can play in strengthening the capacities of families to raise healthy and competent children. Workplace policies related to parental leave after the birth or adoption of a child, flexible working hours, and time off to care for a sick child or attend school meetings are a few examples. In the final analysis, a multi-dimensional approach to building the capacities of communities and caregivers offers tremendous promise. From a global perspective, this chapter cannot begin to speak to the wide diversity of public and private

sector approaches that currently exist among the world's countries. That said, all decision-makers must analyse their own political and cultural context and consider how strategic investments can best promote stable and responsive relationships, safe and supportive environments, and sound nutrition. Collectively, these investments can cover a wide range of informal family supports, voluntary community efforts, private sector actions and publicly-funded services.

A call for collaboration and innovation

The need to address significant inequalities in opportunity, beginning in the earliest years of life, is both a fundamental moral responsibility and a critical investment in the social and economic future of all societies. Generally speaking, however, global understanding of the science of early childhood and early brain development is limited. This rapidly advancing knowledge base is relatively invisible in major media sources and international communications, and it rarely permeates issues that receive more in-depth treatment, such as education, health, poverty alleviation, child protection, and human rights (Kendall-Taylor and Baran, 2011). An additional challenge facing the early childhood field is the need for a coordinated strategy across policy sectors as well as among the senior leadership within international agencies. Without an effective approach to address this challenge, ministries of health will continue to prioritize child survival, ministries of education will focus on schooling, and ministries of finance will promote economic development in the absence of a unifying strategy to deal with the early childhood roots of inter-generational disadvantage (Shonkoff, Richter et al., 2012).

Within this context, two strategies for investment are worthy of attention. First, sufficient resources should be allocated to assure that all eligible children and families are served by existing policies and programmes that strengthen each of the three foundations of healthy development. Second, a relatively small but important portion of expenditures should be invested in the design and testing of innovative approaches that are informed by science and focused on producing far greater impacts than existing services. The need for more effective strategies that cross sectors is particularly important for young children who face the highest levels of adversity and are, therefore, at greatest risk of early physiological disruptions that lead to lifelong, stress-related impairments.

Notwithstanding the challenges described above, there are multiple opportunities to highlight early childhood development as an important education, health, or human rights issue by embedding a developmental perspective within existing programming in each of these three sectors. This approach suggests a promising new direction for the global early childhood community: to build a strong, science-based case for strategic investment in the needs of young children within each of these three dominant, child-focused sectors, in contrast to continuing efforts to build support for the creation of a separate agenda focused exclusively on the early childhood period (Kendall-Taylor and Baran, 2011).

Science tells us that there is a compelling need for more effective approaches to protect young children from the biological consequences of significant adversity, not just to provide enriched learning opportunities. Investments in the early childhood years should, therefore, be viewed as critical building blocks for lifelong health promotion and disease prevention, not just strategies to enhance readiness to succeed in school. In a similar fashion, coordinated approaches to reduce both biological and environmental risk factors in the lives of women and their children can simultaneously reduce child mortality and build human capital in the poorest nations of the world. Stated simply, a healthy and well-educated population, secure and well-functioning communities, and a prosperous and self-sustaining society will be harvested by those nations that make science-based investments in the care and protection of their youngest members.

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Chapter 3

Investment and productivity arguments for ECCE

W. Steven Barnett and Milagros Nores

Introduction

The last decade has seen growing global interest in public investments in Early Childhood Care and Education (ECCE) to improve the development of young children, especially those from socially disadvantaged groups. This interest is based on evidence of environmental influences on early development, the human and economic costs of poor developmental trajectories for children in poverty and the potential for early interventions to alter those developmental trajectories (Barnett, 2008a; Engle et al., 2011). In fact, based on research establishing the importance of investing in the first five years of life, public investments in ECCE have grown extensively. Yet, there is much more to be done, as access to quality ECCE that can significantly improve development remains highly unequal.

This chapter summarizes research on the economic benefits of ECCE together with other studies on the effects of ECCE that underlie the economic argument for public investment. The larger body of research regarding the impacts of ECCE programmes on children and families provides the greatest part of the evidence for the returns to public investments in ECCE. In addition, we consider research on the ways in which economic returns do, and do not, vary with programme features, populations served, and the broader societal context. Well-designed ECCE programmes and policies can produce high rates of return on a large scale across the full range of national incomes. We discuss what is known about the features that are important to achieve high economic returns and the use of continuous improvement processes to fine tune programmes for high returns in specific contexts and given limited knowledge.

Overview

Decades of research provide unequivocal evidence that public investment in ECCE can produce economic returns equal to roughly 10 times its costs (Barnett and Masse, 2007; Engle et al., 2011). The sources of these gains are (1) child care that enables mothers to work and (2) education and other supports for child development that increase subsequent school success, labour force productivity, prosocial behaviour, and health. The benefits from

enhanced child development are the largest part of the economic return, but both are important considerations in policy and programme design.

As discussed below, the economic consequences from these benefits for both the participants and the broader society are clear. These include reductions in public and private expenditures associated with school failure, crime, and health problems as well as increases in earnings. A wide range of ECCE interventions including part-day pre-school at ages 3 and 4, full-day educationally-rich child care from the first five years of life, and home visitation with parents beginning prenatally have produced such results. Often nutrition and other health-oriented interventions including improved prenatal care and behaviour are part of these interventions (Engle et al., 2011; Nores and Barnett, 2010).

The findings of studies with formal benefit-cost analyses are supported by a larger body of evidence documenting both short- and long-term impacts of ECCE (Camilli et al., 2010; Nores and Barnett, 2010; Engle et al., 2011). The results of these studies are remarkably consistent across the years and countries. Substantial positive effects have been found for cognitive development, school success and achievement, health, and social behaviour (Engle et al., 2011, Nores and Barnett, 2010). The quality of ECCE is strongly related to its outcomes and, therefore, its economic return (Barnett, 2011a; Engle et al., 2011).

Although there is increasing agreement about the value of public investments in ECCE in general, there is less agreement about the most effective programmes and policies, and about what matters for quality (Pianta et al., 2009). Obtaining such information is complicated because effects are likely to vary with the children and families served and broader societal contexts as well as with programme practices. In addition, our understanding of the mechanisms through which lasting effects are produced is informed as much by theory as evidence. Suggested pathways include snowballing effects of early success on motivation and effort, effects on meta-cognitive abilities and executive function, prevention of damage to brain development from excessive stress and inadequate nutrition and lasting impacts of family responses to children's early performance (Raizada and Kishiyama, 2010). Multiple pathways clearly are implicated, but the most efficient ways to influence these pathways are still imperfectly understood (Barnett, 2011a; Reynolds and Temple, 2008). Ultimately, scientists must be modest about the extent to which research can inform policy and practice with respect to what works and emphasize the need for a continuous improvement process to ensure that programmes evolve to produce the desired results.

Economic rationale for public investment

From an economic perspective, public investments in ECCE are advisable first and foremost due to the large spillovers, or externalities, associated with private investments in ECCE (Barnett, 2008a). As is the case with investments in infrastructure for public health (such as clean water and disease eradication), the externalities associated with early childhood programmes are large. Therefore, early childhood programmes should be considered a public good deserving government investments and going beyond the responsibility of individual families to provide.

Examples of externalities related to ECCE are decreased costs of public education (due to reductions in grade repetition and need for special education), peer effects on children's learning and development, decreased health care costs borne by the government, reduced crime and criminal justice systems costs, increased tax revenues, and the value of decreased social and economic inequalities. Some of these benefits are the results of social welfare and health policies that introduce differences between private and social benefits (e.g. long-term payments to the unemployed or the cost of public health care for those who develop lung disease from smoking). Others occur regardless of government policy. For example, reductions in crime reduce private as well as public sector costs for security and reduce the human and financial costs to crime victims.

Two important externalities have typically been neglected in economic analyses of ECCE. One such is the value of decreased inequalities. Public investments in ECCE can decrease social inequalities as they have their largest effects on the educational and economic success of disadvantaged populations, those in poverty and migrant families with lower parental education and less fluency in the dominant language (Barnett, 2008a; Burger, 2010). ECCE programmes can also increase gender equality for children and their parents (by improving labour force participation and earnings of mothers). The other major neglected externality is the impact of investment on fertility rates. When designed to address specific local circumstances, public ECCE investments can address both the desire to reduce high fertility rates in very low-income countries and to increase low fertility rates in high-income countries (Rindfuss et al., 2010).

Finally, it should be recognized that to the extent parents make imperfect decisions for their children, societies may have to act in favour of children. If they are imperfectly altruistic, parents will not always fully act in their children's best interests. In addition, parents may have difficulty adequately discerning quality differences in ECCE that influence child development.

And, where child mortality is high, from an individual parental perspective investments in young children may be viewed as high-risk, whereas societal investments in all children pool the risks.

Broad evidence of ECCE benefits

The evidence of positive effects from quality ECCE is remarkably consistent around the globe, taking into account that ECCE quality must be judged relative to conditions in the home (Barnett, 2008b; Burger, 2010). Meta-analyses by Camilli et al. (2010) and Nores and Barnett (2010) provide quantitative summaries of the evidence regarding the magnitudes of programme effects underlying benefits and a basis for directly comparing impacts on child development in high-income nations with those in middle and low-income nations. These summaries indicate substantive impacts from ECCE on child development across a wide range of political, socio-cultural and economic contexts.

In contrast to the general consistency of findings regarding child outcomes, studies of the effects of ECCE on maternal employment are more mixed. Although most studies find positive impacts on maternal employment, their estimated magnitude varies greatly across studies (Ruhm, 2011). A few studies do not find positive effects, and the extent to which increased public investments may lead to changes in the type of child care without increases in employment is debated (Ruhm, 2011). Where informal or inexpensive, poor quality private child care is widely available and maternal labour force participation rates are high, the introduction of public investment in higher quality ECCE may primarily introduce a switch in type of ECCE arrangement that benefits child development, but has little effect on maternal labour force participation. However, for particular contexts and populations where lack of ECCE options substantially limits labour force participation, benefits to maternal earnings due to an increase in ECCE arrangements can be higher.

Returning to the impacts on child development, Camilli and colleagues (2010) analyse the results from 123 U.S. studies since 1960 in which at least one year of ECCE was provided prior to age 5. They find that ECCE produced substantial effects on cognitive and social development as well as school progress. As the vast majority of studies measured cognitive outcomes, it was possible to examine these outcomes in more detail. Although cognitive outcomes declined in the years after children exited ECCE, the effects did not disappear and remained meaningful throughout the school years. They

also find that better-designed programmes produced larger effects, with their long-term effects sufficient to close half the achievement gap between disadvantaged children and other children through the end of secondary school. The authors find that intentional teaching and individualization are ECCE programme features associated with larger gains. Note that although most studies focused on disadvantaged children, more recent U.S. studies find educational benefits to children from all backgrounds (Barnett, 2011b).

The erosion of cognitive effects after children leave ECCE is only partial and, at least in some studies, varies by type of cognitive measure (Barnett, 2011a). Lasting effects about half the size of initial effects are found throughout the school years and even into adulthood (Camilli et al., 2010). Some of the 'weakening' in cognitive effects appears to be due to public schools making greater compensatory effort for children who did not attend a high quality pre-school programme (Barnett, 2011a). In other words, the 'decline' in effects over time is because children who did not benefit from quality ECCE are helped to catch-up, not because the benefits of ECCE wear out. Indeed, it is precisely because children who attend quality ECCE require less compensatory effort including repeating a grade and special education that ECCE generates the educational cost savings that have been documented in numerous cost-benefit analyses of investments in ECCE.

Meta-analysis also documents substantive social and emotional effects (Camilli et al., 2010). ECCE has been found to improve self-regulation, motivation, self-efficacy, educational aspirations, sociability and aggressive or anti-social behaviours (Barnett, 2008b). As many of the studied ECCE programmes were not expressly designed to enhance social and emotional development, but primarily focused on cognitive outcomes, such outcomes are not always seen. It is noteworthy that studies focused on social and emotional development have found that curricula for ECCE can have similar effects on cognitive development while having very different effects on social and emotional development depending on their design (Schweinhart and Weikart, 1997; Barnett et al., 2007). However, no trade-off between cognitive and social is required. Balanced curricular approaches where children learn through both teacher- and child-initiated activities including games and socio-dramatic play can succeed in enhancing a broad array of abilities related to academic achievement as well as social and emotional development including self-regulation and executive function.

Meta-analyses and literature reviews have also summarized the results of studies that measured the effects of pre-school on aspects of children's educational progress that clearly relate to the cost of education, finding

positive effects into the elementary school years and beyond (Aos et al., 2004; Barnett, 2008b; Burger, 2010). Key indicators of school progress and success (other than achievement test scores for which positive ECCE effects have been found) include attendance, classroom behaviour, grade repetition, special education placement and high school graduation (Aos et al., 2004; Camilli et al., 2010; Engle et al., 2011).

In recent years, international research on ECCE has provided a much broader evidence base that is entirely consistent with earlier findings from the United States (Burger, 2010; Engle et al., 2011; Vargas-Barón, 2009; Vegas and Santibañez, 2010). Nores and Barnett (2010) find average effects of comparable size to those found in the United States for interventions including conditional cash transfers, nutritional supplementation, and cognitive stimulation or educational programmes. Engle et al. (2011) reviewed research on parenting education and support programmes and centre-based ECCE in lower-income countries and concluded that both have significant impacts on children's cognitive and socio-emotional development. Baker-Henningham and Lopez-Boo (2010) reviewed studies of ECCE and other early childhood development interventions in lower-income countries. They found positive programme impacts for cognitive, socio-emotional, and nutritional development, as well as for schooling outcomes.

Recent international research on ECCE has not been limited to low- and middle-income countries. In high-income countries, studies have found positive long-term effects including increased cognitive abilities, educational achievement, and adult earnings (Anders et al., 2012; Burger, 2010; Dumas and Lefranc, 2010; Felfe and Lalive, 2010; Havnes and Mogstad, 2011; Sylva et al., 2011). Some studies find larger effects for disadvantaged children including those in migrant families, but others find consistent positive effects for all children (Burger, 2010; Esping-Andersen et al., 2012).

Further details for key studies

The strongest evidence for the economic returns from ECCE impacts on children comes from randomized trials with broad measures of outcomes with very long-term follow-up. These seminal studies have stimulated both policy and additional research and help to knit together findings from other studies that have more limitations. In the United States these include the Perry Preschool Project, the Carolina Abecedarian Program, the Infant Health and Development Program, the Elmira Prenatal/Early Infancy Project, the

Milwaukee Project, and studies of the national Early Head Start and Head Start programmes (Barnett, 2008a). Similarly noteworthy studies from other countries include the Jamaican study of psychosocial stimulation, Mauritius Preschool Study (Raine et al., 2003), the Turkish Early Enrichment Project (Kagitcibasi et al., 2009) and a recent study of vouchers in China (Wong et al., 2013). The knowledge base is further enhanced by studies that depend on statistical controls and provide more evidence on the impacts of ECCE when provided on a large scale (Barnett, 2008b; Burger, 2010; Engle et al., 2011).

Among the ECCE studies mentioned above, the Perry Preschool study is the most widely reported. Participants were economically disadvantaged 3- and 4-year-olds randomly assigned to treatment and control groups in the early 1960s. The treatment group received a half-day high quality educational programme in a centre supplemented by home visitation for up to two years. The study followed the life-long development of these 123 low-income children (Schweinhart et al., 2005). Positive effects on achievement tests did not fade out and were observed through age 27. Also, the intervention group evidenced better classroom and personal behaviour, lower youth misconduct and crime, fewer special education years and a higher rate of on-time high school graduation. Benefits up until age 40 include increased earnings, decreased welfare dependency, reduced arrests and decreases in risky behaviour that could lead to poorer health outcomes (Schweinhart et al., 2005).

A second well-known randomized trial is the Abecedarian study which followed 111 children up to age 30 (Campbell et al., 2012). Children from economically disadvantaged families were randomized at birth. The treatment group attended centre-based, educational child care for a full workday, year-round up to the age of 5. Mothers were found to have higher earnings years after children had left the programme. Positive effects were observed on IQ and on reading and math achievement in the short and long-term. Despite some decline in the IQ advantage, a substantial IQ gain persists after entry to school and large gains in achievement persist unchanged throughout the school years. Children who attended the programme had lower rates of grade retention and special education and increased rates of higher education. Positive effects were also found for health-related behaviours and for symptoms of depression (Barnett and Masse, 2007; Campbell et al., 2012).

Also highly influential is a longitudinal study of the Chicago Child-Parent Centres which provided centre-based half-day pre-schooling for 3- and 4-year olds. Effects were estimated by comparisons to children in similar neighbourhoods where the programme was not available (Reynolds et al., 2011). Cognitive effects of the Chicago Child-Parent Centres remained

substantial through secondary school. There were substantial reductions in grade repetition and special education as well as increases in high school completion and decreases in arrest rates.

The other key U.S. studies also found positive long-term findings, with two notable exceptions. The Early Head Start and Head Start studies do not find any substantive long-term gains. However, these programmes depart from the models that have shown large term gains by relying on staff with low qualifications and pay. Their initial effects are quite small so it is not surprising that long-term effects are difficult to detect. To this it must be added that both studies underestimate programme effects for technical reasons (specifically they estimate the effects of assignment to the programme group rather than actual participation, which is substantially different). Nevertheless, these studies indicate the importance of following proven models as we discuss more fully below. In particular, when teachers have no more human capital than the parents of the children they serve, the teachers have little to transfer to children beyond what the family already provides.

Two ‘proof of concept’ studies in lower income countries stand out. A small-scale randomized trial compared high-quality ECCE in Mauritius that provided nutrition, exercise, and education to 100 children from ages 3 to 5 with typical ECCE of minimal quality and found positive early cognitive effects and reductions in later conduct disorders (Raine et al., 2003). A randomized trial of cognitive stimulation and nutritional supplements with 129 disadvantaged infants (ages 9-24 months) in Jamaica found long-term increases in intelligence and achievement test scores, higher levels of educational attainment and decreased rates of depression and violent behaviour (Walker et al., 2011). These long-term effects in Jamaica were attributable to stimulation only and not to nutritional supplementation. Most recently, a preliminary report found large increases in earnings as a result of the Jamaican programme in a 20-year follow-up (Gertler et al., 2012).

Magnitude of the economic returns to ECCE

Three U.S. studies discussed in detail above provide complete cost-benefit analyses based on follow-up of effects through adulthood. The programmes include two part-day pre-school education programmes attended for one or

two years and one full-day, year round educational child care programme over the first five years. The three had very different costs with annual cost of the least intensive part-day programme equal to roughly half the cost of a year of primary education. Over five years, the full day child care model was about 10 times the cost of the least expensive part-day model. In all three, the economic benefits were all large but the precise benefits and their magnitudes also differed somewhat across studies. Returns for these programmes have been estimated at \$2.5 to \$16 per dollar invested (Barnett and Masse, 2007; Reynolds et al., 2007). Similarly broad benefit estimates are not available for other countries. However, multiple studies from a wide range of countries find effects on earnings. Engle et al. (2011) estimated returns for ECCE in middle and low-income countries and concluded that increased productivity leading to higher earnings can provide returns of 6:1 to 18:1 from increased earnings alone.

We call attention to the fact that increased adult earnings accounted for less than half of the benefits in the U.S. studies. It seems likely that where there are increased adult earnings there would also be decreased costs of school failure, improved adult health, and decreased crime. Depending on the programme and context, the returns might be double or even several multiples of the estimated returns based on earnings alone. This implies that rates of return in low and middle-income nations are even greater than those estimated in the three U.S. studies.

Policy-makers should recognize that even the more comprehensive benefit-cost analyses are conservative because they do not take into account all benefits. Benefits that have been observed but not included in the dollar value of benefits include reductions in substance abuse and mental illness, lower child mortality, impacts on siblings, peer effects on school climate and effects on future generations of improved parenting practices including improved timing and birth spacing, and decreased inequality. Although not formally included in benefit-cost analyses to date and difficult to value with any precision, decreased social inequality (including gender inequality) is accorded substantial value in many countries.

How ECCE policy and programme design matters

Differences in ECCE design affect the types and magnitudes of outcomes, and as a consequence, the economic returns. Camilli et al. (2010) found that

ECCE emphasizing intentional teaching and individualized and small group interactions had larger effects on cognition. (Note that intentional teaching involves a mix of teacher and child-initiated activities and together these findings point away from whole group direct instruction.) They did not find significant associations between effect sizes and age at start, duration, or whether the intervention targeted economically disadvantaged children. Reynolds and Temple (2008) also find that the U.S. evidence does not support claims of higher economic returns from starting before age three. While there is evidence for high returns from investing in ECCE over the entire first five years, there is no empirical support for higher returns birth to 3 than at ages 3 to 5. Policy-makers would do well to keep in mind that returns depend on both costs and benefits, and the costs of good ECCE tend to rise at younger ages, with good infant ECCE being the most expensive.

Three recent reviews indicate that quality and support for continuous improvement are critical for the success of ECCE programmes in producing substantive improvements in children's learning and development (Baker-Henningham and Lopez-Boo, 2010; Engle et al., 2011; Pianta et al., 2009). Quality essentially means that that child has enriching experiences including predominately those with the teacher. Frede (1998) highlights specific ECCE teaching practices where programmes produced large gains for children. These include reflective teaching practices, intensity and continuity, strong emphasis on language development, and a school-like discourse pattern including initiation-reply-evaluation sequences and categorization among other things. These are facilitated by a proven curriculum, training and professional development, reasonable ratios and adequate monitoring and supervision.

The population served and social context are relevant to the design of optimal policy and practice in ECCE. This is true even though some improvements in ECCE, such as increased training for ECCE staff and smaller group sizes, are likely to pay dividends in most circumstances. Quality is always important, but is relative to the child's typical experience. If public investment in ECCE produces larger gains for disadvantaged children, this is because the magnitude of impacts depends on the advantages provided by publicly-funded ECCE relative to the home and out of home care environments disadvantaged children otherwise experience (Esping-Anderson et al., 2012; Gupta and Simonsen, 2010). Poorly designed policies can lead to widespread participation in ECCE of minimal quality that supports increased maternal labour force participation, but has negative consequences for child development including social behaviour. While appearing to be low cost, such policies may produce considerably lower rates of return for society than somewhat more costly policies that increase access to educationally effective

ECCE (Baker et al., 2008). Mixed findings regarding the long-term effects of nutrition interventions either alone or in combination with ECCE (Engle et al., 2011; Walker et al., 2011) suggest the need to further investigate interactions among programme design, population, and context in this domain.

Similarly, programme design can have substantial impacts on the magnitude of child care benefits. Maternal labour force response to free or reduced cost child care depends on eligibility rules, private sector provision of ECCE, labour markets, and other public policies and societal attitudes (Clavet and Duclos, 2011; Ruhm, 2011). ECCE policy-making is complicated by the need to simultaneously focus on both multiple domains of child development and parental employment.

As indicated earlier, it appears that absolute measures of programme quality are not as important as the extent to which additional support for child development is an improvement over what is available to the child without the programme. Obviously, the resources available to children vary from country to country as well as within countries. In very high poverty countries or localities, the family's resources may be so limited that even very modest ECCE programmes might provide advantages (e.g. Rao et al., 2012). However, there is considerable uncertainty regarding possible thresholds for substantive impact, and care must be taken to ensure that ECCE is of sufficient quality to produce the desired long-term outcomes (Raine et al., 2003; Wong et al., 2013).

Given the importance of quality for outcomes, policy-makers often consider targeting ECCE to disadvantaged populations. Means testing, or limiting eligibility to children below an income threshold, is the most common approach to targeting. In theory, means-testing limits costs compared to a universal programme and provides access to those for whom the largest benefits are produced. However, universal programmes may nevertheless yield a higher net economic return for several reasons (Barnett, 2011b). In practice, targeting is often highly imperfect and universal coverage can ensure greater inclusion of the disadvantaged. Also, programme effects for the disadvantaged may be larger if other children also participate because children learn from interacting with each other. Of course, even if benefits for disadvantaged children are highest, the benefits for other children can still outweigh the costs of their inclusion. Finally, there are non economic rationales for preferring universal programmes based on the rights of all children to education and healthy development as well as practical political considerations in securing popular support for ECCE of sufficiently high quality (Barnett, 2011b). Proposed policies need to be carefully evaluated with respect

to their likely costs and benefits in practice, based on the best available data prior to adoption.

Conclusion

A solid body of research provides strong evidence that public investments in high-quality ECCE can yield high economic rates of return. Such returns are more likely if policies and programmes are tailored to the needs of the population and context. However, we must be modest regarding claims about the precise ECCE policy and programme designs that yield the greatest returns. Ongoing evaluation of the impacts of ECCE policy on programme implementation and outcomes is essential for fine-tuning policy. However, no nation seems to be in danger of overestimating the desirable level of ECCE expenditure and quality. Many appear to err in the opposite direction.

The threat of implementation failure is not to be underestimated. There is a strong temptation to substitute less costly, but weaker programmes for the recipes found to be effective in research. In addition, programmes may not be implemented at all if there are no systems in place to ensure accountability. Adopting proven models and instituting an accountability system may significantly reduce the risk of implementation failures. Data on programme implementation and outcomes can be used to guide programme improvement through professional development and technical assistance as well as to fine tune programme design.

As we stated earlier, high economic returns are not the only rationale for public investments in ECCE, but they are an important consideration for what is often thought of as only social welfare expenditure. In high-income countries, public investment in ECCE addresses critical concerns regarding the rising costs of government services and the related issue of the capacity of future generations to maintain income and health care supports for the elderly as the population ages and fertility declines. In low-income countries, public investment in ECCE addresses critical concerns regarding the large loss of human potential and the resulting low productivity and high birth rates which can limit growth in per capita incomes. In both contexts, the wealthy gain, while disproportionately helping those in poverty. The specifics of the optimal policies will differ, but in both contexts public investments in ECCE provide a means for societies to ‘do well by doing good.’

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Part 2

Meeting the challenges
of inequality in and
through ECCE

Chapter 4

Expansion and improvement of ECCE: a gender equality challenge

Elsa Leo-Rhynie

Introduction

Gender as a social construct goes beyond whatever biological differences exist between men and women. It emphasizes the power differential resulting from the rights, roles and responsibilities which particular societies assign to men and women in economic, political and social spheres. Quite wrongly, these roles relate to biological differences, and indeed the role of child care has long been associated with the woman who has given birth and who is thus considered to be the 'natural' caregiver and nurturer. Achieving gender equality and the issues associated with this goal create challenges for early childhood care and education (ECCE). This subject has experienced significant attention worldwide over the past thirty years fuelled by research revealing the vital importance of ECCE in human development. Research in neuroscience such as that of McCain and Mustard (1999), and work which demonstrates the role of ECCE in human capital development and poverty reduction in societies (Shonkoff and Phillips, 2000) has been particularly influential.

In this chapter ECCE and gender equality will be examined from three perspectives:

- Gender socialization of young children: home and community settings
- Gender analysis of ECCE service settings
- Gender issues associated with ECCE: policy concerns

Gender socialization of young children: home and community settings

Theories abound as to the ways in which children acquire patterns of behaviour. Most theorists acknowledge the importance of children's biological makeup but also agree that the child's environment is critical in the interactive construction of their growth and development process, determining how they learn and how learned behaviours can be changed

(Bronfenbrenner, 2001). Garbarino (1999) describes the process as one in which the child draws a “social map”, with one aspect of this map being gender identity. As children develop, their perceptions, beliefs, attitudes and values about many aspects of their world are also being formed. Bem (1994) spoke of the ‘enculturation’ of children by caregivers whose gendered understandings and practices influence strongly the attitudes, values and behaviours the children will adopt. MacNaughton (2000) posits that identity formation involves an active interaction between the child and the social world in which there is ‘mutual construction’ of meaning. The interaction between the individual and cultural influences should be a major consideration in ECCE programmes.

Early gender socialization in Caribbean family and community settings

The gender challenge in ECCE does not only exist in relation to children who are being socialized but is also an important consideration in terms of those influential in the socialization process – parents, other family members, teachers, ministers of religion and people in the community.

The primary socialization environment is the family. Barriteau (2003) reports that: ‘women head a regional average of 42 per cent of households in the Commonwealth Caribbean’ (p. 215). This high percentage means that many young boys and girls lack stable male role models in their home environments. Senior (1991), author of *Working Miracles*, a book on the lives of Caribbean women, notes that: ‘The paradigm of absent father, omniscient mother, is central to the ordering and psyche of the Caribbean family’ (p. 8). This feature of Caribbean families is considered to be most detrimental in the upbringing of children (Samms-Vaughan, 2001). The gender differentiation in parenting and the consequences of this in the development of children’s gender identities and social maps are important factors in the personalities that girls and boys assume.

The socialization practices used in rearing Caribbean children are also strongly gender differentiated: play activities, chores assigned, discipline administered, and praise bestowed, differ for girls and boys. Justus (1981) noted that, in Dominica, chores are assigned to boys and girls from the age of 5, but are usually differentiated by gender.

Brown and Chevannes (1998) and Chevannes (2001) reported qualitative research with valuable data from five communities: one each in Guyana

and Dominica, and three in Jamaica. The data confirmed widely held beliefs as to the complex nature of culture and gender as they affect socialization. The 'indoor/female; outdoor/male' categorization of domestic labour was confirmed and child rearing was supportive of this distinction with girls assigned household chores and boys assigned outdoor tasks. The strategies used by parents in the socialization of boys and girls were succinctly described using the Guyanese expression 'tie the heifer and loose the bull'.

Figueroa (2004) used the term 'male privileging' to describe the gender difference in socialization among Caribbean families. He comments on the 'historical privileging of males which has provided them with a wider social space' i.e. an extension of the domestic space accorded to the girls, to include the street and the community. Girls are expected to be involved in domestic activities such as cleaning, cooking and laundry. Buddan (2008) notes that, although the ideology of male domination and privilege is strongly preserved in society, it is mothers who produce and socialize the men who function in patriarchal ways.

Barrow (2005), exploring child rearing in Dominica and Trinidad, noted that the 'good' child in both settings is described as 'well behaved, mannerly, obedient, and helpful'. Children who are too active or curious, independent or assertive are seen as behaving badly and troublesome. Boys tended to be placed in the latter group while more girls than boys were considered to be 'good'.

Boys tend to be the preferred sex among Indo-Caribbean families which remain strongly patriarchal (Roopnarine, 2006). Meanwhile, girls are often preferred by African-Caribbean families as they are more compliant and less troublesome, and more likely to assume the care and responsibility of their mother when she becomes old (Senior, 1991). This concept of children as economic assets is evident in most Caribbean cultures.

Supervision includes discipline and there is a gender difference in the administration and receipt of such discipline. Brown and Chevannes (1998) noted that the father's role in the home, when he was present, was often confined to disciplining the child. Leo-Rhynie (1998, p. 245) summarized the findings thus:

The father's punishment is usually harsh, and reserved for instances when the seriousness of an offence is to be emphasized. In the case of mothers, discipline is on-going and there is often much love and

affection shared between mother and child after a flogging has been administered.

Traditionally, corporal punishment has been the mode of discipline employed across the Caribbean, even with very young children. Payne (1989) working in Barbados reported that corporal punishment was administered for fighting, disobedience, breaking things and not completing tasks in a timely fashion. This punishment is often so harsh that children are badly abused. Ricketts and Anderson (2008) reported that boys were usually more severely beaten than girls and younger children were beaten more often than older ones. There is some evidence, however, that especially among younger middle and upper class parents, this view is changing and alternative methods of disciplining children are being employed (Samms-Vaughan et al., 2005; Ricketts and Anderson, 2008).

A survey of aggressive behaviour carried out in Jamaica by Meeks Gardner et al. (2003) attributed the prevalence of such behaviour, especially among boys, to harsh physical disciplinary methods as well as their exposure to community violence and involvement in conflict situations, lack of rewards for appropriate behaviour, and low levels of involvement in character-building activities. Boys in particular received very little affection.

Leo-Rhynie (1995) explored the extent to which toys were instrumental in the socialization of Jamaican girls and boys and the implications of this in the acquisition of gender identity. The displays in toy stores and the sales pitch to buyers emphasized the 'appropriateness' of toys for girls as distinct from those for boys, and the vast majority of parents interviewed felt that it was inappropriate to cross the gender lines when purchasing toys for children. Parents were disapproving of, but could tolerate, girls playing with 'masculine' toys, but they rejected completely any consideration of boys playing with 'feminine' toys such as dolls.

In the Caribbean, underlying much of the choice of toys, play activity and child/adult dialogue is the strong fear of homosexuality, particularly where male children are concerned, and any action or activity which could be construed as contributing to such development is taboo. In the Brown and Chevannes (1998) study, for example, parents acknowledged that very young children can exhibit sexual curiosity and even engage in sexual experimentation. Girls should be punished for this, parents asserted, but not boys: as one father noted, such punishment could 'make them go the other way'.

The Brown and Chevannes study highlighted the gendered nature of the 'dialogue' between girls and boys, their parents and other significant adults. Chores assigned, leisure activities encouraged, discipline administered, affection shown and explicit as well as implicit messages communicated about sexuality, sex and sexual behaviour were different for boys and girls and these differences were evident from very early in the children's lives.

The sexual 'maturity' of young Caribbean children has become a source of some concern recently; although some commentators (Taylor, 2012) state that this is not new. Barrett (2012) writing in the Jamaican daily newspaper, the *Gleaner*, reported that children ranging in age from 4 to 14 years from varied socio-economic groups were engaging in various kinds of sexual activities 'like it was no big deal'. Some of these relationships were incestuous. Lack of adequate supervision as well as exposure to modern media in the form of the Internet and movies to which these children seemed to have 'unfettered access', were identified as being influential in this behaviour. The influence of media as an agent of socialization of very young children must also be acknowledged. Technology has provided a variety of media which play a major role in shaping and reinforcing gender stereotypes and biases.

Gender distinctions in child rearing are not as sharply defined in the first decade of the twenty-first century as they were previously according to research conducted among secondary school students in Belize, Guyana, Jamaica and Trinidad and Tobago by the University of the West Indies Institute for Gender and Development Studies (IGDS). Results of that investigation reported by Leo-Rhynie (2010) reveal that male and female students agreed that male/female sharing of household chores, including the caring and rearing of children, was the ideal. The majority of boys in all four countries, however, felt that men should be responsible for protecting the home and family from danger, while the majority of the girls were of the view that this should be a shared responsibility. This new generation may well approach the socialization of their offspring guided by fewer and less traditional gender stereotypes.

A challenge for ECCE is to overcome the gender bias and stereotyping which can be acquired through early socialization in home environments. The family is a very private domain and interventions aiming to bring about changes in gender socialization are few and must be sensitively developed and applied. Projects and programmes targeting families tend to focus on education and assistance for children in trouble – those who need child support and protection from offences such as sexual abuse, carnal abuse and rape.

Interventions that address gender roles, biases and stereotyping in parenting practices can contribute to the development of positive attitudes, values and behaviours for girls and boys and their parents. For example, the Roving Caregivers © Programme (Powell, 2004; Roopnarine, 2005; Jarrett, 2007) is targeted at improving the family environment and enriching the socialization process of young children from birth to age three from poor rural families who do not have access to ECCE services. It includes specific objectives to promote gender equality within the family.

The Rovers © are secondary school graduates trained in child development and child rearing practices, and are assigned to work as caregivers in their communities. They conduct home visits to support parenting, communicating and demonstrating effective childcare practices that include the provision of good nutrition, health, hygiene and safety, early stimulation and parenting. They provide, among other things, information for parents on the importance of gender equality in play items, chores, discipline and expectations. Some of the first Rovers are now early childhood educators themselves, and are applying gender awareness to their classroom practice. The Roving Caregivers © Programme, initiated in Jamaica, has been introduced through the Caribbean Child Support Initiative with great success in other Caribbean countries: Grenada, St Lucia, Dominica and St Vincent.

Gender analysis of ECCE service settings

The influence of gender socialization in the home, ECCE services and community is expressed in children's readiness for formal primary education. In the Caribbean, caregivers/nannies employed to take care of young children at home are often preferred over institutional ECCE settings. However, more and more Caribbean children are participating in ECCE programmes: the regional gross enrolment rate in pre-primary education grew from 45 per cent in 1991 to 78 per cent in 2011 in the Caribbean and Latin America. ECCE institutions are open to both sexes, but the nature of the learning environment in such institutions often reveals gender biases and gender specific expectations that may be found in homes and communities (UNESCO, 2006).

Bailey and Brown (1998) and JASPEV (2003) examined the transition of Jamaican girls and boys from pre-school to primary school, and found significant gender differences in performance on cognitive tests. Results for

both girls and boys were poor, but on the whole girls were better prepared than boys for Primary Grade 1.

Leo-Rhynie et al. (2009) examined the cognitive, social and emotional readiness of pre-school children for formal primary school in urban and rural schools in Guyana, Jamaica and St. Vincent. Although, in most instances, girls and boys performed comparably on the cognitive tasks, significant gender differences emerged in certain aspects of children's functioning. Boys in St. Vincent and Guyana performed marginally better than girls on several cognitive measures, while in Jamaica the margins detected favoured girls. It is not clear why this is so, but the result for Jamaica supports that reported by Bailey and Brown (1998) and JASPEV (2003) and may well be the result of differential gender expectations and socialization in these countries. Data emanating from classroom observations and group discussions with teachers and parents revealed the differing perceptions and interactions of these significant adults with the girls and boys in their care. Furthermore, teachers in all three countries identified the following gender differences in children's learning and behaviour:

- The creativity of girls, their eagerness to learn and preparation for such learning, their focus and seriousness, the attentive indoor play of girls with story books and puzzles, their maturity, neatness, and attention span, good memory, quick grasp of concepts, and strongly competitive nature.
- The hyperactivity of boys, their limited attention span, the spontaneity of their classroom contributions, lack of interest, slow grasp of concepts, incomplete classwork assignments, the ease with which they are distracted and the difficulty in motivating them, their preference for outdoor play with trucks, tractors and cars, reluctance to assume leadership roles, aggressive behaviour and their partiality for physical activities where they outperformed girls.

These comments from teachers in pre-primary schools reflect the compliance of girls with the controlled environment and the efforts of boys to resist the restrictions which school imposes. Many of the teachers considered the gender differences observed to be the result of parental influence, the absence of male teachers in early childhood classrooms, poverty, poor nutrition and the personalities of the children.

In an earlier Jamaican study conducted in Kingston (Leo-Rhynie and Minott, 2008), boys were observed to be more disruptive, aggressive, and easily distracted than girls; in fact, some of the boys seemed to take pride in ignoring

or defying teacher authority. The Leo-Rhynie et al. (2009) study noted similarities between the views of parents and teachers regarding expectations for achievement and behaviour of girls and boys. The boys get messages from both home and school that less is expected of them than of girls; and even in pre-school activities, they tend to live up to these expectations.

The expansion of provision and participation in ECCE is welcome if the quality of the offerings meets the highest standards of education and care and incorporates practices to promote gender equality. The difficulty in Caribbean countries is that the ECCE institutions expected to optimize the development of children from birth to 6 years old have inadequate and sparse facilities, and the absence of gender stereotyping cannot be assured. Hunter (2012), writing in *The Gleaner*, a Jamaican daily newspaper, reported a study which claimed that only 25 per cent of teachers operating at the early childhood level possess a teacher's diploma or a bachelor's degree in ECCE. The implication of this disclosure is that caregivers and educators who may be inadequately prepared for the task are guiding the cognitive and socio-emotional development of Jamaican pre-schoolers, including attitude and value formation in areas such as gender equality. To promote gender sensitive practices in educational settings, Bailey, Brown and Yusuf-Khalil (2000) of the Centre for Gender and Development Studies at the University of the West Indies, worked with teacher educators from seventeen teacher training colleges in the English-speaking Caribbean to develop a gender training module that could be used for educators working at all levels of education. The process of training in curriculum building allowed for reflection and analysis of the educators' own gender beliefs and attitudes, and facilitated the planning of content and methodology which could be effective in bringing about change in schools and classrooms.

The document resulting from this participatory process is available to teachers' colleges in the Caribbean. The motivation of the participant teachers has ensured the integration of the module in teacher preparation courses, including those provided for training early childhood teachers.

Gender issues associated with ECCE: policy concerns

Women are tied to their 'triple roles' (Moser, 1993) – reproductive: bearing and caring for children, attending the sick and elderly and carrying out

household chores; productive: work outside the home to maintain the family; and community participation such as membership in church and other organizations. Any factor which impacts women's lives and hinders them in conducting tasks associated with these roles adversely affects childrearing and child care. Provision of ECCE services can reduce the burden of women's triple roles – it supports the child care aspect of their reproductive role while allowing them to engage in a wage earning productive role as well as in educational pursuits. Older siblings, usually female, who may be kept from school to assist with child care, are also no longer deprived of the opportunity to pursue educational or earning objectives. The Teenage Mothers Project in Jamaica (Jarrett, 1995; Degazon-Johnson, 2001) gives pregnant teenage girls the opportunity to complete their schooling and to develop marketable skills while their babies are looked after by caregivers trained to provide optimal care and emphasize gender appropriate practices. This two-pronged approach demonstrates how ECCE can empower women.

As shown above, ECCE provision facilitates women's employment and girls' schooling, but that in itself is not sufficient in promoting optimal development of both girls and boys and sowing the seeds of gender equality in them. ECCE should be an early care and education environment which values and treats girls and boys equally and which addresses gender bias and stereotypes appropriately. High quality ECCE can be made possible by committed, motivated and well-trained educators and a well-designed care and learning environment, for which adequate government investment and support in the area is indispensable.

In establishing, expanding or improving quality ECCE services, it is important that policy statements make explicit the importance of gender in ECCE, ensure that there is equal access for boys and girls to participate in ECCE, and address cultural issues which may impede the involvement of either girls or boys in ECCE. At the programme level, the curriculum should specifically address the needs of girls and boys, and educational materials should reflect an environment in which gender equality is communicated and promoted.

In reality, however, the work in ECCE is often accorded low status and low pay, and assumed to require no specific training. It often receives low levels of public resources: among the Caribbean countries that had data, the median of public expenditure on pre-primary education as a percentage of the overall education budget was 3.7 per cent in 2010. This is partly because caring for young children may be identified with motherhood and therefore considered a female activity (UNESCO, 2006) that can be relegated to the family sphere. If quality ECCE is not available then the socialization of boys and girls can

be compromised through unequal gender access and by the perpetuation of gender expectations, preferences and stereotypes in the education system.

Conclusion

In 1997, Heads of State of the Caribbean Community (CARICOM) adopted the Caribbean Plan of Action for Early Childhood Care and Development (CPOA, 1997) in recognition of its importance in the development of the region's human capital. The major elements of the CPOA (1997), which was endorsed by early childhood representatives from eighteen Caribbean countries, are parent education and support and curriculum reform.

While it is admirable that policy statements, goals and objectives, as in this case, speak of 'child' and 'children', the special and distinctly different treatment of boys and girls in terms of their socialization experiences, and consequent learning styles demand that such statements be more gender explicit. Policy statements also need to identify ways of overcoming structural barriers, be they legal, economic, political, or cultural, which may influence parenting practices, the provision of access to, and participation of either sex in ECCE; and which may have an impact on the quality of the offerings in this sector. The very active role that women play in national development is evidenced by the significant involvement of women in ECCE, and efforts must be made to improve their capacity to carry out these roles effectively and efficiently.

Expansion and improvement of ECCE in terms of resources, training, facilities and delivery of services ought to be a priority in national development. This entails policy-makers facing squarely the gender issue associated with the perception of ECCE as a 'woman's domain' and its consequent relegation to low status within national objectives. Identification of ECCE as critical to national development must be supported by quality provisions for girls and boys, and parents as well as those charged with delivering these services must be sensitized to the importance of gender equality in the interactions and relationships they develop with young children. The quality issue is critical as only care and education of the highest standards will ensure that the benefits of a focus on achieving gender equality in an expanded and improved ECCE are maximized locally, regionally and internationally.

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Chapter 5

Ethnic diversity and social inclusion in ECCE in Europe

Michel Vandenbroeck

A European view on the benefits of ECCE

It is well documented that children's home situation influences their development, but also that early childhood care and education (ECCE) can make a substantial contribution to the developmental opportunities of children (e.g. Adams and Rohacek, 2002; Burchinal and Cryer, 2003; Burchinal, Vandergrift, Pianta and Mashburn, 2010a, 2010b; Burger, 2010; Duncan and Brooks-Gunn, 2000; Shlay, Tran, Weinraub and Harmon, 2005). There is an abundance of research over several decades leading to robust empirical evidence showing the substantial benefits of ECCE on later school careers.

While initially these studies were predominantly conducted in the USA, there are now increasing numbers conducted in low- and middle-income countries (see Engle et al., 2007; 2011 for a concise overview) as well as on the European continent (Burger, 2010; Penn, 2009). Since the turn of the millennium, the beneficial effects of ECCE have been demonstrated through robust studies in, among others, England (Melhuish et al., 2006; Sammons et al., 2007), Germany (Datta Gupta and Simonson, 2007; Felfe and Naliv, 2011; Spiess, Buchel and Wagner, 2003), Northern Ireland (EPPI Centre, 2004); Norway (Havnes & Mogstad, 2009), Italy (Brilli, Del Boca and Pronzanto, 2011), and Switzerland (Lanfranchi, 2002). We now know that ECCE has positive effects on cognitive, social and emotional development, that these effects outlive ECCE and are most salient for underprivileged children. Hence, ECCE is claimed to be one of the most powerful equalizers. However, there are still a number of gaps to fill before we can rely on ECCE to work towards more equal societies. First, we need to acknowledge that in many countries, it is precisely the poorest that are less enrolled in high quality ECCE. Second, all studies concur in saying that only high quality can yield the expected positive results. And third, labelling ECCE as the greatest of equalizers may cast a shadow over other essential aspects of policies to combat child poverty. This chapter will explore these issues in more depth.

Unequal access and quality

Despite the abundance of evidence on the potentialities of ECCE, especially for underprivileged children, children from poor and migrant families more often miss out on ECCE, or are enrolled in ECCE of poorer quality than their more affluent peers (e.g. Greenberg, 2010; Hernandez, Takanishi

and Marotz, 2009; Magnuson and Shager, 2010). Over the last decade, the unequal attendance has been documented in several European countries, including France (Brabant-Delannoy and Lemoine, 2009), Germany (Büchel and Spiess, 2002), Italy (Del Boca, 2010), The Netherlands (Driessen, 2004; Noailly, Visser and Grout, 2007), England (Sylva, Stein, Leach, Barnes and Malmberg, 2007), and Belgium (Van Lancker and Ghysels, 2012). This problem is not new and initially the reasons for this differential enrolment were attributed to family characteristics (e.g. Peyton, Jacobs, O'Brian and Roy, 2001), leading to the conclusions that parental preferences were crucial and poor parents should be taught about or guided towards high quality services. However, we now know that parental preferences are to a very large extent moulded by environmental constraints (Himmelweit and Sigala, 2004; Vandenbroeck et al., 2008) and by early childhood policies (Sylva et al., 2007). To understand the differential enrolment (and thus change it) we need to adopt an ecological and systemic approach combining elements of ECCE policies (the macro level); institutional cultures and procedures (the meso level); and family characteristics (the micro level) (Sylva et al., 2007; Vandenbroeck, Geens and Berten, 2013).

On the policy level for instance, comparative studies clearly show that universal services (high quality for all, based on the entitlement of families) yield significantly higher enrolment rates of poor families than policies that target these services to the poor and therefore the former have greater equalizing potentials (Van Lancker, 2013). Another policy variable that has been studied in Belgium and the Netherlands is geographical inequality, meaning that more affluent areas often offer more high quality services than poorer neighbourhoods (Noailly et al., 2007; Vandenbroeck et al., 2008). Also central monitoring of quality tends to raise the quality of poorest provisions and, together with regulations on parental fees, this tends to diminish the differences in quality and enrolment (Morris, 2011; OECD, 2012; Safer, 2005). On the meso level, it is well documented that priority criteria as well as enrolment procedures might unwittingly create thresholds that discriminate against poor and migrant families such as when working conditions are not taken into account, language issues, or in case the workforce does not represent the diversity of the community and therefore raises doubts in immigrant parents about the cultural sensitivity of the staff (Vandenbroeck et al., 2013). Finally, on the micro level parents need to be well informed about their entitlements, meaning that information needs to be accessible (e.g. multilingual) and meaningful to them (see also Bennett, 2012).

The issue of quality

International studies on the beneficial effects agree that quality matters. In the case of the Effective Provision of Pre-School Education (EPPE) study for instance, the latest findings suggest that high quality ECCE yields beneficial effects that last up till secondary school, even when primary school is of mediocre quality (Melhuish, 2013). Studies in France (Caille, 2001) and the Netherlands (Driessen, 2004; Van Thuyt and Leseman, 2007), in contrast, are disappointing in their results although they also suggest that average quality is simply not good enough. And recent studies on high cortisol levels in children attending childcare suggest that poor quality may even be harmful for brain development as poorer quality is related to persistent higher levels of cortisol (Groeneveld et al., 2010; Gunnar et al., 2007). The crucial question is therefore what constitutes high quality.

There is substantial consensus on a number of conditions for high quality. It is quite clear that there is a strong relation between staff qualifications and outcomes for children and that qualification levels are one of the most salient predictors of quality (for an overview of literature see Urban et al., 2011). Professionals who have more formal education and more specialized early childhood training provide more stimulating, warm and supportive interactions with children (OECD, 2006). Therefore, there is a general agreement across international policy documents for at least 60 per cent of staff being trained at a bachelor degree level (ISCED5) (European Childcare Network, 1996; Sylva et al., 2004; Care Work in Europe, 2007; UNICEF, 2008; Eurydice, 2009). Other important preconditions are related to staff/child ratios, group size, working conditions (i.e. salaries) and continuity of staff. However, these are the structural conditions for quality and cannot be mistaken for quality itself. Indeed, what constitutes high quality in daily practice is subject to the meaning one may attribute to ECCE.

International research can provide us with some basic insights into how quality can be conceived from the point of view of children's outcomes, understood as cognitive, social and emotional development of children. In that respect, it is the interaction between the adult and each individual child that is in the focus. 'Shared attention', 'serve and return' and 'sensitive responsiveness' are some of the most used concepts (e.g. UNICEF Innocenti Research Centre, 2008) to indicate the ability of the adult to empathically understand children, to share, but also to broaden their interest, taking into account both their cognitive and emotional needs and leading them to their zone of proximal development (Vygotski, 1978). The EPPE study indicated that

the most positive effects are to be found in mixed groups, rather than in targeted provisions. This is a contrario also suggested by Dutch studies that did not find positive results of ECCE programmes in targeted pre-schools (Driessen, 2004; Veen et al., 2000) and in the analyses of PISA results by OECD, showing that a concentration of children from families with low socioeconomic status jeopardizes the learning outcome (and not as such the concentration of children with different home languages) (Organisation for Economic Co-operation and Development, 2012). Further, more qualitative studies show that it is important – from a developmental perspective – that education and care are integrated with a holistic view of the child (Bennett, 2005; Organisation for Economic Co-operation and Development, 2006); that a good balance between child-initiated and adult-initiated activities is important (Pramling Samuelsson and Sheridan, 2010), and that documenting and monitoring children’s learning is helpful.

Well-being: is it OK to be who I am?

It is acknowledged that without a feeling of well-being or inclusion even children in a rich environment will not learn. Well-being is closely related to a feeling of belonging and being welcomed. For most children, enrolment in an early childhood service represents a first step into society. It presents them with a mirror reflecting how society looks at them and thus how they should look at themselves, since it is only in a context of sameness and difference that identity can be constructed. In this public mirror, every child is confronted with critical existential questions: who am I and is it ok to be who I am? A positive self-image is closely linked to well-being and the capacity to succeed in school (Laevers, 1997). For all humans and especially for all (young) children, well-being is derived from a feeling that one’s multiple ‘belongings’ are also accepted and a central ‘belonging’ is one’s family. Yet, all too often children experience, for example, that their home language or family circumstances or cultural habits are to be left at the doorstep. Implicit negative images may seriously damage the image of the self and prevent the child from benefiting from the full potential of ECCE.

In this respect, an appropriate early childhood curriculum needs to find a balance between two pitfalls: denial and essentialism (Vandenbroeck, 2007). Denial of diversity suggests that one ‘treats all children the same’ implying that the educator addresses what he or she considers to be an ‘average’ child. When this is the case, it is almost inevitable that this ‘average’ child is moulded in the image of the teacher or the image that the teacher implicitly

holds of the 'good' child. Most often this is constructed as a middle-class, white child, living in a traditional nuclear family (Burman, 1994; Canella, 1997). This may easily lead to what is labelled as 'racism by omission': the denial of children's belongings, as a result of a well-intended conviction not to discriminate. A French study of pre-school illustrates how an attempt to treat all children the same (considered in France as 'good practice' toward classroom diversity) often fails to provide the differentiated teaching that some children belonging to specific groups may need (Brougère, Guénif-Souilamas and Rayna, 2008).

The other (and opposite) pitfall is essentialism. This implies that a child is reduced to his or her family and ethnic or cultural background. It is common practice, for example, in some multicultural programmes to assume that there is such a thing as 'Muslim practices' or 'African culture' denying not only the huge diversity within these cultures but also the agency with which parents and children shape their own multiple belongings or multiple identities (Beck, 1997; Vandebroek, Roets and Snoeck, 2009). One cannot simply assume that a child from North African origins loves to eat tagine, refuses to eat pork or that her parents wish the staff to address her in Arabic. Nor can we assume the stereotypical idea that the child with African origins will be a good dancer or eat with his or her hands.

The European network Diversity in Early Childhood Education and Training (DECET, see www.decet.org) provides six interesting guiding principles for a respectful curriculum:

- Every child, parent and staff member should feel that he/she belongs. This implies an active policy to take into account family cultures and preferences when constructing the curriculum.
- Every child, parent and staff member is empowered to develop the diverse aspects of his/her different identities. This implies that the curriculum fosters multiple identity building and multilingualism by building bridges between the home and the institutional environment as well as with the local community.
- Everyone can learn from each other across cultural and other boundaries.
- Everyone can participate as active citizens. This implies that staff should develop an explicit anti-bias approach and take appropriate action to involve all parents.

- Staff, parents and children work together to challenge institutional forms of prejudice and discrimination. This includes a critical study of availability and access policies, as well as structural discrimination, as explained below.

The construction of a curriculum that welcomes each child and that provides a holistic nurturing environment in which every child can grow to its full potential can therefore not be constructed without involving the family. It is not possible to build a welcoming curriculum for the child without welcoming his or her parents.

The voice of parents

Welcoming parents in contexts of diversity and heterogeneity is a rather complex issue. While we may expect to easily agree on general options (e.g. ECCE needs to prepare children for later life, foster holistic development and be free of bias and discrimination) it is highly improbable that we would agree on what this means in more concrete terms (Vandenbroeck, 2009). Ethnographic studies (Adair, Tobin and Arzubiaga, 2012; Tobin, Hsueh and Karasawa, 2009) clearly show that parents may substantially differ on the very meaning ECCE has and on what represents 'good practice' regarding politeness, the use of home languages in the provision, punishments and other educational matters, as well as on what parent participation means (e.g. Hwa-Froelich and Westby, 2003). We cannot reduce parent participation to a tool for children's learning outcomes, but need to also negotiate rationales and practices with parents.

Qualitative studies show that building reciprocity in such an asymmetrical relation is highly complex but feasible, provided that parents are genuinely listened to from the start (Vandenbroeck et al., 2009). It is important to acknowledge that there are many possible viewpoints on what quality may be (Dahlberg and Moss, 2005), and a parental perspective may differ from the professionals' canon. It does not suffice to organize accessible and affordable ECCE; the service also needs to be desirable and useful from the parents' perspective (Shlay, Tran, Weinraub and Harmon, 2005). This remains a major challenge considering that the curricula of future early childhood professionals in a majority of European countries do not yet place the dialogue with diverse parents at the heart of their training programme (Van Laere, Peeters and Vandenbroeck, 2012). When this reciprocal dialogue with parents is neglected, it inevitably leads to frustrated professionals and policy-makers. Policy-makers may feel 'we have designed wonderful services

for them and they do not use them as we intended them to'. Professionals may be frustrated because 'those parents that most need it are always absent at the parents' meetings that we organize for them'.

A comprehensive welfare approach

A last remark needs to be made regarding the claim that ECCE is a potential equalizer. One of the reasons why there is a large consensus on focusing on the youngest children is political in nature (Morabito and Vandebroek, 2013). As the World Bank claims, the idea of giving people equal opportunity early in life is embraced across the political spectrum: as a matter of fairness for the left and as a matter of personal effort for the right. When the focus of the debate is on inequality of income or any other outcome of adults, the views about how much to redistribute (if any at all) vary from left to right across the political spectrum. However, when the focus shifts to early childhood education, political consensus about the need to reduce inequity is easier to achieve (Paes de Barros et al., 2009, p. 27). The danger, however, is then that investments in ECCE are considered as an alternative for investing in equality of outcomes, somewhat neglecting that one generation's outcome is the next generation's opportunity (Morabito and Vandebroek, 2013). As the well-known studies of Wilkinson and Pickett (2009) show, income inequality is a salient predictor of many indicators of well-being. In more equal societies, there tend to be less teenage pregnancies, less delinquency, less mental health problems and other indicators of well-being. It should be clear that ECCE is not an alternative to redistributive measures, but on the contrary, at its best, a part of a more comprehensive welfare policy. Only then can it really become an effective instrument to create more equal societies and to realize the full potential of the largest parts of the population.

Discussion

There is robust evidence that ECCE is beneficial for children and in particular for underprivileged children. It is therefore worrying that in continental Europe children from poor families are less often in ECCE of high quality and this is especially the case for the youngest children. There is equally strong evidence demonstrating that beneficial effects can only be expected when certain conditions are met and especially those of high quality and equal enrolment. Defining what high quality means is a complex matter and pieces

of the puzzle are still missing. While some determinants of high quality can be defined those, in contexts of diversity, cannot because quality needs to be negotiated with parents and local communities and this is a democratic process with partly unpredictable results. Thus highly qualified practitioners are needed and must be supported to work in contexts of unpredictability and uncertainty (Urban, Vandebroek, Van Laere, Lazzari and Peeters, 2012). This is not only a challenging task; it is also a very rewarding one which professionals list as an interesting aspect of the job (Peeters, 2008). Moreover, as universal provisions are preferred over targeted ones, this process of dialogue not only strengthens children's holistic development but has the potential to strengthen social cohesion. From a democratic perspective, it is important that children and their families are socialized as early as possible in contexts of diversity, since ECCE is not only about individual achievements, but also about how people live together (European Commission, 2011).

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Chapter 6

Young children on the frontline: ECCE in emergency and conflict situations

Heyam Loutfi El Zein and Maysoun Chehab

Introduction

Children between the ages of 0 and 8 represent the highest percentage of those affected by today's global emergencies and are often hardest hit by their consequences. Apart from death and injury, these consequences can include displacement, malnutrition, increased pre-natal and infant mortality, family separation, sexual exploitation and abuse, trafficking, impoverished living conditions and the spread of contagious diseases that reduce life expectancy, with psychological, social and economic implications. It is often difficult to separate the effect of emergencies from that of potential compounding factors such as pre-migration stress, separation from family, displacement stress, socioeconomic hardships, and acculturation difficulties (Berman, 2001). The severity of impact depends on diverse factors including previous life experiences, coping ability, the seriousness of the trauma, age and development, gender, poverty, intelligence, education and follow-up support from family, friends and professionals (Dempsey, 2002; Punamaki, 2002; Williams, 2006).

The negative impacts of emergencies undermine the physical, emotional, cognitive and social development of young children. Apart from physical injury, the loss of parents and/or caregivers, friends, relatives, and neighbours may bring serious disorientation. Physical and emotional neglect may result from parents and caregivers. The loss of home and possessions and the disruption of daily routine further undermine the foundation for a healthy and productive life (Bentacourt, 2008; American Psychology Association, 2010). It should be noted, however, that not all children with high levels of emergency exposure develop post-traumatic stress disorder (PTSD) (Dempsey, 2002) and reactions may vary over the first days or weeks following a crisis.

Drawing largely on studies undertaken in the Middle East, North Africa and Asia, this chapter addresses some key issues related to the well-being, development and education of young children affected by emergency and conflict situations. Specifically, it will examine a) the extent to which young children are affected by emergency and conflicts; b) the impact of emergency and conflict experience on children's development and education as well as implications on disabilities and gender differences; and c) factors and strategies that reduce the negative impact and aid fast recovery.

Children affected by emergency and conflicts

Approximately 13 million children are displaced by armed conflicts and violence around the world (UNICEF, 2010). Where violent conflicts are the norm, the lives of young children are significantly disrupted and their families have great difficulty in offering the sensitive and consistent care that young children need for their healthy development (UNICEF, 2010). Studies on the effect of emergencies and conflict on the physical and mental health of children between birth and 8 years old show that where the disaster is natural, the rate of PTSD occurs in anywhere from 3 to 87 per cent of affected children (Garrison et al., 1995; Shannon et al., 1994). However, rates of PTSD for children living in chronic conflict conditions varies from 15 to 50 per cent (DeJong, 2002) as evidenced in the following countries: Iran, Iraq, Israel, Kuwait, Lebanon, Palestine, Rwanda, South Africa, and Sudan (Morgos et al., 2008; Elbedour et al., 2007; Husain, 2005; Mohlen et al., 2005; Hawajri, 2003; El- Khosondar, 2004; Thabet et al., 2002; Dyregrov et al., 2002).

Impact of emergency and conflict experiences

Impact on pregnancy

Research shows that environmental factors and experiences can alter the genetic make-up of a developing child (Das et al., 2009). Exposure to prolonged stress, environmental toxins or nutritional deficits chemically alter genes in the foetus or young child and may shape the individual's development temporarily or permanently. Violence and maternal depression may also impair child development and mental health (Walker, Wachs et al. 2007). When trauma occurs at critical times of development for the foetus or young child, the impact on specialized cells for organs such as the brain, heart, or kidney can result in underdevelopment with lifetime implications for physical and mental health (Das et al., 2009). For instance, a study on Iraq showed the rate of heart defects at birth in Fallujah to be 13 times the rate found in Europe. And for birth defects involving the nervous system the rate was calculated to be 33 times that found in Europe for the same number of births (Alani et al., 2010). Prolonged stress during pregnancy or early childhood can be particularly toxic and, in the absence of protective

relationships, may also result in permanent genetic changes in developing brain cells. Evidence has shown that toxins and stress from the mother cross the placenta into the umbilical cord (Balakrishnan et al., 2010), leading to premature and low birth weight babies (Shonkoff et al., 2009). Likewise, conflict trauma can affect pregnant women and the subsequent emotional health of their children (Engel et al., 2005). In addition, babies of severely stressed and worried mothers are at higher risk to be born small or prematurely.

Impact on children's development

Children's reactions to emergencies fluctuate depending on age, temperament, genetics, pre-existing problems, coping skills and cognitive competencies, and the dose of the emergency. Although most children are said to recover over time, if emergency reactions are left untreated, they can have a significant adverse impact on children's social, emotional, behavioural and physical development (Zubenko and Capozzli, 2002; Dyregov et al., 2002). The following are common impacts and typical reactions to stressful or difficult events, classified by age group. Age is important as it indicates the way a child understands and reacts to the emergency and the intervention.

Age 6 and younger

In conflict-affected countries, the average mortality rate for children under 5 is more than double the rate in other countries. On the average, twelve children out of a hundred die before their fifth birthday, compared with six out of a hundred (UNESCO, 2011). Common reactions among this age group are severe separation distress, crying, clinging, immobility and/or aimless motion, whimpering, screaming, sleeping and eating disorders, nightmares, fearfulness, regressive behaviours such as thumb-sucking, bed-wetting, loss of bowel/bladder control, inability to dress or eat without assistance, and fear of darkness, crowds and being left alone.

Thabet et al. (2006) investigated the relationship between exposure to day raids and shelling and behavioural and emotional problems among Palestinian children, aged 3-6, in the Gaza Strip. Children demonstrated sleeping problems, poor concentration, attention-seeking behaviour, dependency, temper tantrums and increased fear. Mothers of Palestinian kindergarten children reported severely impaired psychosocial and emotional functioning in their children (Massad et al., 2009). Thabet et al. (2005) examined the

behavioural and emotional problems of 309 Palestinian pre-schoolers, and found that direct and indirect exposure to war trauma increased the risk of poor mental health. Zahr et al. (1996), in a study on the effect of war on Lebanese pre-school children, found more problems in children aged 3-6 years exposed to heavy shelling over a 2-year period than in a control group living without this threat. According to Yaktine (1978), 40 mothers of different socio-economic backgrounds during the civil war in Beirut reported that their pre-school children became more anxious and fearful about bombardments and explosions. After Scud missile attacks, displaced Israeli pre-school children demonstrated aggression, hyperactivity and oppositional behaviour and stress. This was compared with non-displaced children and, despite a continuous decrease in symptom severity, risk factors identified shortly after the Gulf War continued to exert their influence on children five years after the traumatic exposure (Laor et al., 2001).

Ages 6 to 11

Common symptoms in this age bracket include disturbing thoughts and images, nightmares, eating and sleeping disorders, noncompliance, irritability, extreme withdrawal, outbursts of anger and fighting, disruptive behaviour, inability to pay attention, irrational fears, regressive behaviour, depression and anxiety, feeling of guilt and emotional numbing, excessive clinging, headaches, nausea and visual or hearing problems. Traumatic events experienced before the age of 11 are three times more likely to result in serious emotional and behavioural difficulties than those experienced later in life (Goodman et al., 2002). According to the Palestinian Counseling Centre, Save the Children (2008), even six months after the demolition of their homes, young Palestinian children suffered from withdrawal, somatic complaints, depression/anxiety, unexplained pain, breathing problems, attention difficulties and violent behaviour. They were afraid to go to school, had problems relating to other children and greater attachment to caregivers. As a result parents reported deterioration in educational achievement and ability to study. Al-Amine and Liabre (2008) revealed that 27.7 per cent of Lebanese children aged between 6 and 12 suffered from symptoms of PTSD, as well as from problems sleeping, agitation, difficulties in concentrating and excessive awareness of events related to the 2006 Lebanese-Israeli war. Many children in Sudan and northern Uganda who were forced to witness family members being tortured and murdered (UNICEF, 2011) exhibited stunting, PTSD and other trauma-related disorders (Husain, 2005).

In sum, emergency and conflict may impact on children's development in the following manner:

- Physical: exacerbation of medical problems, headaches, fatigue, unexplained physical complaints.
- Cognitive: trouble concentrating, preoccupation with the traumatic event, recurring dreams or nightmares, questioning spiritual beliefs, inability to process the event.
- Emotional: depression or sadness, irritability, anger, resentment, despair, hopelessness, feelings of guilt, phobias, health concerns, anxiety or fearfulness.
- Social: increased conflicts with family and friends, sleep problems, crying, changes in appetite, social withdrawal, talking repeatedly about the traumatic event, refusal to go to school, repetitive play.

Disabilities

Children with disabilities are disproportionately affected by emergencies, and many become disabled during disasters. Children with disabilities may suffer due to loss of their assistive devices, loss of access to medicines or rehabilitative services and, in some cases, loss of their caregiver. In addition, disabled children tend to be more vulnerable to abuse and violence. UNICEF research (2005) indicates that violence against children with disabilities occurs at annual rates at least 1.7 times greater than their able-bodied peers. Young children with disabilities living in conflict are more vulnerable and the consequent physical, psychological or emotional problems are higher. They are also more likely to develop emotional and mental health problems during emergencies because of lack of mobility, treatment, and medication or through starvation (Miles and Medi, 1994). The Inter-Agency Standing Committee (IASC, 2007) recognizes that children with pre-existing disabilities are more vulnerable to mistreatment, discrimination, abuse and destitution. Children with mobility, visual and hearing disabilities or intellectual impairments may feel particularly vulnerable if an emergency leads to the relocation of school and the learning of new daily routines. During emergencies, long unsafe distances to school, the lack of buildings with adequate facilities and equipment and teachers with minimum qualifications, are likely to be overwhelming challenges for young children with disabilities to be enrolled in day care and early education.

Gender differences

Some research shows that girls exhibit higher levels of distress than boys in relation to stressful situations and are considered at higher risk in situations of war and terror (Ronen et al., 2003). Other research has found that girls express more worry (Lengua et al., 2005), anxiety and depressive disorders (Hoven et al., 2005), and PTSD symptoms (Green et al., 1991; Shannon et al., 1994) while boys show more behavioural problems in the aftermath of a disaster (Pfefferbaum et al., 1999). However, pre-school girls exposed to earthquakes in Sultandagi (Turkey) displayed more problematic behaviours than boys in the same educational category (Erkan, 2009). Additionally, Wiest, Mocellin, and Motsisi (1992) contend that young children, especially girls, may be vulnerable to sexual abuse and exploitation. Garbarino and Kostelny (1996) reported that Palestinian boys suffered more than girls from psychological problems when exposed to chronic conflict. In another study, Palestinian boys were more susceptible to effects of violence during early childhood and girls during adolescence (Leavitt and Fox, 1993). In general it appears that boys take longer to recover, displaying more aggressive, antisocial and violent behaviour while girls may be more distressed but are more verbally expressive about their emotions.

Educational consequences

Quality education alleviates the psychosocial impact of conflict and disasters by giving a sense of normalcy, stability, structure and hope for the future. However, emergency and conflict situations often undermine the quality of educational services. They result in shortages of materials, resources and personnel, thereby depriving young children of the opportunity to receive quality early education. In most conflicts, education infrastructure is usually a target. Pre-schools and schools are often destroyed or closed due to hazardous conditions depriving young children of the opportunity to learn and socialize in a safe place that provides a sense of routine (UNICEF, 2009; Obel, 2003).

Young children living under emergencies are less likely to be in primary school and more likely to drop out. Primary school completion in poorer conflict-affected countries is 65 per cent while it is 86 per cent in other poor countries (UNESCO, 2011). According to the 2000 UNICEF MICS report, information from Iraq, for example, confirms the lack of Early Childhood Development programmes within the formal educational system. Only 3.7 per cent of children aged from 36 to 59 months were enrolled in nurseries or kindergartens. Low enrolment rates in early education programmes decrease

the opportunity for young children to find a safe space where they flourish and release the stress and tension resulting from the emergency. In countries with ongoing emergencies, researchers have found a full range of symptoms that may be co-morbid with trauma, including attention deficit hyperactivity disorder, poor academic performance, behavioural problems, bullying and abuse, oppositional defiant disorder, conduct disorder, phobic disorder and negative relationships (Terr, 1991; Streeck-Fischer and van der Kolk, 2000).

A study using the Young Lives data in Ethiopia found that young children whose mothers had died were 20 per cent less likely to enrol in school, 21 per cent less likely to be able to write, and 27 per cent less likely to be able to read (Himaz, 2009). Dybdahl (2001) found that 5- to 6-year-old war-traumatized Bosnian children showed lower levels of cognitive competence. Pre-school and school age Palestinian children exposed to severe losses, wounding and home destruction suffered impaired cognitive capacity for attention and concentration (Qouta et al., 2005). Severe trauma has been found to be associated with inflexible and narrowed attention and problem-solving strategies (Qouta et al., 2008). Since both physical and mental health are linked to language and cognitive development (Engle et al., 2007), it is reasonable to assume that violent conflict has a negative effect on these areas of development.

Resilience of young children

Studies show that young children who are supported by a caring and responsive caregiver have greater ability to cope with stress. A supportive relationship can not only temper the child's reaction to stress, but also help to build a buffering system which is fundamental to its long-term development (National Scientific Council on the Developing Child, 2005). Pre-schoolers respond to adult care, routine and stability, tolerate some separation, tell and understand stories and can express themselves through drawing (Punamaki, 2002; Thabet et al., 2001). Zahr (1996) found a relationship between the availability of parents and the development of secure attachment in Lebanese kindergarten children exposed to war. Barber (2001) showed that young Palestinian and Balkan children's emotional well-being and development were protected from the negative impact of military violence by positive and protective relationships with caregivers. Palestinian children whose parents used positive styles of comforting were found to be resilient, and those who had loving and non-rejecting parents were more creative and efficient (Garbarino and Kostelny, 1996; Punamaki et al., 2001). When exposed to frightening events, resilient toddlers regain their secure base by

seeking attachment with caregivers, conquer anxiety and fear through play, persist with challenging tasks and are willing to explore.

Research indicates that an affectionate family, social support, shared ideology and religion and a sense of community during adversity contribute to child resilience to poverty, losses, and illness, facilitate coping and adaptation and lead to good mental health, school achievements and peer relationships (Daud et al., 2008). The Massad et al. (2009) study of the mental health of pre-schoolers in Gaza found that factors associated with resilience were caregiver's health, a higher maternal level of education and lower child exposure to traumatic events. Findings also show that good maternal mental health (Laor et al., 2001; Qouta et al., 2005) and adequate responses to trauma, such as image control (Laor et al., 2001), were associated with good pre-school psychological adjustment.

Supporting young children during emergency and conflict situations

Early childhood is a multisectoral field that holistically addresses children's multiple needs. During emergencies ECCE supportive services may address a range of issues including prenatal care, immunization, nutrition, education, psychosocial support and community engagement. Coordinated services of health and nutrition, water sanitation and hygiene, early learning, mental health and protection are considered essential in supporting young children living under emergencies and conflicts (Save the Children, 2008; UNICEF, 2009).

Many programmes and strategies, whether in the formal or non-formal education sector, have proved to be very supportive to the well-being and recovery of young children living in areas of conflict. Child Friendly Spaces (CFS) programmes have been found valuable in creating a sense of normality and providing coping skills and resilience to children affected by emergencies (the Christian Children Fund (CCF), 2008; IASC, 2007; INEE, 2004). Child Friendly Spaces help children develop social skills and competencies such as sharing and cooperation through interaction with other children. They also offer opportunities to learn about risks in their environment and build life skills, such as literacy and non-violent conflict resolution, and provide a useful means of mobilizing communities around children's needs. In an effort to strengthen community systems of child protection, CCF (2008) established three centres for internally displaced young children in Unyama (Uganda) camp that provided

a safe, adult-supervised place for young children between 3 to 6 years of age. War Child (2012) established six 'safe spaces' in schools in northern Lebanon for displaced Syrian children where counsellors used art and music therapy to help young children express their emotions in a healthy way.

Several studies show that children who have participated in quality education programmes within schools tend to have better knowledge of hazards, reduced levels of fear and more realistic risk perceptions than their peers (Llewellyn, 2010; Andina, 2010). In such contexts, psychosocial intervention programmes for young children and their families are considered to be vital. Interventions such as storytelling, singing, jumping rope, role-play activities, team sports and writing and drawing exercises helped to reduce psychological distress associated with exposure to conflict-related violence in Sierra Leone for children aged 8 to 18 (Gupta and Zimmer, 2008). Studies in Eritrea and Sierra Leone revealed that children's psychosocial well-being was improved by well-designed educational interventions (Gupta and Zimmer, 2008). In Afghanistan, young children and adolescents gained a sense of stability and security after their involvement in constructive activities (e.g. art, narrative, sports) which took place in neutral safe places within their communities (Dawes and Flisher, 2009).

Box 1. HEART: Healing and Education through the Arts – A Save the Children programme

Save the Children created a new education approach that brings the proven power of artistic expression – drawing, painting, music, drama, dance and more – to children in need around the world. The HEART programme is designed to help children aged 3 to 14 heal emotionally and learn critical skills so they can achieve their highest potential. These children may be trapped in the cycle of extreme poverty and limited opportunity, often compounded by trauma caused by emergency, conflict and violence or the loss of a parent or other loved ones to HIV/AIDS. HEART has been piloted in six places – El Salvador, Haiti, Malawi, Mozambique, Nepal and the West Bank – and has changed the lives of more than 10,000 children. Results include:

- Healing – Children develop the ability to express and regulate their emotions, improve self-control and self-esteem, recover and build resilience so that they are ready to learn.
- Learning – Children develop the cognitive skills they need to learn – perception, attention, memory, logic and reasoning – in addition to language, social and physical skills.

Children who participate in HEART are consistently more expressive and engaged in learning. They like going to school and transition more successfully to higher levels of education. Some children experience hope, and even joy, for the first time in their lives.

Source: <http://www.savethechildren.org/site/c.8rKLIXMG1p14E/b.6292389/>.

Building the capacity of caregivers (which includes parents and teachers) to assist children appropriately during the early stages of crisis response as well as the later stages of emotional recovery is vital. Caregivers can provide

support by acting as role models for children, monitoring their conversation and behaviour and providing information and emotional support. They should also stay close to young children, maintain routines, shield them from media coverage, safeguard physical health and explore helpful community resources.

Box 2. Psycho-social Support to Parents and Teachers of Young Children – A programme by the Arab Resource Collective (ARC)/Lebanon

After the 2006 war in Lebanon, ARC designed a programme to prepare and motivate teachers and parents for the challenges of such a situation. This project aimed at offering psycho-social support and care to young children of conflict-affected areas in the classroom and at home by providing:

- Capacity-building for teachers and parents to cater to psycho-social and basic developmental needs of young children aged 3-8
- Enhanced resilience in younger children to cope with rapidly changing situations due to conflict.

Training topics included:

- War and child development/The role of education and the role of the teacher
- Communication for coping/How to discuss conflict with children
- Effective classroom management strategies and child-friendly discipline
- The school and classroom environment – reaching all children
- Psychosocial activities to improve learning and recovery.

The project was judged to be effective and timely in its delivery (Zein, 2007).

Source: Psychosocial Support to Parents and Teachers of Young Children Project Report, ARC 2007.

Conclusion and recommendations

This chapter provided studies that examined the direct and indirect impact of conflict, violence, emergencies and war-related events and their short and long-term effects on physical, emotional, cognitive and social development of young children. In general most studies find that young children represent a large vulnerable group in times of emergencies and conflicts. More positively, most children, if given support, will recover almost completely from the impact of distressing events. The majority will be able to cope effectively with the after-effects of their emergency exposure through their own resilience, and with the support of family and others, and may even derive positive benefits from their experiences. However, some children need more specialised help, perhaps over a longer period of time, in order to heal.

The chapter has confirmed that an integrated approach for ECCE in emergencies is required for greater impact. This calls for more coordinated intervention in the fields of health, nutrition, education, and protection. In addition the chapter has stressed the powerful role of education in restoring the lives of young children. Education as a force for peace and stability is an important starting point for prevention and reconstruction. Education programmes should focus on effective teaching and learning, capacity-building for school personnel, parents and other caregivers and the promotion of skills that enable children to cope and become agents of change. The role of the non-formal education sector cannot be underestimated, especially during times of crisis. Programmes should be tailor-made to different age groups and adjusted to include gender, IDPs, the disabled and orphanages. Community and parental participation in such programmes is vital as it promotes the importance of children's well-being as well as improving their physical environment.

It is important to note that research and data specific to the age group (0-8) remains insufficient for ECCE programme developers and policy-makers. Therefore, researchers need to be encouraged to further study the impact of emergencies on early childhood qualitatively and quantitatively, taking into account variables such as gender, disability, orphanages, IDPs, ongoing vs. short emergencies, and socio-economic conditions. More credible needs assessments of young children living in emergencies with a focus on the 0-8 population should be a starting point for effective provision of ECCE services.

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Chapter 7

Reducing disparities,
enhancing capabilities,
embracing diversity:
harnessing the power
of early childhood care
and education to advance
disability rights

Divya Lata

Introduction

The recognition that people with disabilities have human rights and are entitled to equal and active participation in families, communities and societies not only challenges conventional notions of their capability and capacity but also provides fresh impetus for investment in developmental and educational opportunities which nurture the potential, dignity and self-worth of every child. This chapter explores synergies between early childhood strategies that enhance human capabilities and the agenda of human rights to advance the developmental potential of young children with disabilities. Following the Convention on the Rights of Persons with Disabilities (CRPD) (United Nations, 2008), it takes a cross-disability view of the issues and does not aim to discuss interventions for specific disabilities. Looking at developmental risks and protective factors that shape the contours of early differences and that, if unattended, can perpetuate childhood disabilities in poorly resourced settings, it leverages the provisions of the CRPD to promote inclusive early childhood systems as foundations of a diverse, dynamic and just society.

Association of early childhood risk factors with disabilities

Experts typically consider children who have an impairment that restricts their functioning and those who show developmental delays (behaviour atypical for age) under the broad definition of childhood disabilities (Vargas-Barón et al., 2009, p. 8). While genetic and organic factors have long been associated with disabilities, studies have begun to suggest links between developmental risks in early childhood and the prevalence of disabilities. In a landmark review, Walker et al. (2007) narrowed down principal risk factors that influence child development outcomes in poorly resourced settings. While stunting (indicative of chronic under-nutrition), micronutrient deficiencies (notably iodine and iron) and inadequate cognitive stimulation adversely affect at least 20-25 per cent of young children in developing countries, they are often exacerbated by low birth weight, infectious diseases, environmental toxins and exposure to violence (Walker et al., 2007; Walker et al., 2011).

Iodine deficiency, overwhelmingly associated with significantly low IQ scores, is regarded as the most common preventable cause of lower intellectual ability. Chronic iron deficiency in infancy correlates strongly with delayed brain maturation, poor neurophysiologic functioning and adverse effects on all domains of infant behaviour with long-term effects on IQ. Stunting too is associated with apathy, insecure attachment and lower levels of play in infants; compromised cognitive and language ability at 5 years; poor attention, cognitive deficits, low school achievement, problems with social relationships and conduct and dropout at school age, as well as reduced likelihood of formal employment in adulthood. While an estimated 200 million children below 5 fail to reach their potential in cognitive and social-emotional development on account of poverty and nutritional stunting in developing countries, it is expected that some of these 200 million would reflect 'IQ levels indicative of mild mental retardation' (Grantham-Mc Gregor et al., 2007, p. 66).

A range of preventable maternal risks such as poor nutrition, infections during pregnancy, difficult births and exposure to alcohol and drugs have been associated with intrauterine growth restriction, birth defects in central nervous system, sensory impairments, low IQ, learning difficulties and increased risks of developmental difficulties (Tofail et al., 2008; Noland et al., 2003; Klebanov and Brooks-Gunn, 2006). Studies report a high correlation of infant stunting and poor quality of parenting with high incidences of maternal depression across cultures and socio-economic groups. Poverty, low education, high stress, lack of empowerment and poor social support are common risk factors for maternal depression and poor child development suggesting cumulative and multilevel impact on child and maternal outcomes (Grantham-McGregor et al., 2007).

Protective factors such as maternal education and exclusive breastfeeding attenuate the impact of adverse influences on both mother and child (Walker et al., 2011; Jones, 2005) while responsive and stimulating care appears to generate gains in cognitive and non-cognitive outcomes that last into adulthood (Walker et al., 2007). However, evidence suggests that only 10-33 per cent of parents actively engage with their children in cognitively stimulating activities (Walker et al., 2007, pp. 152-153). This risk is severely exacerbated among children with low birth weight and with autism or sensory impairments, as lower levels of energy and/or lack of responsiveness associated with these conditions tend to reduce responsive interaction between child and caregiver (Wan et al., 2012; Kushalnagar et al., 2010; Malekpour, 2004). Learning and social integration of children with disabilities is severely limited by caregiver stress, social stigma and overprotection and reduced access to basic services (Walker et al., 2011).

The above findings suggest that developmental risks in early childhood have cumulative, long-term consequences; if unattended they can even perpetuate disabilities (Barth et al., 2007). Similar trends are noted in Multiple Indicator Cluster Surveys (MICS) data reflecting correlations of poverty and nutritional stunting with children who screen positive for increased risk of disabilities, the risk increasing with the severity of stunting and being underweight (WHO, 2011, pp. 36-37).

The proportion of young children who are placed at risk of disabling conditions is substantial. Severe and moderate stunting among under-fives is as high as 40 per cent in countries with low income; 38 per cent in South and West Asia and 39 per cent in sub-Saharan Africa (UNESCO, 2012). Unsurprisingly, whilst approximately 80 per cent of people with disabilities live in developing countries (United Nations, 2006), reviewing the MICS of 18 low- and middle-income countries Gottlieb et al. (2009) noted that 23 per cent of children aged 2 to 9 years had, or were at risk of, disabilities. This is in sharp contrast to the rather low prevalence of disabilities officially reported in developing countries, ranging from 5.1 per cent of children under 14 globally to 0.4 to 12.7 per cent of disabled children in low- and middle-income countries estimated to be at risk of disabilities (WHO, 2011, p. 36).

Reducing disparities through early intervention

Studies of nutritional supplementation underscore the urgency of 'early' intervention. Although improved nutrition is beneficial at any age, preventive supplementation is effective in promoting 'catch-up' only if the nutritional status is restored before 24 months (Walker et al., 2011, p. 1337). Likewise, iodine supplementation is effective if administered as a preventive measure in the general population and during the first and second trimester to pregnant women (Walker et al., 2007, p. 147). While pre-school age children respond to iron therapy, IQ scores can only be improved if anaemia in infancy is corrected within six months. Even if iron therapy subsequently addresses anaemia, problems such as lower motor scores, inattention, more grade repetition, anxiety, depression and social adjustment persist in adolescence (Walker et al., 2007, p. 148). In the psychosocial realm, citing long-term deficits associated with early institutional care that potentially impact over 2 million children living in non-parental group residence, Walker et al. (2011) emphasize the benefits of timely adoption before the second year of life.

Advances in developmental neuroscience corroborate the significance of early interventions, demonstrating the rapid and substantial pace of brain growth within the first three years as well as neuronal imprinting of early experiences which form the basis of life-long development (Shonkoff and Phillips, 2000). The plasticity of neuronal architecture is enhanced by the existence of sensitive periods when the brain is particularly susceptible to external influences. Not only are children vulnerable to disproportionate disadvantages during this period, they can also gain transformative benefits from responsive and stimulating care that meets their developmental needs and ameliorates adverse influences.

Sensitive periods are especially critical for children at risk of disabilities who need both the developmental care and support necessary to all as well as specific interventions to minimize the impact of disabling conditions. Deaf and hard of hearing infants reflect significantly better language development if their hearing loss is addressed before the age of 6 months (Yoshinaga-Itano et al., 1998). Children receiving cochlear implants before 24 months achieve language similar to their normal hearing peers (Yoshinaga-Itano et al., 2010). Those receiving cochlear implants after 7 years show poor outcomes compared to those fitted before 3.5 years, corresponding with sensitive periods in central auditory development (Sharma et al., 2005). Likewise, analyzing the interplay of genetic and environmental factors associated with autism, Dawson (2008) notes that interventions to enhance social engagement and reciprocity in parent-child interactions have the power to amend genetic expression, brain development and behavioural manifestations of autism, provided they are initiated well before the full expression of autistic symptoms.

Comprehensive early identification, assessment and intervention processes, collectively called Early Childhood Interventions (ECIs) not only have the potential to attenuate general developmental risks and minimize the impact of disabilities, but also enable children to thrive in inclusive settings. Approaches that are most successful adapt routine activities and environments to individualize support for infants and young children with disabilities in home and mainstream centre-based settings (Howard et al., 2004). For example, marking objects and areas by tactile patches helps visually impaired children to negotiate spaces, find familiar objects and gain feelings of competence and the confidence for independent exploration. Motor play differences between perceptually impaired infants and their peers are minimized when play environments are so adapted.

Although ECI systems are still evolving in developing countries and systematic evidence is hard to find (Engle et al., 2011), their effectiveness in reducing

disparities is well established. Across a range of disabilities, one in three children in the United States who receive ECI services before the age of 3 do not present later with a disability or require special education in pre-school (Hebbeler et al., 2007). Research from the United Kingdom of Great Britain and Northern Ireland (UK) shows that high quality pre-school settings that combine care and education enable children with a probability of developing special needs to move out of the 'at risk' status for cognitive measures (Taggart et al., 2006). Tracking children with mild developmental delays enrolled in full-inclusion pre-schools through first and second grades, Guralnick et al. (2008) conclude that early inclusion creates a momentum to build maximum participation in inclusive settings over time.

The paradox of disability rights and the reality

The proactive agenda of early childhood systems to nurture the potential of every child is complemented by the radical claim on the rights and capabilities of persons with disabilities advanced by the CRPD. Preceded by the Convention on the Rights of the Child (CRC) and its associated General Comment 7 (2005) and General Comment 9, (2006) focusing on early childhood and children with disabilities respectively, the CRPD posits no 'new' rights but marks a critical milestone by placing disability rights within the scope of human rights. It considers all persons with disabilities as 'subjects' actively commanding the right to a fulfilling life rather than 'objects' of services, treatments or charity. This presents a compelling vision of people with disabilities as competent, able individuals claiming their human rights, fundamental freedoms and dignity toward a fulfilling and meaningful life (United Nations, 2006). As Quinn (2009) points out, the critical value of the CRPD as a human rights instrument is that it makes the 'human being behind the disability visible, extending the benefits of the rule of law to all' (p. 248). With unprecedented participation of disabled people themselves in the drafting process, the CRPD is instructive as much in the process of its development, as in the specific content of its provisions (Lawson, 2009).

The 'personhood' of disabled individuals has far-reaching implications and the convention is explicit in its demands. It not only secures the inherent right to life, liberty, security, health, education and employment (articles 10, 14, 24, 25, 27) but also the right to live independently with full inclusion and participation in the community (article 19). It includes the right to marry

and found a family (article 23) as well as the right to vote and be elected (article 29). More significantly, it liberates people with disabilities from 'civil death' (IDC Madrid Resolution cited in Lawson, 2009) by investing them with legal capacity to independently manage their own lives including the right to inherit property, enter into contracts or access financial credit (article 12).

At first glance these provisions appear far-fetched given the reality of the lives of disabled people. The widespread incidence of neglect, concealment, abandonment, exclusion, discrimination and abuse inflicted on children with disabilities is undeniable. They are less likely to survive (United Nations, 2006), be registered at birth and have access to services that offer meaningful developmental support. Often they do not receive standard immunizations and basic 'well-child' care – even in countries that are otherwise well off (Ayora et al., 2007). Accounting for a third of children out of school worldwide, 90 per cent of children with disabilities do not attend school in developing countries (UNICEF, 2006) while those enrolled have lower attendance and transition rates to higher levels of education (World Bank, 2009). In some countries, they are systematically excluded from school data, reflecting shocking disregard for their right to be part of the education system (Lansdown, 2009, p. 44).

Lack of meaningful support at an early age has a significant impact on poverty in adulthood. It is hardly surprising then that adults with disabilities constitute 20 per cent of the world's poorest people with a global literacy rate of 3 per cent and an unemployment rate of 80 per cent (United Nations, 2006). The situation persists despite a huge cost to society. An estimate undertaken in Bangladesh of the cost of disability on account of income lost from lack of schooling and employment revealed a loss of GDP of 1.7 per cent, amounting to US\$ 1.2 billion annually (World Bank, 2008 cited in WHO, 2011).

Provisions that specifically address disabilities operate more as welfare than to provide equitable, meaningful opportunities for a fulfilling life (Inclusion International, 2009). In the worst cases they fail to challenge practices that are neglectful, insensitive and abusive with no regard for the human dignity of people with disabilities (UNICEF, 2005). For example, national legislations often provide for disability-specific institutions for children with disabilities. These segregated arrangements neither succeed in providing services at a viable scale, nor in meeting the developmental and educational needs of children who are differently able and offer few opportunities for social interaction with age-mates in regular mainstream settings (UNICEF, 2007). Of the estimated 1.6 million children with disabilities in Ethiopia, only 2.1 per cent are covered by special schools; reach is similarly limited in Nicaragua

(2.4 per cent) and El Salvador (less than 1 per cent) (Inclusion International, 2009).

It is indeed remarkable that exclusion on the basis of differences in human functioning continues to be tacitly condoned or explicitly justified as a considered and ‘appropriate’ strategy for addressing differences. Notably, even as segregation and discrimination on the basis of race, caste, ethnicity, age and gender have been challenged under human rights instruments, disabilities have largely remained within the purview of social policy. In what Quinn calls a ‘perversion’ of the true mission of social policy, ‘the default setting for considering disability has not generally been human rights...(but)... a mixture of charity, paternalism...(that serves to)...maintain people rather than to forge pathways into the mainstream’ (Quinn, 2009, p. 247).

Enhancing the capabilities of persons with disabilities

The radical contrast between the rights and reality of persons with disabilities makes it imperative for early childhood and disability rights to come together to bring about transformative change. Aspirations of the CRPD would remain notional unless profound ways to cherish human differences and foster capabilities of every human being were adopted. Equally, the vision of a disabled person with ‘full legal personhood’ not only challenges conventional notions of capability and capacity associated with disabilities but also gives added significance to early interventions that nurture the potential, dignity and self-worth of every child towards the full range of human endeavours, thereby laying the foundations for an inclusive society.

This imperative becomes clear if we track changes that have emerged in conceptualization of disabilities. To begin with, the much-celebrated shift from looking at disability as a problem within an individual (medical approach) to the focus on barriers in social systems that make individual differences problematic (social approach) has been liberating (Officer and Groce, 2009). However, the shift from ‘individual/medical’ to ‘social’ culpability for the discriminatory treatment of persons with disabilities has not been enough to replace constructs of individual deficit with notions of ability, self-determination and choice. Narrow impairment-based systems

force-fit a diverse range of disability issues into normalizing binaries of 'being disabled or not', and continue to predetermine life-goals irrespective of individual potential and aspirations.

Dubois and Trani (2009) look towards Sen's Capability paradigm and find an enabling framework to counter such attitudes and systems. Sen conceptualizes disabilities in terms of constraints a person encounters in the 'substantive freedoms he or she enjoys to lead the kind of life he or she has reason to value' (Sen, 1999, p. 87). He proposes the notion of 'capabilities' as freedoms that are required to fulfil the chosen aspirations. Notably, systems for identifying disabilities such as the International Classification of Functioning are giving way to approaches which map thresholds of disabilities along a continuum of human experience based on levels of activity and participation, determined by individual, societal and institutional factors. Highlighting the socio-political context within which people determine their 'actual' and 'possible' choices, Dubois and Trani look to human rights to expand the freedoms a person with disabilities has to determine priorities and the means of achieving them.

The paradigm shift afforded by the 'capabilities' approach is more likely to build social systems that nurture the aspirations, initiative and volition of the individual. By accounting for people's needs as well as values and choices it not only advances the notion of trust in the capacity of persons with disabilities to consider options and make choices but also overcomes the lack of agency implicit in critiques of disabling social barriers. It also lends support to the notion of 'evolving capacities' which underpins children's right to participation, progressively strengthening their capability to make meaningful contributions in the process (Lansdown, 2005).

Comprehensive, appropriately designed and inclusive early childhood systems resonate well with the 'capabilities' approach. They conceptualize all children as active and capable beings, proactively constructing their understanding of the world from the earliest stages of life (Sameroff, 2009). In doing so they not only overcome preordained trajectories of development imposed by disability-based interventions but also offer the advantage of pre-emptive action to minimize risks and disabling conditions and enable timely developmental support to pursue the open ended, generative agenda of aspirations envisaged by the CRPD.

Embracing diversity: need for a systems framework for inclusive ECCE

Comprehensive ECI systems need an inclusive developmental framework that can be applied to children developing typically as well as those at risk of developing delays and disabilities. In pursuit of such a unifying framework Guralnick (2006) draws attention to influences that operate at three levels in child development: (a) child as a goal-directed, interactive learner with emerging social and cognitive competence; (b) family patterns of interaction that govern environmental influences on children's development and are in turn influenced by the child and his/her emerging competencies, and (c) resources available to families to access goods and services to support the child. He argues that reciprocal patterns of influence between these three levels generate the risk and protective factors that ultimately determine the social and intellectual competence of young children.

Guralnick further uses systems thinking to integrate the science of normative development, research on risks and disabilities and intervention science to propose a Developmental Systems Approach (DSA) for early intervention applicable across the diversity of children and their families. He observes that children with disabilities benefit from the same family patterns of interaction, characterized by sensitive responsive care and a linguistically rich environment. Stressors on family patterns of interactions that disrupt such care can place a child at risk for developmental delays; conversely children at biological risk for developmental problems can lead to stressors on family patterns of interaction. Typically these stressors arise from needs for information and additional resources, interpersonal family stress and the lack of confidence parents face when caring for a child at biological risk or with established disabilities. However, by the logic of interactivity, stressors created at any level can be mitigated by corresponding adjustments at other levels to achieve optimal outcomes. While families use a range of approaches to ensure optimal developmental outcomes for their children, influencing family patterns of interaction can be a powerful intervention when outcomes are not on track.

Consolidating a vast body of research, Guralnick (2011) cites considerable evidence to suggest causal relationships between child outcomes, family resources and optimal patterns of family interactions. While noting the paucity of data that fully explore these mechanisms for children with biological risks and established disabilities, he maintains that these mechanisms apply

equally to children who are vulnerable and at risk. Accordingly, he concludes that early intervention can be expected to work for all vulnerable children as long as the 'program is able to establish or restore as optimal level of family patterns of interactions as possible' (Guralnick, 2011, p. 19).

Although the DSA model had largely been developed on the basis of experiences and empirical data from the developed country context, it can serve as a framework to seek common principles and guidelines that would strengthen ECI systems in other countries and contexts. Intervention studies show that mediation of adverse effects of disabilities is only successful 'if they are compatible with a family's culture, values and priorities, particularly as they are realized through their own family structure and family routines' (Guralnick, 2006, p. 56). Accordingly the DSA draws upon key principles of ECI (see box below) to suggest an agenda for systems development bearing in mind the diversity of disabilities children and families deal with as well as the diversity of culture, political systems, availability of resources and societal commitment to young children.

Common ground principles of early childhood intervention systems

Principle 1: A developmental framework informs all components of the Early Intervention System (EIS) and centres on families

Principle 2: Integration and coordination at all levels of the EIS are essential

Principle 3: The inclusion and participation of children and families in typical community programs and activities are maximized

Principle 4: Early detection and identification procedures are in place

Principle 5: Surveillance and monitoring are an integral part of the system

Principle 6: All parts of the system are individualized

Principle 7: A strong evaluation and feedback process is evident

Principle 8: True partnerships with families cannot occur without sensitivity to cultural differences and an understanding of their developmental implications

Principle 9: Recommendations to families and practices must be evidence based

Principle 10: A systems perspective is maintained, recognizing interrelationships among all components

Based on 'International Perspectives on Early Intervention A search for common ground'

Source: Michael J. Guralnick, Journal of Early Intervention, *International Perspectives on Early Intervention: A Search of Common Ground* (Volume 30, Issue 2) p. 12 © 2008 by SAGE Publications. Reprinted by Permission of SAGE Publications.

Towards human rights-based systems of inclusive ECCE

In light of the above review it is encouraging to note that there is a growing pool of ECI services globally. Australia, Germany, the Republic of Korea, Sweden, Taiwan of China and the United States of America offer diverse illustrations of elaborate ECI systems that rely on professionals who work in trans-disciplinary teams with families, to provide individualized, support to young children with disabilities (Odom et al., 2003; Ho, 2010). Moving away from long traditions of segregated provision, Belarus is connecting professionals across sectors to support children and families with regular assessments, child and family development plans, careful tracking and follow-up (Vargas-Barón et al., 2009). More modestly resourced countries rely on trained paraprofessionals such as Community Rehabilitation Workers in Ethiopia who connect communities in remote rural areas and urban slums with services that can support children and families (Odom et al., 2003).

ECI models, methods and tools have been adapted across countries and cultures with a reasonably high level of reliability and validity (e.g. Kapci et al., 2010; Fernald et al., 2009; Malhi and Singhi, 1999). In Viet Nam, the national teacher training system incorporates approaches to include children with intellectual difficulties in kindergartens (Hodes, 2007). In Jamaica, the Portage model of home-based intervention has been adapted to train women from the community, including parents of children with disabilities who work with other mothers to design home-based activities and materials (Odom et al., 2003).

‘Parental concern’ has been found to be effective in identifying developmental delay (Glascoe, 2000) and caregiver-administered developmental scales are beginning to emerge (Chistovich, 2008). The Seti Center in Egypt engages parents as key partners and demonstrates effective ways of undertaking joint assessments and goal setting, providing accessible information, developing clear objectives and offering practical demonstrations of ways to support the child (Odom et al., 2003). The Mediation Intervention for Sensitizing Caregivers (MISC) model used to engage parents in play-based learning activities with children in Israel has also been applied in Belgium, Ethiopia, Holland, Indonesia, Sweden and Sri Lanka (Odom et al., 2003).

Despite the above gains few countries offer the full range of comprehensive, linked services from birth to early primary education for infants and young

children who are at risk of developmental delays or disabilities (Alur, 2003; Elewekke and Rodda, 2002). Limited investment in systemic capacity to implement screening, surveillance and support systems at scale constrains progress (Engle et al., 2011; Hodes, 2007).

In looking for reasons that dilute the effectiveness of the 'rights' discourse in enhancing investments in ECCE, it is useful to reflect on the distinction analysts make between the 'development agenda', advanced through public policies and programmes and the 'human rights' agenda, a subject of judicial edicts and regulation. Within human rights too there is a long-held dichotomy between 'civil and political rights' – those that are immediately realizable; and 'economic, social and cultural rights' – those considered amenable to 'progressive realization' giving scope to state parties to determine the scale and pace of investment on social issues based on their ability to garner the required resources. While some experts maintain that political and civil rights pave the way for economic and social rights in reform processes (Kauffman, 2004), others suggest that social and economic rights are better addressed through democratic debate and choice rather than judicial processes (Neier, 2006). Either way, largely aligned with social, economic and cultural imperatives, early childhood interventions remain on lower priority in public policy and provision.

The CRPD offers two specific provisions that can be used to advance advocacy for investments in enhancing access to inclusive ECCE. First, it positions economic, social and cultural rights as necessary components of anti-discrimination provision to make civil and political rights meaningful. It asserts that people with disabilities often need developmental and educational support to claim their civil and political space. In Quinn's words, 'positive acts of social solidarity are often required to underpin freedom...' and economic, social and cultural rights are required to ... set the terms of access, entry and participation in the mainstream' (Quinn, 2009, p. 250). While there have been other calls urging the convergence of development and human rights approaches (Alston and Robinson, 2012), this assertion directly reinforces the responsibility of state parties to meet their core obligations towards the rights of persons with disabilities. Thus, lending urgency to the entitlements due to young children with disabilities as holders of human rights, the CRPD strengthens state accountability to use 'progressive realization' to demonstrate decisive action rather than inactivity on the plea of limited resources.

Secondly, the CRPD calls for development of inclusive systems based on principles of 'universal design' and 'reasonable accommodations' in the

design and function of products, environments, programmes and services. The principle of 'universal design' proactively takes potential diversity into account so that it is suitable for all people to the greatest extent possible. It is complemented by the principle of 'reasonable accommodations' which refer to the required individual modifications and adjustments to '...ensure that persons with disabilities can enjoy their rights on an equal basis with others' (CRPD, article 2). This not only guarantees that persons with disabilities are not excluded, but also ensures that they have the required support to enhance their capabilities and overcome barriers denying them access to such opportunities. Indeed the CRPD goes so far as to consider the denial of reasonable accommodations as a form of discrimination.

The principles of Universal Design and Reasonable Accommodations offer a 'twin-track' framework to conceptualize inclusive ECCE systems based on the acceptance of human diversity as the norm. For example, emphasizing the critical role of early interventions in reducing the incidence, severity and secondary complications of disabling conditions Simeonsson (2003) prioritizes interventions at three levels in terms of their breadth versus intensity of effort. Interventions applied 'universally' (e.g. immunization) cover the whole population while 'selected' targeting is warranted where increased risk may be associated with a group identity (e.g. early learning facilities for families participating in deinstitutionalization initiatives). Within specific populations these would be high prevalence needs to be addressed through provision that is not only universally targeted but also designed to be universally accessible. At the third level, provision is individualized (e.g. babies reflecting early markers of autism or infants diagnosed with hearing loss) and must be addressed under the provision of reasonable accommodations. Following the CRPD, all three levels of interventions must be offered within the scope of mainstream policies, laws, programmes and financing arrangements.

In conclusion, failure to support development during the first few years of life places a lasting burden of disadvantage on the child resigning him/her to a lifetime of sub-optimal outcomes, perpetuates disabling conditions and condemns societies to persistent and intergenerational transmission of poverty. On the other hand, a rights-based ECCE agenda respectful of diversity benefits all children and builds the capabilities of people with disabilities to uphold their dignity, assert their basic freedoms and claim protection from discrimination and abuse. Families, communities, civil society, private entities and government must hold themselves to account on their obligations to all young children. Inclusive ECCE cannot just remain a matter of political will – it must become a matter of political choice.

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Part 3

Ensuring quality ECCE
through contextually
relevant provisions

Chapter 8

Parenting education and support: maximizing the most critical enabling environment

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Introduction

Parenting approaches, philosophies and cultural constructions abound, but there is one tenet that is universal: a primary function of parenting is to facilitate the survival, development and well-being of the child. However, this function may not always be carried out in full (due to any number of individual and/or contextual factors), disrupting the mechanism by which positive parenting promotes children's ability to achieve their full potential. Focusing on parenting in the context of early childhood care and education (ECCE), this chapter seeks to examine why it is important and how positive parenting can be supported through programmes and policies to attain the best possible outcomes for young children and their families.

Some core concepts embedded in parenting of young children are defined. Evidence and global trends in parenting patterns are presented, taking into consideration cultural, geographic and socio-economic influences. This is followed by an overview of the landscape of programmatic models for parenting education and support – including adult literacy – that are being implemented in low- and middle-income countries (LMIC) and the impact these programmes have on parenting and child outcomes. Finally, the chapter highlights programmatic and policy challenges to implementing parenting programmes and makes recommendations for practice, policy and research.

What is parenting?

Parenting is a universal characteristic of primates and a critical function linked to the evolution of our species and the psychosocial manifestation of the intergenerational transmission of culture, values and traditions. It encompasses a range of behaviours, values, emotions, attitudes and knowledge associated with the interactions and relationships between adults and children. However, global demographic shifts towards urbanization, economic trends into a post-industrial era, and an increase in areas made fragile by exposure to disease, conflict and emergencies, have led to dramatic changes in the family structure and the conceptualization of parenting. In this chapter, parents are defined not only by their familial relationship but also by their functional relationship with the child including biological and non-biological caregivers such as grandparents, extended family and kinship.

Parenting can be understood as child-focused interactions, behaviours, emotions, knowledge, attitudes, beliefs and practices associated with child health, development, learning, protection and well-being (Yale-AÇEV, 2012). While mainly developed from conceptual models of parenting emanating from the United States and Europe, parenting models from other parts of the world are increasing (Britto et al., 2013). The US-based models identify five domains of parenting: caregiving, stimulation, support and responsiveness, structure, and socialization (Bradley, 2004), however contextual differences may influence the expression of these categories as is described in the section on influences below.

Caregiving includes health, hygiene and nutrition-related practices, knowledge and attitudes, such as bathing, breastfeeding, and handwashing (Richter, 2004).

Stimulation practices, which were developed based on brain development literature, are derived from the function of stimulating neurons (Shonkoff and Phillips, 2000). Examples include language interactions (e.g. singing, talking, reading); provision of learning materials and exposure to learning opportunities (e.g. books, magazines), physical interactions (e.g. sports, playing games) and parents' behaviour, which serves as a model for children to imitate and emulate (Britto et al., 2002).

Support and responsiveness, with a foundation in early bonding, are expressed through social and emotional relationships, building trust and attachment and behavioural interactions such as hugging, holding and loving physical contact (Bowlby, 1988). Responsive parenting includes prompt response to a child's behaviour that is appropriate to its needs and developmental phase (Eshel et al., 2006). Responsive feeding practices have been positively associated with young children's nutrition status (Yousafzi et al., 2013).

Structure is associated with discipline, supervision and protection of the child from harm, abuse and neglect (Baumrind, 1996). These parenting interactions are expressed through positive disciplinary practices and a safe, secure and consistent environment.

Socialization relates to parenting that promotes the development of values, attitudes towards life, and identity; it is often an expression of cultural, social and religious morals and expectations (Rogoff, 2003).

Although these domains can be conceptualized individually, they are interdependent. Responsive feeding practices involve both caregiving and

support while shared book reading includes both stimulation and responsiveness (Britto et al., 2006). In addition, there is not a one-to-one correspondence between a parenting domain and a child outcome domain. For example, when parents exhibit responsiveness such as hugging and cuddling, they influence their children's emotional well-being, foster their development of relationships and shape their biological systems, including nervous and immune system functioning (McCartney and Phillips, 2006). These links underscore the importance not just of parenting, but of holistic, committed parenting.

An important distinction is that these domains address direct (i.e. the parent-child relationship) and indirect parenting (i.e. relationships between the parent and other key members of the family and/or community). The manner in which the parent conducts these relationships – modelling behaviours, attitudes and values – has a strong influence on the child's developmental trajectory (Garcia and Garcia, 2012; Pruett, 2000). For example, exposure to violence, in the home and community can thwart children's development (Landers et al., 2013). This chapter focuses on direct parenting which tends to command more policy and programmatic efforts.

Why is parenting important?

Optimal development in early childhood is dependent on parents (or their substitutes), meeting the child's holistic developmental needs (Bornstein et al., 2012). Parents create the contexts within which children grow, develop, learn and thrive (Bakermans-Kranenburg and van Ijzendoorn, 2010). From the prenatal period through the first few years of life, children are completely dependent on their parents for basic survival and development (McCartney and Phillips, 2006). Parents are also critical during children's transition to primary school, the quality of which is predictive of later academic achievement and success (Britto, 2012). Therefore, the rapid strides made by young children across all domains of development and learning are fostered and supported through parents' practices, attitudes, knowledge and resources. The multi-disciplinary and international literature on parenting clearly indicates that parents are one of the most influential factors in children's development (Bornstein, 2002; Bradley and Corwyn, 2005; Rogoff, 2003; Whiting and Edwards, 1998).

In addition to the role of parents in normative contexts, positive parenting mitigates the impact of risk factors such as poverty, violence, and disease (Engle et al., 2011). Enriched home environments and supportive and

stimulating parenting in income-poor families can improve children's outcomes to equal those from more economically advantaged families. Positive parenting can also buffer both the toxic effects of violence and conflict on early development and the burden of chronic disease on children's health. In contexts where risk factors for hindered development are present, positive parenting can protect and promote children's well-being (Alderman and King, 2006; Walker et al., 2011).

Global trends and influences in parenting of young children

As already indicated, research on parenting during early childhood is dominated by data from high-income countries. However, given that parenting is strongly influenced by context, generalizations of parenting patterns from one region to the world are not globally informative. In this section, we use trends from the latest data on parenting of young children from the Multiple Indicator Cluster Survey – 3 (MICS3) by UNICEF to address individual and contextual influences on parenting in LMIC, both to better understand the patterns and to inform interventions (Bornstein et al., 2012).

The caregiving domain of parenting which includes areas of health, hygiene and feeding is important as it has direct links to a range of child outcomes (Bartlett, 2005; Bhutta et al., 2008). But documented caregiving trends are alarming. For example, only 25 per cent of surveyed mothers with infants less than 6 months of age reported exclusive breastfeeding the previous day, with the upper limit at 57 per cent. This means that, at best, just over half of children in this age range were breastfed (Arabi et al., 2012). Similarly, the examination of disease prevention indicates that only 35 per cent of mothers reported an increase in fluid intake (range 2 to 59 per cent) and Oral Rehydration Solution (45 per cent) when the child had diarrhoea.

The stimulation domain includes practices that encourage and foster children's learning (Custodero et al., 2003; Hart and Risely, 1995; Tamis-LeMonda et al., 2002). The MICS3 results indicate that in the three days prior to the survey, on average, only one quarter of mothers read to their child, slightly over a third told stories and close to half (47 per cent) engaged in counting, naming and other learning activities with their child (Bornstein and Putnick, 2012). However, mothers reported higher incidences of singing (50 per cent) and playing (64 per cent) with their children during this time.

It should be noted that, across countries and income levels, fathers report engaging in less than a third of the number of activities in which mothers engage. Moreover, fathers are more likely to engage with their sons than with their daughters (Engle et al., 2013). The survey results also indicated a wide range of exposure to print; one of the strongest predictors of literacy and a key aspect of the stimulation domain of parenting. For example, the availability of ten books in the home ranged from 2 to 59 per cent.

With respect to responsiveness and structure domains, 66 per cent of caregivers reported that, in the month prior to the survey, their child had experienced psychological aggression; 63 per cent reported their child experienced mild physical discipline, while 16 per cent reported an experience of severe physical discipline. Only 18 per cent of caregivers reported that no one in the household had used a violent form of discipline in the previous month (Lansford and Deater-Deckard, 2012). These rates of physical discipline support global findings on violence against children in the home (Pinheiro, 2006). Twenty one per cent of mothers reported that they had left their child unattended in the past week, with a notable variation noted across countries (Bradley and Putnick, 2012).

These results suggest that in between a quarter and a third of families, children do not experience the central domains of parenting. Although there was a wide range in reporting, the upper limit for most indicators was approximately half the population. So even by the most liberal estimates, only half of parents engage in parenting behaviours that are considered positive and beneficial (Britto and Ulkuer, 2012).

Influences on parenting

Individual influences can be understood both at the parent and the child level. Parent-level influences are primarily biological and psychosocial characteristics, including depression, substance abuse, and specific disabilities. In particular, the negative impact of maternal depression on young children's outcomes, across high and LMICs has been documented. However, contextual factors implicated in maternal depression in high-income countries differ from LMICs, where contexts are marked by a high degree of stress. Child-level factors that influence parenting interactions include children's traits, temperament, personality, gender and conditions such as disability. There is also a range of bio-ecological influences, such as chronic disease (e.g. repeated malaria), environmental stress, and exposure

to toxins that may have an impact on parenting abilities and competencies (Wachs and Rahman, 2013).

With respect to contextual influences on parenting, the influence of income or poverty is the most studied. Household income is strongly associated with availability of resources in the home. For example, reported availability of children's books across the 28 countries surveyed indicates that poorer families have fewer books for their children than families in richer income quintiles. Also, the poorest children under age 5 are at a greatest risk of being left alone or having inadequate care (e.g. being supervised by a child under age 10), which compromises their development and increases their exposure to risk (UNICEF, 2012). Living in a poorly constructed home with inadequate access to clean water and toilet facilities is a risk factor for child protection and is more common in countries with a lower Human Development Index (Bradley and Putnick, 2012).

A second notable area of contextual factors is cultural influences, including traditions of values and intergenerational patterns of parenting. Attitudes and beliefs about parenting, children and parent-child relationships are often highly culturally informed. For example, Lansford and colleagues (2012), through their work across 28 countries, revealed that nearly a third of mothers studied believe that physical punishment is a necessary part of child rearing, suggesting that the practice of harsh discipline may be culturally rooted. Similarly, the use of language (i.e. mono- versus bilingual interactions) is strongly influenced by cultural beliefs and attitudes (Suarez-Orozco et al., 2008). Parents' expectations about what is developmentally appropriate for their child at a particular age are also greatly influenced by local customs, culture, and national norms (Britto and Kagan, 2010; Harkness et al., 2013). Recent cultural influences on parenting include media, social networks and the use of mobile technologies.

The importance of parenting cannot be overstated, yet global patterns indicate that over half of young children may not experience positive parenting within the identified critical domains. Further research and systematic examination is required to understand not only why parents do not engage or are unable to engage in fulfilling their parenting responsibility, but also to explore the motivators and facilitators which would enable them to engage in parenting education and support programmes. If interventions are targeted to address individual and contextual influences the programmes may mitigate some of the impact of poor or inadequate parenting and could even improve parenting practices.

What is parenting education and support?

Parenting support has always existed (e.g. through informal kinship and family networks), but formal recognition of the need to support parents was established through the International Year of the Family in 1994 (UNESCO, 1995). In understanding the history of parenting programmes, it is necessary to highlight two global shifts. The first relates to significant changes in family structure, where extended, tribal or community family models have given way to more nuclear – and, in some societies, absent-parent – family models (e.g. due to conflict, disease and natural disasters). The second shift involves demands on families due to societal changes in areas including employment, inequity in incomes, exposure to disease and modern influences such as drug use, technology and urbanization. These changes have made clear the need for support for parents or their surrogates. As traditional structures dissipate and new parenting challenges arise, concerted efforts are required to assist parents in fulfilling their role.

There are two broad categories of parenting programmes. *Parent education and support programmes* not only include services that help parents in their role but may also include information on other aspects (e.g. job training or adult literacy). *Parenting support programmes* are those that are focused primarily on parenting. These two types are differentiated because of their implications for policy and establishing appropriate entry points for service provision. For example, social protection, health care and cash transfer programmes could provide an entry point for parent education and support programmes. As addressed in the last sections of this chapter, early childhood nutrition interventions may provide an entry point for parenting support programmes.

Landscape of parenting programmes

The landscape of parenting programmes is quite complex and can be differentiated on several dimensions that have been associated with child outcomes. The variety and complexity of these services and challenges in the identification of effective parenting models are highlighted below.

Some programmes are intended to improve parents' knowledge and practices related to caregiving, nutrition and child health (Aboud and Akhter, 2011), while others focus on early education and learning (Kagıtçibasi et al., 2001). There are also programmes centred around the reduction of harsh parenting and violence at home (Al-Hassan and Lansford, 2011), and a range of programmes that have more comprehensive or integrated designs, for

example, the Integrated Management of Childhood Illness (IMCI) – Care for Development (WHO, 2012). There is also a set of programmes in which parenting, although addressed, is not the primary focus (e.g. social protection cash transfer programmes or adult literacy programmes).

Programmes can also be differentiated by the number of generations who are the target beneficiaries. Single-generation programmes are designed to directly serve mothers (e.g. breastfeeding programmes) and/or fathers (Cowan et al., 2007), while multi-generational programmes either serve the parent and the child or the entire family (Wasik, 2012).

Programmes may also differ in their targeted stage of development. Some focus on parents with children from birth to 3 years old (Hamadani et al., 2006), but others are designed for parents with children from 3 upwards (e.g. Johnson et al., 2012). Typically, programmes that focus on the younger age group have a health, nutrition and/or stimulation focus and those for older children have a social, learning and education focus.

Programmes also differ based on setting. Some are home-based (Mother Child Education Foundation, 2012), some clinic-based (Needleman, 1991), and others community-based (Thompson and Harutyunyan, 2009).

The type of service provider involved in a programme is also a differentiating dimension. Professional service providers include nurses and trained parent educators (Olds, 2011). However, given issues of low technical capacity and limited resources, most programmes use paraprofessionals or community workers (Daro and Dodge, 2010). Depending on the type of programme, the credentials and training of the service provider and supervision practices are critical to improving its quality.

Another differentiating dimension is the manner in which services are delivered. Some parenting programmes involve a one-to-one teaching or counselling model (Powell, 2004), while others use a group discussion format (Koçak, 2004). They may use one or multiple delivery mechanisms. For example, a very common combination is home-based services and media in the form of posters and brochures or radio announcements (Britto et al., 2007).

Programmes can also be differentiated by the degree of standardization within their curriculum. Some follow a very structured curriculum with weekly lessons plans and a detailed script for the service providers, while others are less formal with topics generated based on participant needs and interests.

Finally, programmes can be distinguished from one another based on the critical dimension of ‘dose’ which includes the length of the programme from inception to culmination, the periodicity (e.g. daily or weekly) and the length of each session. Programme dosage is important for understanding effectiveness and resource requirements. Also, it has been noted that as programmes get scaled up the dosage is often altered.

This complex landscape of parenting programmes is represented across programmatic models as either single site or demonstration interventions or national programmes supported by specific sectors, such as health, education, women’s affairs or welfare.

Summary of findings from parenting programmes

As illustrated above, programmes employ multiple dimensions and often combine them in unique ways. Additionally, the intended and measured outcomes also vary. For example, the stated purpose of a programme could be child cognitive development, but evaluations of the programme may also measure physical and social outcomes. Furthermore, outcomes are not always measured using the same instruments across programme evaluations. Consequently, creating succinct and comparable summaries of results from a review of parenting interventions is difficult.

Findings from a recently published review of eleven effectiveness trials and four scaled-up parenting programmes reflect a range in delivery settings, generation of target beneficiaries, curricula and key messages, as described earlier (Engle et al., 2011). All programmes report substantial positive outcomes for children (e.g. cognitive, social and emotional development) and two of the programmes report significant improvements in adult parenting knowledge and the home environment. There are also some interesting patterns to the results that have important implications for future programme design. First, the findings suggest that programmes that employ more than one delivery mechanism are more effective than those that rely on a single mechanism, and programmes that address the parent and child (i.e. two-generation programmes) are more effective than those that only focus on the parent. The effects of the evaluated programmes were also stronger among younger children; this result demonstrates support for the hypothesis that earlier intervention yields better outcomes. Also, results were stronger for poorer children when compared with their wealthier peers; this finding validates previous work on programme impact and disadvantage.

Finally, some interventions improve parenting practices even when their primary focus is not parenting. For instance, social protection conditional cash transfer programmes that combine cash and parenting services have demonstrable impact on parenting knowledge and practice (Berhman and Hoddinott, 2005; Macours et al., 2012). These evaluations, predominantly from Latin America, are important because they address parenting directly through support and education but also indirectly by altering a family's poverty status – a contextual influence on parenting. Adult and family literacy programmes have also demonstrated a positive impact on parent and child outcomes (Padak and Rasinski, 2003). These results are not unexpected given the established link between maternal education and child health and development outcomes.

In summary, parenting programmes exist within a complex landscape and represent a myriad of designs, making it difficult to isolate and compare effective mechanisms. In addition, the strong influence of context is important in the interpretation of results. In general, these programmes have been effective in improving parenting practices, knowledge and attitudes and in supporting children's positive health, growth, development, learning and protection.

Parenting programmes: the next generation

The final section of this chapter illustrates how the evidence can be translated to effectively inform parent education and support and parenting support programmes.

Specification of effective delivery mechanisms that can be scaled up

Most effective programmes are smaller scale demonstration studies. For example, in Engle (2011), of the 15 eligible evaluations, only 4 were scaled up programmes. This situation is indicative of an immense set of programmatic challenges. First, the appropriate 'dose' of a programme has not been established. The field is still in the process of estimating 'how much' of a programme families need in order to achieve desired outcomes. A linked aspect is the timing of the programme with respect to the developmental phase of the child. For example, programmes focusing on early attachment

are important in the first few months of life and those focused on school transition in the year prior to entry into primary school. There is also a need to determine mechanisms that are effective at achieving diverse types of programmes and outcomes e.g. are home-based individual programmes better than group-based programmes to achieve lowered violence against children? Third, the characteristics, skills and training of effective service providers are still to be determined. Therefore, while we do have a growing number of effectiveness trials, further investigation is required to determine programme delivery mechanisms that can be implemented at scale.

Identification of appropriate entry points

Reviews of parenting programmes indicate that they are supported and implemented under the auspices of government, non-government, and inter-government private for profit sector. In addition, some programmes are supported by the health sector, others by education and still others by women's affairs. This issue of multiple sector involvement is expected given that parents are the main pathway to reach children. However, this multisectoral approach is also a challenge because very seldom is the programme implementation coordinated across sectors leading to fragmented efforts and limited impact. A central challenge has been the identification of appropriate entry points to introduce parenting programmes with the intention of providing services to families in a coordinated manner. Future work has to focus its attention on the identification of entry points that allow for coordinated approaches.

Broadening the focus to include families

It has been speculated that 'parenting' is an academic term to represent the reality, which is 'families'. The suggested shift in approach from parenting to family might be useful in increasing the impact of the interventions. This recommendation stems not only from the shifting definition of who is a parent because of health, demographic and economic changes in society, but also the recognition that the immediate context of a young child consists of several key individuals who constitute a family. Also, 'family' as an institution is recognized across sectors, and, particularly in times of conflict and disaster, is often the only institution that is able to support the child. UNESCO's report contained an important set of approaches that resonate even today, for example with respect to the Millennium Development Goals (Roynance, 2012). The shift will allow for multiple sectors to provide a coordinated focus on the institution

of 'family' in a cohesive manner. Family intervention programmes, although primarily from high-income countries, have been very effective in improving well-being in a service and cost-effective manner (Wasik, 2012).

Recognizing the role of policy for programmes

It has been noted that the quality of parenting is a result of the social context in which families reside and one of the most influential, albeit often indirect, influences is policy. Social and family policies have a very strong role in determining parenting practices and family functioning, for example, labour policies, family leave, maternity and paternity policies (Kammerman, et al., 2003). Currently, in LMICs there are a very limited number of policies that explicitly accord attention to parents and families and provide for supportive services. Policies are required that allow for the lowest level of government to be able to make decisions about the type of programmes required for families in a community with governmental financial support. While decentralization of these policies is key, a recognition of the basic evidence-based approaches needs to be included. These policies need to also address elements of 'care', from the broad definition of 'ECCE' and issues that are important to parents, with respect to family values, language and positive cultural practices. Such statements may take a while to become part of the policy landscape as, in the field of parenting, we have yet to establish ways to understand parental demand for services and motivation to engage in programmes.

Conclusion

The promise of parenting programmes and family capital for ECCE has yet to be realized. The evidentiary foundation is getting stronger and larger as is the recognition that in most parts of the world parenting is far from meeting desired expectations. Therefore, efforts are required at multiple levels to address this issue. Scaling-up of services into systems is one recommended pathway. Others include understanding parenting motivation to participate in such programmes and conceptualizing programmes more broadly to include families.

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Chapter 9

Child health and nutrition in Africa: issues and challenges in the context of early childhood development

Mohamadou Guélaye Sall

Introduction

Early childhood is a crucial period characterized by rapid physical and psychomotor development. There is a threefold increase in birth weight by the age of 12 months, and head circumference increases by 10 centimetres in the same period in association with the brain's rapid development. Because it is a critical period of development, inadequate health care, poor nutrition and neglect can cause serious harm, with damaging, irreparable and sometimes fatal consequences (UNESCO, 2011).

The right to health and a nutritious and sufficient diet are internationally recognized fundamental human rights protected by international treaties and conventions on the right to life, as well as in charters, strategies and declarations. Millennium Development Goals (MDGs) 1, 4, 5 and 6 highlight, respectively, how poverty, hunger, child mortality, maternal health, the eradication of HIV/AIDS, malaria, tuberculosis and other diseases are of particular significance in the context of child health.

Despite these commitments and ideals, however, the reality is that high mortality among young children, particularly in Africa, continues to be a cause for concern. Children born in developed countries such as Sweden have a less than 1 per cent risk of dying before the age of 1 year, whereas for children born in developing countries, the risk is closer to 10 per cent or higher. Within developing countries, there are significant disparities between rich and poor and urban and rural areas (UNICEF, 2008).

This chapter aims to provide an overview of the health and nutrition of young children in Africa, to review the most relevant interventions which may guarantee optimal child nutrition and health, and to highlight some of the promising practices which, were they more widespread, could make a significant contribution to supporting the development of healthy and productive human resources.

Extent and gravity of child health and nutrition in Africa

Worldwide, substantial progress has been made in the effort to reduce child mortality. The number of under-5 deaths in the world has declined from nearly 12 million in 1990 to 6.9 million in 2011; and the global under-five mortality rate has dropped 41 per cent since 1990 – from 87 deaths per 1,000 live births in 1990 to 51 in 2011 (UN Inter-agency Group for Child Mortality Estimation, 2012). The leading causes of death among children under age 5 are pneumonia (18 per cent), preterm birth complications (14 per cent), diarrhoea (11 per cent), complications during birth (9 per cent), and malaria (7 per cent). Globally, more than one third of under-5 deaths are attributable to undernutrition (UN Inter-agency Group for Child Mortality Estimation, 2012).

In Africa, some progress has also been registered over the decades. Compared to other regions, sub-Saharan Africa has experienced a faster rate of reduction in under-5 deaths, with the annual rate of decline doubling between 1990-2000 and 2000-2011 (UNICEF, 2012). However, child mortality figures in sub-Saharan Africa are still sobering. The region alone accounts for 3,370,000 deaths of children under 5 in 2011 (WHO, 2012) which corresponds to 9,000 children dying every day, and six children dying every minute. Out of 3 million neonatal deaths worldwide, approximately 1.1 million are found in sub-Saharan Africa (WHO, 2012). The highest rates of child mortality are in sub-Saharan Africa, where 1 in 9 children dies before age 5; and 1 in 16 children in Southern Asia (UN Inter-agency Group for Child Mortality Estimation, 2012).

Deficiency in essential nutrients and micronutrients

Given that vitamin A is critical for proper functioning of the visual system and for maintaining immune defences, its deficiency remains a public health issue. An estimated 250,000 to 500,000 children deficient in vitamin A become blind every year, half of them dying within 12 months of losing their sight. This deficiency accounts for 350 million cases of blindness and 670,000 deaths globally (WHO, 2001). In Africa alone, it contributes to 23 per cent of child deaths. In 2009, the prevalence of low serum retinol, associated with vitamin A deficiency, was 37.7 per cent in Ethiopia, 49 per cent in the Congo, and 42 per cent in Madagascar. The immediate causes of this deficiency are

the low rates of consumption of animal products, the poor bioavailability of vitamin A in cereal-based diets, the consumption of green leaves with low lipid content, and an increased bodily demand for vitamin A owing to the infections that frequently affect African children (Manga, 2011).

There are equally disturbing levels of zinc deficiencies and this has seriously adverse effects on growth, the risk and severity of infections, as well as the level of immune function. Although the actual prevalence is unclear, zinc deficiency is recognized as one of the main risk factors for morbidity and mortality. It contributes to over 450,000 deaths per year among children under 5 years (Robert et al., 2012), particularly in sub-Saharan Africa. It affected 57 per cent of children under 5 in Senegal, 72 per cent in Burkina Faso, and 41.5 per cent in Nigeria in 2004 (Beye, 2011). The main causes of this deficiency in children are a lack of zinc-rich easily absorbed foodstuffs (such as meat, poultry, seafood) and the over-consumption of foodstuffs that inhibit zinc absorption, such as cereals, roots and tubers, which are among Africa's staples (Beye, 2011).

Inadequacies in iodine intake on the other hand impair the synthesis of thyroid hormones, which are critical for normal development and proper functioning of the brain and nervous system as well as the conservation of body heat and energy. Iodine deficiency causes endemic goitre and cretinism as well as stunting of mental and physical development. Globally, 1.6 million people are at risk of iodine deficiency disorders and 50 million children affected by them. About 100,000 children are born each year with mental retardation, most of them in Africa. This is due to the low consumption of iodine-rich foodstuffs (e.g. marine products) and the over-consumption of foodstuffs causing goitre, particularly bitter cassava, which is a staple in Central Africa (Kupka et al., 2012).

Anaemia is quite prevalent in Africa especially among young children due mainly to a diet that is low in animal-based foodstuffs and high in fibre-rich cereals, tannins and phytates which inhibit iron absorption. In 2006, about 67.6 per cent of children under 5, and overall 83.5 million children were anaemic (Sy, 2011). Through its effects on metabolic processes such as oxygen transport, oxidative metabolism and cell growth, iron deficiency also retards growth and development. It impairs the immune response and increases susceptibility to infection, delays motor development, and diminishes concentration (impairing cognitive and behavioural capacities). It therefore prevents 40-60 per cent of African children from attaining their full mental capacities. Moreover, of the 26 health risks reported by the WHO Global Burden of Disease project, iron deficiency is ranked ninth in terms of years of life lost.

Key interventions and strategies

Preventive interventions

Breastfeeding: Breast milk is the ideal natural food for optimal growth and safe psychomotor development. This is due to its rich nutrients and protective factors, as well as its biospecificity (the kinetics of its composition change during lactation) and impact on mother-child relationships. These key advantages reduce child mortality rate by 13 per cent in areas where over 80 per cent of women breastfeed exclusively (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

Supplementary feeding: Undernourished children have lowered resistance to infection and are at greater risk of common childhood diseases such as diarrhoeal diseases, respiratory infections, recurring sickness and faltering growth, often with irreversible damage to their cognitive and social development (Habimana, 2009). For current and future generations, good nutrition is a cornerstone for survival, health and development. Well-nourished children set off on a better developmental path (both physically and mentally), perform better in school, grow into healthier adults and are able to give their own children a better start in life. Supplementary feeding, when properly implemented, helps to reduce the mortality rate of children under 5 by 6 per cent (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

Long-lasting insecticidal nets (LLINs): The prevention of malaria through the use of LLINs is a key strategy for rolling back malaria in Africa. According to model-generated estimates based on the number of LLINs supplied by the manufacturers, the number distributed by national malaria control programmes and data from household surveys, the percentage of households with at least one LLIN in sub-Saharan Africa increased from 3 per cent in 2000 to 50 per cent in 2011. Coverage rates of more than 80 per cent can reduce Africa's child mortality rate by 7 per cent (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

Vaccination against Haemophilus influenzae type b (Hib): Hib, meningitis and respiratory infections are frequent and serious on account of their high mortality rates and potential consequences, which include sensorineural damage. These infections can be prevented by vaccination to reduce child mortality by 4 per cent. Hib vaccination is part of the Expanded Programme on Immunization (EPI) together with vaccines against tuberculosis,

poliomyelitis, diphtheria, tetanus, hepatitis B, measles and yellow fever. EPI is a key preventive intervention in reducing infant morbidity and mortality; together with the monitoring and promotion of growth, it is a fundamental pillar in child health and development (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

Prevention of mother-to-child transmission of HIV: The 25 per cent prevalence of HIV in some eastern and southern African countries is a matter of concern. African countries that showed more than 20 per cent adult HIV prevalence in 2011 included Botswana (23.4 per cent), Lesotho (23.3 per cent) and Swaziland (26 per cent) (UNICEF, 2013). Globally, the number of new HIV infections continues to fall annually, although there is considerable regional variation. In sub-Saharan Africa, where most of those newly infected with HIV live, it is estimated that 1.9 million (1,700,000 – 2,100,000) people were infected in 2010. According to estimates, this represents a 16 per cent decrease compared to the number of new infections with HIV in 2001, which was 2.2 million (2,100,000–2,400,000), and a 27 per cent decrease compared to the number of new infections between 1996 and 1998, when the incidence of HIV infection in the region peaked (UNAIDS Progress Report, 2011).

The vast majority of children are infected before birth, during pregnancy, labour or breastfeeding (if the mother is seropositive). The course of HIV and AIDS is particularly aggressive in children. Without care and treatment, the virus multiplies and destroys the child's immune system, lowering resistance to infections such as pneumonia and other common childhood diseases. Almost half of all children infected by their mothers die before the age of 2. Thanks to a decrease in the price of drugs, increased awareness, the introduction of fixed-dose combinations of anti-retrovirals (ARVs) and more reliable forecasts of demand for paediatric ARVs, several countries have been able to distribute them for use in children, but the coverage rate remains extremely low in Africa (WHO, 2011).

Zinc supplements: The role of zinc in strengthening immune defences cannot be underestimated and in areas where effective preventive supplementation campaigns have been implemented, particularly in Africa, the child mortality rate has been lowered by 4 per cent (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

Vitamin A supplement: Biannual vitamin A supplements can help to reduce mortality among young children by 23 per cent (The Lancet, 2003).

Curative interventions

Oral rehydration solutions: Oral rehydration is considered one of the greatest revolutions in improving child health and managing diarrhoea. With new oral rehydration solutions containing zinc, child mortality can be reduced by 15 per cent (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

Antibiotics to treat pneumonia: The improved availability of antibiotics to treat pneumonia, particularly in remote areas and among deprived populations, has contributed to reducing the child mortality rate by 6 per cent.

Other curative interventions which can help to reduce child mortality include antibiotics to treat sepsis (6 per cent), the use of artemisinin-based combination therapies to treat malaria (5 per cent) and antibiotics to treat dysentery (2 per cent) (The Bellagio Study Group on Child Survival, 2003; Habimana, 2009; The Lancet, 2003).

These interventions are highly beneficial to child health and development. However, coverage rates remain low due to underdevelopment and poverty, poor health care systems with limited access to health services (less than 40 per cent in most African countries), a lack of qualified human resources resulting in part from the brain drain to Western and Arab countries, inadequate equipment, an inconsistent supply of medications and basic products with frequent shortages, a poorly structured and barely functioning programme of health promotion, and limited budgets for health (less than the 15 per cent recommended by WHO for most African countries) combined with often unorthodox financial governance.

Main strategies

The strategies outlined below are recommended by WHO and adopted by all African countries as part of a bolder approach to serious child health problems. Their strengths reside in the complementarity of components integrated into strategies, the effectiveness in reducing child mortality and morbidity, and the positive long-term impact generated for children, such as enhanced school performance, well-being and life chances. These strategies offer an immediate return while having a significant impact on the future.

Integrated Management of Childhood Illness (IMCI): IMCI is a strategy that integrates various programmes for the survival of children under 5 with a

view to improving the practices that are likely to have the greatest impact on their health, growth and development. This is the overarching strategy for achieving MDG 4 (reduction of child mortality), and it is recommended by WHO and UNICEF, particularly in countries with a high child mortality rate. The strategy is simple and, according to the World Bank, cost-effective. It aims to address the main causes of child mortality in settings characterized by (1) a low level of health coverage, with little or no access to diagnostic equipment and treatment, (2) a low level of health monitoring, and (3) weak links between healthcare facilities and communities. IMCI has three components: (1) improving the skills of health care workers, (2) strengthening the health care system, and (3) improving family and community practices (WHO, 1992).

Emergency Obstetric and Neonatal Care (EmONC): Maternal and neonatal mortality in the Africa region accounts for more than half (51 per cent) of the world's total maternal deaths, with a neonatal mortality rate of approximately 40 per thousand. The causes of these deaths could be prevented or avoided by the proper implementation of strategies for skilled care at birth and emergency obstetric and neonatal care services. With the assistance of WHO, UNICEF, UNFPA and the World Bank, various African countries have developed roadmaps for accelerating the reduction of maternal and neonatal mortality by improving the skills of service providers, standardizing treatment protocols, and developing quality criteria for EmONC (The Lancet, 2005).

While effective interventions and strategies for improving the health and nutrition status of young children are available, the financial resources required to implement them in Africa are inadequate. It is essential that African governments, their domestic partners (the private sector and civil society) and their partners abroad (bilateral and multilateral cooperation) invest more heavily in mobilizing resources for early childhood development. The focus should be on optimal governance of financial resources with transparent management rules and particular emphasis on equity of care and guaranteed access for the poor.

Country experiences: call for innovative interventions

Senegal: Community management of acute respiratory infections by community health workers

In Senegal, the main causes of mortality among children under 5 are malaria, diarrhoea, acute respiratory infections (ARIs), neonatal infections and malnutrition. Studies conducted in Kédougou and Vélingara (2001) showed that 80 per cent of deaths caused by these illnesses occurred in homes that had no access to formal health care. While there were initiatives for managing malaria and diarrhoeal diseases at the family and community level, the same was not true for ARIs. Yet the 1999 Senegalese health indicator survey (ESIS) ranked ARIs as the third most common cause of child health problems after malaria and diarrhoea. That is why Senegal decided, with the assistance of its partners, to undertake operational research into the management of ARIs by community health workers in municipal health units, with the aim of reducing the mortality of children under 5.

The research focused on training community health workers using a simplified management algorithm based on IMCI, providing mentoring and supervision, equipping them with a timer to count respiratory changes, scales, a calculator and management tools, supplying them with medication (cotrimoxazole), and raising awareness among communities of ARIs and mobilizing them accordingly.

At the end of the first year of implementation, the results showed that, when given proper training, a community health worker with primary schooling was able to manage simple cases of pneumonia, spot serious cases for referral, and correctly manage supplies of antibiotics. Moreover, the strategy has made it possible to double the number of pneumonia cases being managed. The lessons learned from this innovative experiment, the first in which community health workers have been authorized to give antibiotics, shows that:

- The teaching methodology, which is based on the acquisition of skills coupled with post-training follow-up and individual performance-based assessment, has increased the confidence of community health workers in managing ARIs;

- The leadership shown by the Ministry of Health and the consistent support of partners in advocacy and implementation have been key to the success of this operational research;
- The training of community health workers in managing medication adds value to the implementation of community-based care.

These tangible results have led Senegal to institutionalize this approach, and its scaling-up has made a significant contribution to reducing the mortality among young children from 121 per thousand in 2005 (EDS IV) to 72 per thousand in 2010 (EDS-MICS V), thus reinforcing the capacity for developing human resources (EDS-MICS Senegal, 2011; Sall, 2004). Following the tangible results achieved in Senegal, the West African Health Organization (WAHO) strongly recommended that its members implement community-based management of ARIs.

Niger: Community-based IMCI

Niger has one of the highest rates of under-5 mortality in Africa. About a decade ago, it was 198 per thousand compared to the African mean of 171 per thousand, owing to limited access to basic health care and low utilization rate of health services (30 per cent) (Demographic and Health Survey of Niger, 2006). To tackle the high mortality rate among children under 5, it was considered necessary to improve access to and utilization of quality health care at the community level.

With support from Action for West Africa Region – Reproductive Health (AWARE-RH), WHO and UNICEF, Niger adopted the community-based IMCI (C-IMCI), which consists of a holistic and integrated approach to community management of diarrhoea, pneumonia, fever and malaria, and malnutrition (WAHO, 2004).

Key agents of C-IMCI are the community health workers, women and men chosen by the community on the basis of their education and commitment to improving access to appropriate care and health information. They are trained to take a general approach to managing sick children suffering from the commonest illnesses while delivering preventive and promotional care and providing advice on appropriate medication and general health issues. The community health workers are based in permanent facilities that generally have three rooms for consulting, labour and care respectively. They

are assisted by community contacts who go by a variety of titles, such as peer educators, mentors and liaison officers.

The C-IMCI in Niger has been identified by AWARE-RH as best practice, and has been extended throughout the country. It has become a major priority strategy for improving child health in the country. Its tangible results include correct classification (over 80 per cent), therapeutic management (98 per cent success rate), and compliance with follow-up visits (89 per cent). The performance of community health workers is generally satisfactory and they are supported by Integrated Health Centre (IHC) leaders who offer them regular supervision as well as assistance with the adaptation of training tools and methods. Information obtained from Ministry of Health staff and the mothers of children aged under 5 and documentary analysis have made it possible to identify the most suitable responses to various situations and issues concerning child health.

The main benefits of C-IMCI in Niger experienced by health care workers are (WAHO, 2004):

- Positive impact on the mortality of children under 5 caused by diarrhoea, malnutrition, malaria and ARIs;
- Bringing care to beneficiaries;
- Rationalizing prescribed medication: in the words of one community health worker: 'Since the implementation of C-IMCI, medication is used judiciously and there is less wastage';
- Taking account of the needs of the community (for information, education and communication): 'the use of videos to get educational messages across is welcomed by the general public, who are keen to learn more';
- Cost-effectiveness: bringing care to beneficiaries and ensuring greater flexibility in the treatments prescribed make a significant contribution to reducing the cost of patient management while improving quality.

The main benefits experienced by the communities are (WAHO, 2004):

- Increased utilization of community health units: one mother said: 'Previously it took me more than two hours to walk seven kilometres to take my sick child to the IHC and that was a big problem; the services of the community health unit have made it so much easier';

- The availability of community health workers;
- A more comprehensive examination of the sick child: according to one mother: ‘Children are now examined from head to toe and that reassures us and increases our trust in the community health workers’;
- Follow-up of sick children;
- Referral of serious cases;
- Preventive and promotional care (promotion of vaccination, information on the harmful effects of inappropriate weaning, dietary advice, promotion of LLINs).

Benin: Combating malaria in Djeregbe through women’s groups promoting LLINs

Malaria continues to be a real public health problem in Benin, where it accounts for 34 per cent of all visits to health facilities. Its mean incidence rate was 113.6 per thousand inhabitants, but this figure was substantially higher in children, at 425 per thousand children under 1 year old, and 216.4 in those aged 1 to 4 years (WAHO, 2004).

In Djeregbe, health workers were assisted by the Malaria Control Programme called PROLIPO to take part in a pilot project to combat malaria by targeting women’s groups in the surrounding villages with the aim of reducing maternal and child malaria-related morbidity and mortality. The pilot targeted pregnant women and children under five living in the five largest villages in the Djeregbe community.

Following a participative community diagnostic procedure in the district and in each of the five villages, six main target pathologies in children under 5 – malaria, diarrhoea, ARIs, malnutrition, anaemia and measles – were identified. Democratic establishment of management structures (a village health committee with a chair, treasurer, secretary, and so on) was made, and a plan of action targeting these illnesses was drawn up. The plan placed emphasis on malaria and the promotion and use of LLINs as part of an overarching health development plan for each village. Viable women’s groups with an effective and transparent administrative and management structure and profitable economic activities (such as the fabrication and sale of soap, gardening, establishing a common fund or ‘tontine’, and trade in rice, fish, oil

and other produce) were approached to negotiate the sales and promotion of LLINs to pregnant women with young children. The roles and responsibilities of each stakeholder were discussed, thus forging a partnership between health facilities and the women's groups in the villages with the support of PROLIPO.

Key achievements identified by those involved in the effort were: strengthening the community dynamic, providing greater training in financial management, consolidating solidarity, strengthening the partnership between the community and health facilities, making significant community savings, increasing community engagement in health issues in general and malaria in particular, and above all substantially decreasing cases of malaria and mortality among young children (WAHO, 2004).

Madagascar: Zinc supplements as part of diarrhoea management in children under five

In Madagascar, the under-5 mortality rate was 94 per thousand in 2003, and mortality from diarrhoea was 9 per cent (Statistical Yearbook of the Ministry of Health and Population, 2005). In order to address this, Madagascar was the first African country to implement the new WHO directives on managing diarrhoea in young children with newly formulated oral rehydration salts and zinc. The situation was the subject of an analysis based on current literature and data collection from the field. The results of the analysis were validated; and a budgeted action plan to strengthen regulation and to conduct advocacy, provision of zinc and oral rehydration salts, communication, training, research, monitoring and evaluation was drawn up.

The results of implementing the plan included:

- **Advocacy:** the decision by health and community centres to use zinc supplements as part of diarrhoea management; and the establishment of a national intersectoral steering committee on child survival comprising an orientation committee and a technical committee;
- **Medication:** the inclusion of zinc on the national list of essential medications, the granting of a marketing authorization, inclusion of zinc in the FANOME circuit (funding for the uninterrupted supply of medication), and the availability of low-osmolarity oral rehydration salts throughout the country;

- Communication: the implementation of a communication and social mobilization plan that greatly increased public awareness of diarrhoea and new protocols for managing diarrhoea and prevention strategies;
- Human resources: refresher courses for health workers trained in IMCI, training for future health workers in IMCI and training for dispensers of medicines;
- Monitoring: the development of management tools for community sites, the establishment of a national reporting system, and the identification of indicators.

This pioneering strategy was rolled out across Madagascar and has been remarkably effective in helping to reduce infant and child mortality (WAHO, 2004).

Conclusion

In the context of increasing productive human resources to accelerate development in Africa, the persistent high rates of mortality and morbidity among young children are an urgent concern. Two-thirds of deaths among under-fives in Africa are preventable, as they are caused by illnesses such as malaria, pneumonia, diarrhoea, measles, neonatal tetanus and malnutrition (including micronutrient deficiencies). As mentioned earlier, these illnesses and conditions can be tackled by providing vaccination, in particular measles and neonatal tetanus; intervention as well as prevention and early management of malaria, pneumonia and diarrhoea in the community; and growth monitoring and a comprehensive package that promotes breastfeeding and a balanced diet with medical supplements where necessary. There is a need to optimize the functioning and effectiveness of established health care structures and reinforce them, when necessary, with services from outside those structures so that children and their families can benefit from an integrated and effective set of preventive, promotional and curative interventions.

The compelling evidence on the crucial importance of ensuring good health, nutrition, protection and education in the first years in life, documented elsewhere in this volume, cannot be ignored. Attending to young children's health and nutrition not only provides them with the essential building blocks for lifelong well-being, development and success, but is their right.

Effective prevention and intervention, supported by strong policies and sufficient resources, backed by research evidence, and implemented on a large scale so as to reach all children, is required. By achieving this, wealth can be generated and poverty reduced or eradicated and, by extension, the well-being of African populations can be ensured in the context of sustainable development (Ban Ki-Moon, 2010; Sall, 2010; UNDP, 2011; UNICEF, 2010). Child survival and development need to be placed firmly back on the national, African and international political agenda (Kampala 2010: Fifteenth African Union Summit on Maternal, Infant and Child Health and Development in Africa, New York, September 2010: United Nations MDG Summit).

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Chapter 10

Institutionalization and the early childhood years: perspectives from Central and Eastern Europe and the Commonwealth of Independent States

Jean-Claude Legrand, Deepa Grover and Bettina Schwethelm

Introduction

In a high-level ministerial conference on 21 and 22 November, 2012 in Sofia, Bulgaria, hosted by the President of Bulgaria and UNICEF, 20 governments from Eastern Europe and Central Asia joined forces to boost the growing movement to end placing children under 3 in institutions. A commitment was made to the following priority actions:

1. Preventing unnecessary separation of children from their family by the development of comprehensive policies of social protection for the most vulnerable families.
2. Giving priority to the most vulnerable groups of children, including children under the age of 3 years and children with disabilities in reforms and in access to services.
3. Reinforcing the outreach capacity of social work and home visiting systems to provide early support to vulnerable families.
4. Further developing forms of alternative family-based care, such as foster care.
5. Creating national bodies or intra-ministerial coordination mechanisms to oversee reforms and the implementation of new policy priorities.
6. Giving greater responsibility and transferring adequate funding to local authorities for developing and expanding new forms of services at local level and ensuring better equity in access to services among the poorest and the richest municipalities (UNICEF, 2012).

Commitment to these actions reflects a rapidly increasing understanding of the devastating and lifelong impact of institutional care during the early years. It also represents critical guidance to all sectors and stakeholders who interface with children and families about the importance of inclusive and comprehensive basic services for vulnerable groups in Central and Eastern Europe and the Commonwealth of Independent States (CEECIS). This chapter focuses on the continuing practice of institutional care in CEECIS; the reasons behind it, its characteristics and its effects on the growth and development

of young children. Progress to date in the prevention of institutionalization is assessed, and recommendations are made for family and child care professionals and other relevant stakeholders.

CEECIS constitutes one of the more developed regions of the world. However, despite highly literate populations and historically strong government systems, inequities are on the increase, generally affecting children (Innocenti Social Monitor, 2009). Much of this is related to the pervasive poor understanding – from government to household level – that the early childhood years are critical, and young children need responsive and nurturing care, stimulation and protection.

Typically in CEEICIS countries,

- Social assistance payments to families have received a much lower priority than pensions and entitlements. Economic growth has least benefited families of young children, and poverty is higher in this population group (Innocenti Social Monitor, 2009).
- The region has by far the lowest breastfeeding rates: only 29 per cent of infants under six months were exclusively breastfed (2005-2009). Approximately 16 per cent suffered from moderate to severe stunting ranging from 4 per cent for Belarus to 39 per cent for Tajikistan (UNICEF, 2011a).
- Nutritional deficiencies, observed in the region, from conception (folic acid) through pregnancy and the early years (iodine, iron) affect brain development and children's ability to learn (Christianson et al., 2006; Engle, 2009).
- Household surveys show that even with very young children, harsh and violent discipline is common, and the negative impact of punishment, neglect, and abuse on development is not well understood (UNICEF, 2010a).
- Health and other professionals frequently fail to identify, report, or refer child abuse and neglect to the appropriate services (Stamenkova-Trajkova, 2005; Moestue, 2008).
- As a legacy from the past, when state care was considered superior for raising children, new generations of parents lack positive role models and parenting knowledge and skills to engage with their young children in caring interactions.

The limited understanding of children's basic developmental needs; inadequate policies and legislation supporting child development; and, weak safety nets for poor, socially excluded families, have contributed to the highest rate globally of children living without parental care (UNICEF, 2010b). Of these, approximately 626,000 children live in residential care, including 33,000 infants and children under 3 (Gamer, 2011). Most come from highly vulnerable groups (poor families and ethnic minorities), were born with low birth weight, have medical problems and/or disabilities, and therefore, suffer additionally from the lack of a caring family environment.

Behavioral and neuro-science research has contributed a wealth of information about what infants and young children need to develop normally during their first years of life. Important conclusions can be drawn from research on children growing up in 'depriving environments' (e.g. those characterized by poverty, social exclusion, war, abuse and neglect, and institutional settings, separated from or without a primary responsive carer). Similar conclusions can be drawn from research that demonstrates that the most vulnerable children benefit most from remaining or being placed in a responsive family environment, particularly when supported with intensive and high quality early interventions.

Testimonies from individuals who have grown up in institutional care indicate that even imperfect families and family-like settings are better than institutional care and facilitate integration into society (European Commission, 2009). Yet too many children in CEECIS spend their valuable formative years in institutions, condemning them to an inter-generational cycle of low productivity and poverty and a lifetime of poor physical and mental health.

What is institutional care?

Institutional care is commonly defined as: 'a group living arrangement for more than 10 children, without parents or surrogate parents, in which care is provided by a much smaller number of paid adult carers' (Browne, 2009, p. 1). Children frequently have little or no contact with families, may live isolated from the community where the institution is located, and usually remain in institutional care until the age of majority (EveryChild, 2011). The culture of institutionalization is shaped by depersonalization, social distance, group treatment, and lack of participation and is reinforced by rigid routines

and timetables that meet the requirements of the institution and staff, rather than the needs of its residents.

There are no officially recognised United Nations or Council of Europe definitions of small and large institutions. However, experts have put forward suggestions as to the different sizes of institutions: 'A large institution is characterised by having 25 or more children living together in one building. A small institution or children's home refers to a building housing 11 to 24 children. Alternatively, "family-like" homes accommodate 10 children or less, usually with 2 to 3 in each bedroom.' (Gudbransson, 2004, in European Commission Daphne Programme, 2007, p. 14).

Why are young children placed in institutional care?

Three primary reasons are commonly cited for institutional placement: children becoming orphans; protection from neglectful or abusive parents; and special needs or disabilities that cannot be addressed in the home community.

Across CEECIS, more than 95 per cent of children in institutions have one or both parents and are not orphans. The reported reasons for their admission differ substantially across countries and include abandonment, poverty, disabilities and educational reasons (Carter, 2005). Judgemental attitudes of professionals towards young, single, poor, or minority parents; the pervasive medical model of disability; societal attitudes about children with special needs; and the lack of community-based and accessible support services remain important underlying causes.

In CEECIS, the high rate of institutionalization is an indicator of family distress and lack of appropriate support to vulnerable parents. During the past decades of social transformation, high divorce rates (32.5 per cent in 2010, Transmonee Data Base) have significantly increased the number of children living with only one parent (above 20 per cent in Belarus, Ukraine and Kazakhstan). Migrant parents leave children behind, either with grandparents, who have limited capacity to raise them or in institutions, convinced that these will provide good care. Not enough social work outreach and family support services are available to help prevent family breakdown.

Patterns of institutionalization across the region have evolved accordingly. During Soviet times, the placement of children in institutional care was generally a government decision to deprive dysfunctional parents of their parental rights; children thus placed were usually five to fifteen years of age. While this practice has diminished, the abandonment and relinquishment of infants is becoming a tolerated reason for placing them in institutional care.

The reasons for the placement of newborns and young children vary and remain poorly documented. A 2009 Eurochild survey in 32 European countries (Hainsworth et al., 2009) noted difficulties of accessing information and sharing a common understanding about causes and forms of alternative care, particularly for children under three. Even where placement of young children is against the law, enforcement remains weak. Infants left in maternities or paediatric hospitals without identification papers are still routinely moved into institutional care, often at the initiative of health professionals who lack an understanding of the negative long-term consequences of such actions.

Research by the European Centre for the Rights of Roma (2007, 2011) revealed an over-representation of Roma children in public residential care in Bulgaria, the Czech Republic, Hungary, Italy, Romania and Slovakia. Rates vary from 30 per cent in Bulgaria to 80 per cent in regions of Romania and Slovakia. Due to prejudice and discrimination, institutional placement of Roma children can become permanent without alternative solutions. Probably as a direct consequence of institutional living and exclusion from schooling, many Roma children are labelled as having mental health, behavioural and learning problems.

Placement characteristics for children in institutional settings – Country examples

Study setting	Year	Placement characteristics
The St Petersburg - USA Orphanage Team	2003	Directly from maternity (15.3%) or other hospital (47.5%); 30% had spent time with parents, relatives or in foster care; 8% have clear disabilities; 43% are below the 10th percentile on growth at admission; 50-60% considered at-risk.
Republic of Moldova (UNICEF Moldova, 2008)	2007-2008	76% of placed children came from single parent families
Romania	2004	31.8% of children left in hospitals have no identification papers

Source: Authors.

Institutional settings in the CEECIS: physical features, the living environment, and caregiving characteristics

As pointed out by Carter (2005), ‘children face intolerable hardships when they are no longer protected in a family’ (p. 38). Yet, the institutions provided to ‘protect them’ from poverty, from ‘incompetent’ and/or abusive parents, or to provide them with interventions for their special needs, lack the necessary characteristics to ensure child development and well-being.

General physical environment and basic care

According to primarily narrative accounts, institutions in CEECIS vary in terms of basic care provided. Based on reports of children 5-18 years, employees and administrators, residential institutions in Kyrgyzstan provided food, but many lacked heat, running hot and cold water, adequate toilet and personal hygiene facilities, and washing and cleaning items. Toys and recreation facilities were often not available and children were not able to choose their own clothes or personal items (UNICEF, 2008). At the other end of the spectrum, in an analysis of the institutional environment of three baby homes in St Petersburg, it was concluded that: ‘the quality of care in the Baby Homes [was] not much different than that provided in USA family and home care’ with respect to medical care, nutrition, sanitation and safety. Babies had a supply of toys, equipment and learning materials, but access to and use of toys was not established (St Petersburg-USA Orphanage Research Team, 2005, p. 499).

Despite a lack of data, it appears that institutions for children with disabilities are among the worst. In a 2005-06 review of 64 Romanian state-run institutions (Centre for Legal Resources and UNICEF, 2007), research teams sometimes had difficulties even finding the buildings due to their remote locations. More than two-thirds of the institutions did not meet minimum standards, and one-third were in ‘appalling’ condition with lack of privacy in bathrooms and toilet facilities. In some cases, children with disabilities were placed in adult or psychiatric institutions without regard to diagnosis or treatment needs. Restraints and isolation procedures did not comply with regulations and were judged to be abusive. In half of the settings, children did not have personal items or places to keep them. In facilities that also accommodated ‘healthy children’, their wards were in better condition, and they received better care than children with disabilities. A report on

European institutions for the disabled (UNHR, 2010) confirmed substandard living conditions, badly maintained buildings, lack of heating, unhygienic sanitation, poor treatment of residents, inadequate clothing and food, lack of privacy and poor therapeutic activities.

Quality of care – the carer-child relationship

Even in better placements, researchers have reported significant deficits in certain aspects of care. For example, the St Petersburg-USA Orphanage Research Team (2005, 2008) found no major differences between baby home and residential home care providers with respect to harsh treatment and discipline. Also carers spent little time in contingent interactions, i.e. the give-and-take with a child that is essential for normal development. Their work and interaction with the children was emotionally detached; they were efficient in providing the caretaking functions of feeding, cleaning, and interventions and children were required to conform strictly to directions. During a three-hour observation, carers talked to children only 12.6 minutes, rarely responded to children's positive emotions and cries and did not talk to the child while feeding, which lasted only 4.5-11.5 minutes.

Several important factors contributed to the behaviour of the carers, including a low level of education and lack of training in child development, poor working conditions resulting in overall lack of motivation and the institutional environments with structures and schedules. The carers tended to work long hours, sometimes 24 hours, for overtime income. They were off for long periods, had 56-63 days of vacation time, with a 30 per cent staff turnover per year. In addition, children were regularly graduated to new groups or wards at 3, 9, 12, and 24 months of age. This meant that children were exposed to 60-100 carers during the first two years of life denying them the opportunity to develop a relationship with an adult.

Institutional setting and young child well-being

Four broad categories of behavioural research and neuro-science have contributed to our understanding of young children's critical development needs, including, short- and long-term outcomes for children institutionalized during sensitive developmental periods, children exposed

to improvements in their institutional setting, children who were adopted or placed in foster care before or after sensitive developmental periods and impact of institutional care on the developing brain.

Short- and long-term outcomes of institutional placement

Institutional care, particularly the lack of carer warmth and responsiveness, can visibly affect young children within a very short time. In a study of young children placed in institutional care in the UK between 1948-52 for family reasons, a film taken over nine days documents day-to-day changes in 17-month-old John (Robertson and Robertson, 1969). Attached (as expected for normal development) to his mother, he is placed in a residential nursery due to his mother's hospitalization. Initially, John seems happy and tries to interact with the carer and other five children. However, other children are more used to capturing the attention of the carer, and he is left out. His protests and cries are not sufficiently successful to gain attention. He loses sleep and his appetite and his increasing distress cannot be alleviated by the father who visits daily after work. Finally, John becomes more and more detached from his environment and cuddles up with a toy. By day 9, he is an unhappy, depressed, and emotionally detached child who resists the efforts of his mother to comfort him when she comes to take him home.

Similarly drastic changes were documented in a number of young children filmed over more than a year in a children's home in the Russian Federation (EveryChild, 2005). The initially responsive behaviour of infants and young children, who did not benefit from loving interactions with their mothers during daily visits, was gradually extinguished.

Research evidence has accumulated on the lifelong impact of institutional living (European Commission Daphne Programme, 2007; Center on the Developing Child at Harvard University, 2011) including:

- non-organic failure to thrive and chronic conditions;
- poor executive functions (working memory, inhibitory control, and cognitive or mental flexibility);
- poor cognitive development, academic under-achievement, and impact on employment;

- poor self-confidence, lack of empathy, problems with relationships in childhood and adulthood (attachment disorders, poor parenting);
- lack of understanding of appropriate boundaries, poor moral development and negative and anti-social behaviours (aggression towards others, cruelty to animals, delinquent behaviour in adolescence and young adulthood); and
- autistic tendencies, stereotypical behaviours, self-stimulation and self-harming behaviours.

Changing the quality of institutional care

The St Petersburg team (Groark et al., 2008) introduced two intervention packages in one of three baby homes, one focusing on structural changes to reduce the number of children cared for together. Two primary carers were assigned to each small group (6-7) of children, who spent time with one or both of these carers every day. In addition, children remained in the same group for two years. Because children no longer needed the carers at the same time, they were able to spend more time on individualized one-on-one interactions. Further, the childcarer interactions were enhanced by training in child development and support for more sensitive caregiving behaviours.

Significant improvements were noted across a broad range of skills (fine and gross motor, personal-social, cognitive, adaptiveness, and communication), with most improvements made by children with severe disabilities, who had been the most neglected. Typically developing and moderately disabled children increased with respect to weight, height, head and chest circumference; severely disabled children increased in weight and chest circumference, confirming the strong synergies between physical growth and other dimensions of child development.

In a second baby home, only training was provided to the carers, resulting in minor improvements. These findings highlight the critical importance of mutual responsiveness between carer and child as a foundation for all domains of development. Intermittent, random stimulation is inadequate for optimal development.

Placing children in family care

In a study in Romania (Nelson et al., 2007; Smyke et al., 2007), abandoned young children living in institutions were randomly chosen for foster care or to remain institutionalized. At the time of the study, all children had already diminished IQs (mean IQ = 77), but children placed in foster care before 24 months of age had achieved significantly greater increases in IQ at 42 months (mean IQ = 94) than those adopted after 24 months (mean IQ = 80). If placed before 15 months, they also improved their language abilities.

After severely depriving institutional experiences in Romania, children benefited significantly in their overall and cognitive growth from being adopted by high-income families overseas. When adopted before six months, children resembled peers without institutional experience. Children adopted later on were more likely to suffer from inattention, over-activity, cognitive delays, autistic-like behaviours and attachment difficulties. Mental, emotional and behavioural problems were more frequently noted as children adopted at an older age went through their school years and adolescence (Gamer, 2011).

Similar findings were also reported for children adopted from the St Petersburg Baby Homes and in a meta-analysis of international research. In the former, adoptees were more likely to suffer from hyperactivity, have poor social responsibility and self-control. Children adopted after 12 months showed higher rates of multiple extreme behaviours (Groark et al., 2005).

Evidence from neuro-science

It is now known that brain synapses form rapidly during the first few years of life with density peaking at age three. Depriving environments can affect the growth and development of the brain. While some level of recovery is possible, it is well known that rehabilitation is lengthy and costly, that individuals are unable to reach their potential, and that often significant compensatory mechanisms are required. The evidence gathered at the Harvard Center on the Developing Child (e.g. 2007) provides important additional justification for the prevention of institutionalization in the early years.

Five key points summarize the impact of depriving conditions on the developing brain:

Brains are built over time, from the bottom up. Environmental inputs, particularly during the early years are critical for certain areas of the brain to be stimulated and the neuronal connections to be made. Earlier neural connections provide the foundations for later more complex circuits. Therefore, when adequate stimulation does not occur during the sensitive or critical periods for vision, hearing, language development and cognitive development, individuals may be permanently affected. For example, electroencephalograms (EEGs) taken of institutionalized Romanian children showed diminished brain activity.

The interactive influence of genes and experience shape the developing brain. Infants and young children require ‘mutuality and reciprocity’ in an ongoing ‘dialogue’ with their caregivers. This is lacking in institutional settings where carers do not (or cannot) respond to individual children’s social cues or cries. For the child’s growing brain, consistency and contingency of the environment is needed to strengthen brain connections and build new neural synapses.

The brain’s capacity for change decreases with age. The notion of sensitive periods for language development, attachments, and other cognitive and social-emotional functions is supported by studies where responsive, nurturing, and stimulating environments result in more gains in younger children.

Cognitive, emotional, and social capacities are inextricably intertwined throughout life. Research has demonstrated that depriving settings rarely affect one area of child development, but broadly impact on physical health and growth, and socio-emotional and cognitive-linguistic abilities.

Toxic stress damages developing brain architecture which can lead to lifelong problems in learning, behaviour, and physical and mental health. Living in an institutional setting is highly stressful to infants and young children. Prolonged exposure to physically and emotionally depriving environments, coupled with emotionally unavailable and depressed carers, and even situations of violence and abuse, disrupts brain development.

In summary, to develop their full potential, children need good nutrition and physical health, a quality relationship with a consistent primary caregiver and opportunities to learn in a supportive environment (Engle, 2011).

Progress achieved and remaining challenges to prevent family separation

Several CEECIS countries have begun to reduce the number and rate of young children placed in residential care and are making family-like placements for the youngest children a priority.

In Croatia, Romania, and Serbia laws have been adopted to ban the institutionalization of young children. Supported by the EU, Bulgaria has adopted a national strategy for deinstitutionalization of all children, with plans to close 137 institutions over the next 15 years and to provide a wide range of community-based child and family services. The Republic of Moldova, similarly, has taken first steps and discussions are ongoing in Kazakhstan, Montenegro, and The former Yugoslav Republic of Macedonia. New statutory bodies have been established, such as Guardianship and Care Panels at regional level in Georgia, commissions for the Protection of Children in Difficult Situations at the rayon level in the Republic of Moldova, Child Protection Units at the provincial level in Armenia while the old Commissions on Minors at the local level in Belarus have been reformed. These changes permit individual case management, assessment and care planning and are becoming important gatekeeping mechanisms for preventing institutionalization of children, particularly the youngest.

To address the remaining challenges, UNICEF (2011b) recommends a focus on five core interventions:

1. Legislative changes, setting strict conditions and making the placement of children below three years into institutional care a last resort.
2. Prioritizing the development of alternative care solutions for children below three, with special attention to the needs of children with disabilities.
3. Appropriate budget allocation and services for supporting vulnerable families.
4. Training maternity and paediatric hospital staff to discourage institutionalisation and to support the parents of newborns with disabilities as well as parents from most vulnerable groups.

5. Partnering with media and civil society to promote the social inclusion of children deprived of parental care and children with disabilities UNICEF (2011b).

Vulnerable families generally require multisectoral support to cope with sudden shocks or changes in their circumstances, be it the loss of employment, an unexpected illness, or having a new baby. Different components of the social protection, welfare, and health systems must work together to offer social assistance (cash or in-kind transfers, tax deductions or fee waivers for basic services), social services, family and child support services (e.g. day-care, counselling, hotlines, services for children with disabilities) and housing, employment, health and education services to make it possible for children to remain with their families. Also, legislation and policies need to be in place and enforced to support reforms that address inequalities in accessing services or economic opportunities.

Prejudices and stereotypes continue to contribute to the institutionalisation of children 0-3 from vulnerable groups. The 'State-knows-best' mentality and the defectology tradition continue to contribute to an over-representation of children from vulnerable groups (children with disabilities, from Roma/young/single/using drugs or alcohol/HIV positive/disabled parents). Up until today, some professionals and even parents from vulnerable groups believe that children will have a better upbringing in an institution, especially if the institution is well off and nicely equipped.

Children cannot move out of residential care if alternative services do not exist or are not targeted to those most in need. Countries in the region need to develop continua of multisectoral services with the capacity to address diverse vulnerabilities through individualised child and family plans and by strengthening family capacities. Transforming the old system and establishing new services will require careful and coordinated planning, as currently services are concentrated in bigger towns or provided only on a pilot basis.

With regard to children below three with disabilities, day care centres can facilitate their full development and support parents in their daily relationship with their children. These centres must be part of a wider Community-Based Rehabilitation (CBR) strategy. For example, in 2010, The Ministry of Health of Tajikistan and UNICEF launched a CBR project for children affected by polio and other physical disabilities to ensure that they were cared for in their communities (UNICEF, 2013). For children below 3 years with disabilities, adapted day-care services are a first 'defence' against institutionalisation,

though institutionalisation may only be delayed if inclusive kindergartens and schools are not available later.

Social and community-based services that identify families at-risk early and provide them with the right support can contribute to preventing infant abandonment or relinquishment or the deprivation of parental care. However, as yet such services are under-developed and often only available in urban locations, making them inaccessible to the most vulnerable groups.

Initiatives and innovative approaches in the region

Evidence from research in early childhood is influencing a broad range of UNICEF actions in the region.

Advocacy and strengthening of political structures

- A change in government policies and structures is being promoted through work with political mechanisms, such as the European Commission and the Council of Europe. While not all countries in the region are members, directives for policies and guidance influence the larger region and national policies. In 2011, UNICEF CEECIS and the Office of the High Commissioner for Human Rights (OHCHR)-Europe launched a campaign at the European Parliament in Brussels to prevent the placement of children below 3 years in residential care, with priority given to the situation of young children with disabilities and ways to prevent family separation.
- UNICEF (2011b) has developed a detailed advocacy tool, *Early Child Development: What Parliamentarians Need to Know and Do*. This tool provides information about children's needs to develop optimally, what we know about the devastating impact of institutionalizing young children and detailed guidance on how parliamentarians can play a significant role in promoting child development at the national level. In a meeting of the Inter-Parliamentarian Union in Armenia (2011) which brought together parliamentarians from 10 countries in the region, this information led to a commitment to improve protective legislation, increase budget allocations to alternative solutions to institutional care and for vulnerable

families, and ensure the greater integration of children with disabilities into society (OHCHR and UNICEF, 2011).

- A number of countries have assessed their gate-keeping systems to develop stringent criteria for institutional care, including case management and regular case reviews. For example, after an extensive review, Bulgaria, Croatia and Serbia followed the example of Romania and developed policies to eliminate the placement of children under three. The Czech Republic and Slovakia are currently addressing the issue as well in order to break with legacies and practices of the past.
- Commitment to the elimination of institutionalization of children under three was further strengthened in the high-level ministerial conference in Bulgaria in 2012 (UNICEF, 2012) and will accelerate progress over the coming years.

Increasing the availability of information on including children with disabilities

- Governments and donors are supporting the development of alternative forms of care and new models and approaches to reduce stigma and discrimination against children with disabilities. Public awareness campaigns (e.g. It's about Ability, Montenegro, 2010-2011) on the importance of early child development, responsive parenting and the inclusion and mainstreaming of children with disabilities are broadly increasing the knowledge of families and communities and the adoption of more positive attitudes and practices.

Financing

- Donors and countries are supporting studies on the cost of institutional care, social benefits to poor families and other support services to prevent institutionalization.
- Governments are investing in the development of social policies with cash transfers for the most vulnerable families and community-based services to enable parents to raise their own children, particularly children with disabilities.

- High-level advocacy is ensuring that the European Union Structural Funds support the development of CBR services rather than supporting rehabilitation of large-scale Soviet-style institutions.

Improving capacity for quality of care for the vulnerable

- Baby-friendly hospital approaches provide some of the earliest support to the development of attachment between mother and infant. Government agencies and NGOs in some countries (Bulgaria, the Republic of Moldova, Russian Federation, Ukraine) have enhanced this approach to assist pregnant women and new mothers at-risk of abandoning or relinquishing their infants by providing shelters, parenting education, child care and comprehensive home-based support. Serbia has developed guidelines for maternity staff on how to counsel mothers and families on infants' needs and to counteract attitudes and practices of medical staff to recommend institutionalization of infants with disabilities.

Recommendations for family and child care professionals and stakeholders

To ensure that infants and young children are provided with a strong foundation to reach their potential, sustained support is needed in the following areas from family and child care professionals and stakeholders who come from a variety of disciplinary backgrounds e.g. paediatrics, education, social welfare, nursing and parenting:

- Conduct broad-based advocacy that highlights the irretrievable losses to nations and societies when young children are institutionalized or placed in poor quality alternative care.
- Make widely available information on the detrimental impact of institutionalization, in order to counter prevailing perceptions and beliefs that children might be better served in residential care.
- Promote the establishment of inter-sectoral mechanisms to work to improve policies that impact young children, e.g. policies that determine benefits and support services to poor, socially excluded or otherwise vulnerable families.

- Integrate the science of early child development as a foundational component in all pre- and in-service training of those who work directly and indirectly with children and families. Maternity staff, primary health care personnel, home visiting nurses, health mediators, early educators and others need to have a keen understanding of children's developmental needs. They should be enabled to identify early families with difficulties, facilitate the enhancement of positive parenting skills in families, and know when and how to link families with needed social services.

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Chapter 11

Quality early childhood care and education in low-resource level countries in Asia

Nirmala Rao and Jin Sun

Introduction

The *Education for All Global Monitoring Report, Strong Foundations for Early Childhood Care and Education* (UNESCO, 2006), provided compelling reasons for investment in the early years and summarized research on the short and long-term benefits of ECCE programmes for children and nations. Studies on early brain development have shown that the brain develops most rapidly in the first 3 years of life and that it is positively affected by environmental stimulation (Shonkoff and Phillips, 2000). Research has also shown the benefits of ECCE to child development, school readiness (Engle et al., 2007; 2011) and the economic returns to individuals and governments (Heckman, 2004; Lynch, 2004; see Chapter 3, this volume). Further, investing in early child development promotes children's rights to survival, protection, development, and to participation in early education. Evidence equally shows that it is not just access to ECCE programmes that matters, but that the quality of those programmes matters even more. In particular, high quality ECCE programmes (i) offer support to parents in a child's earliest years; (ii) integrate educational activities, nutrition, health care and social services; (iii) provide relevant educational experiences; and (iv) ease the transition to primary school.

This chapter presents empirical studies which compared the development of children who had attended ECCE programmes of differing quality with that of those who did not have access to those services. These studies provide evidence on the relationship between the quality of ECCE and child outcomes in low-resource level countries in Asia. Their findings strengthen the case for providing high quality ECCE for all children as a means of promoting equity. Indeed, equity considerations should guide ECCE programme development, and 'equity' in ECCE refers to both access to services and their quality (Equity = Access + Quality) (Britto et al., 2011).

Conceptualizing and defining quality ECCE programmes

Defining quality

A distinction has been made between structural and process dimensions of programme quality (Lamb, 1998; Phillips and Howes, 1987). Structural measures include teacher-child ratios, staff qualifications, teaching experience and stability, health and safety, and the physical setting while process refers to the quality of interactions between teacher and child. Definitions of high quality ECCE vary across contexts since there are wide variations in economic development, resource availability, and cultural beliefs. Nevertheless, there is some agreement about the factors which define quality in formal and informal programmes regardless of circumstance, including the physical and psychological environment, curriculum, learning and teaching approaches, teacher-child interactions, programme management and community integration (Association for Childhood Education International, 2006). Among these, teacher-child interactions are considered the most important determinant of quality (UNESCO, 2007) and the vehicle for this interaction is the curriculum.

Measuring quality

Teacher-child ratios and children's performance on cross-national tests of achievements are two proxies typically used for educational quality in UNESCO's EFA Global Monitoring Reports. However, these two indices are not totally relevant for the early years (0-5). Small sample size, stringent teacher-child ratios are important for responsive teacher-child interactions; but this is highly affected by cultural beliefs (Tobin, 2005), and it is difficult to achieve a feasible common metric for the various forms of early childhood services. Further, good quality ECCE is holistic and is concerned with more than children's academic achievement.

There are several challenges associated with the measurement of the quality of ECCE programmes. We find a range of ECCE programmes all over the world, some provided in formal settings such as primary school or pre-school institutions, while others take place in informal or non-formal settings (e.g. community-run, home-based or parent education programmes). Programmes for children under 3 years tend to be holistic in nature and include health, nutrition, hygiene and social protection in

addition to cognitive, social, emotional and physical development (Copple and Bredekamp, 2009). Further, some programmes include micronutrient supplementation, support to enhance maternal and child health and support for families. Because of the range of programmes and the varying needs of children of different ages, there exist different versions of commonly used tools, such as the Early Childhood Environment Rating Scale – Revised (ECERS-R) (Harm et al., 1998), to assess programme quality. The ECERS-R is used to evaluate the quality of centre-based ECCE for children from 2½ to 5 years, while the Infant Toddler Environment Rating Scale – Revised (ITERS-R) is designed for use for the birth to 2½ age range. The first ECERS scale was developed in the U.S. but has been adapted for use in the United Kingdom (ECERS-E) (Sylva et al., 2006), Bangladesh (Aboud, 2006; Moore et al., 2008), Cambodia (Rao and Pearson, 2007) and Tamil Nadu, India (TECERS) (Isley, 2001; Rao, 2010). In addition to differences in definitions and standards for quality across countries, the use of a tool developed in one country or another also raises issues related to linguistic, cultural, functional and metric equivalence across countries (Pena, 2007).

Therefore, a valid measure of quality should include assessment of all programme targets. It should also assess the extent to which the philosophy of a programme is evident in the early childhood setting. In addition to aligning measures of quality with programme goals, it is important to formulate guidelines to ensure reliable measurement. Assessment tools should also be appropriate for the age range of children studied and the type of early childhood programme (Zaslow et al., 2011).

Measures of structural quality, such as teacher-child ratios, teacher qualifications and experience, are relatively easy to obtain and have been used in measurement of ECCE quality (e.g., Cost, Quality, and Child Outcomes Study Team, 1995). However, process measures of quality, such as teacher-child interactions and implementation of learning activities, are particularly useful as they provide information about their day-to-day functioning. In short, contextually-sensitive standards (and indicators) appropriate for both a variety of programmes and a wide age range of children are necessary to measure effectively the quality of ECCE programmes.

Regulation of quality

In most countries in the developing world, the authority to enforce standards for operating early childhood programmes rests solely with the government, but the regulation of quality is problematic in some contexts. For example, in

some countries (e.g. India), there are no requirements for teacher qualifications in the private sector and in others (e.g. China) rural pre-schools are not able to meet government standards for teacher qualifications (Rao and Sun, 2010).

It should also be noted that governments have typically focused on input quality (structural quality) or output quality (child outcomes), but not on the quality of interaction within a programme (process quality) (Rao and Sun, 2010).

Importance of high quality ECCE in low-resource environments in Asia

High quality ECCE should be a right for children worldwide but it is especially important for those in low-resource environments such as can be found in Asia which, in some regions, has poor human development indicators and high levels of educational poverty.

Tens of millions of vulnerable and disadvantaged children need high quality ECCE

There are wide variations across and between sub-regions and countries on many human development indicators in the Asian region which has 3.5 billion people and includes five of the E-9 high population countries (Bangladesh, China, India, Indonesia and Pakistan). These five countries alone account for 35 per cent of the world's population (Rao and Sun 2010), and four of them are less developed nations. The region has millions of children who are vulnerable and disadvantaged and in dire need of high quality ECCE. Access to early childhood services reduces inequalities and is particularly important for these children as they typically have less stimulating family environments and fewer resources for learning in the home and in the community. In these contexts, ECCE has 'helped level the playing field for disadvantaged children as they entered primary school' (UNESCO, 2006, p. 113).

High quality ECCE improves countries' poor human development indicators

Many countries in South, South-East and West Asia have very high rates of infant mortality and stunting (Rao and Sun, 2010) and high quality ECCE

services are particularly important in helping to decrease these rates. Without quality ECCE, these countries are also unlikely to attain Goal 1 of the EFA goals, 'to expand and improve comprehensive early childhood care and education'.

Rapid expansion impacts the ECCE quality

There has been a rapid expansion in ECCE participation in some parts of Asia, but this has led to concerns about an associated decrease in quality. In South and West Asia, the average teacher-child ratio increased from 36 in 1999 to 40 in 2007 (UNESCO, 2010a). Although notions of appropriate teacher-child ratio might vary across cultures, in a classroom with such high teacher-child ratio, it is almost impossible for the teachers to allocate sufficient individual attention to a child.

ECCE quality and child development in Asia

Children from socially and economically disadvantaged backgrounds who have received ECCE have better developmental outcomes than those who have not (see Barnett, 1998; Burger, 2010; Engle, 2007; 2011; UNESCO, 2006 for reviews). It is assumed that ECCE can compensate for the less favourable home environments of socially disadvantaged families and close the gap in terms of school readiness and achievement between these children and their more advantaged peers. However, attendance is not enough; the quality of this experience matters and the potential for harm from low quality ECCE is a concern (UNICEF, 2008).

Large-scale methodologically rigorous longitudinal studies conducted in the U.S. (e.g. NICHD ECCRN, 2005) and in the United Kingdom (Sylva et al., 2006) have found a positive relationship between the quality of ECCE and children's cognitive, language and social outcomes. However, there is a dearth of studies on the relationship between pre-school quality and child development in the developing world. Using the benchmarks of the developed world, many programmes in the developing world would be considered of extremely poor quality, since many developing countries lack the resources to attain the quality standards used in the developed world. Myers (2006) reviewed longitudinal studies on the effects of ECCE programmes on children in the developing world and noted that few of them assess quality concurrently and longitudinally. On the basis of a critical review of 20 studies conducted in developing countries in Asia, Africa and Latin America which evaluated the effectiveness of early childhood programmes, Engle et al. (2007)

concluded that holistic, intensive, long-lasting, high quality early childhood interventions are effective in promoting child development and averting the loss of young children’s development potential.

Four studies conducted in South Asia have specifically evaluated pre-school quality and child outcomes. Research conducted in Bangladesh (Aboud 2006; Moore et al., 2008) and in India (MSSRF, 2000; Rao, 2010) found that even in programmes considered to be of low to mediocre quality using Western benchmarks, pre-school quality was positively associated with child developmental outcomes controlling for potential confounding variables (Rao and Sun, 2010, pp. 41-42).

Against this background, the studies described below examined the relationship between the quality of ECCE programmes and child outcomes in three low-resource level contexts in Asia. We were mindful of the need to use contextually appropriate tools to evaluate quality and to use as rigorous a methodology as possible. We assumed that in these contexts of high educational poverty, even the minimum input provided by programmes would have a positive impact on children – i.e. that something was better than nothing. At the same time, we hypothesized that children from higher quality programmes would have better cognitive, language and social developmental outcomes than other children.

Asian context

Asia has 48 countries in eight sub-regional groups in UNESCO’s classification of the Asia-Pacific sub-region. This chapter covers three studies from different sub-regions (see Table 1).

Table 1. Sub-regions in the Asia and Pacific region

Sub-regions	Countries Studied
Mekong sub-region (5 countries)	Cambodia
Insular South-East Asia sub-region (5 countries)	
South Asia sub-region (7 countries)	India
West Asia sub-region (2 countries)	
Central Asia sub-region (5 countries)	
East Asia sub-region (3 countries)	China
Pacific sub-region (14 countries)	
Developed Countries (5 countries)	
Others (2 countries)	

Source: Authors.

The three countries use different terms for their ECCE services, and the services cover different age ranges (see the table below).

Table 2. Terms used to denote early childhood services and age range covered

Country	Terms and age ranges
Cambodia	ECCD (conception-6 years); primarily state, community, home-based, and private pre-schools (3-under 6 years)
China	ECCE (0-6); primarily three main types of nurseries (0-3), kindergartens (3-6), pre-primary classes (5-6). There are also a variety of other forms of ECCE services for children and parents.
India	ECCE (0-6 years), including an array of public, private and NGO-sponsored programmes, crèches for working mothers, and pre-primary sections in schools (3-6 years)

Source: Authors.

Participation in pre-school programmes has increased in Cambodia, China and India over the past decade (UNICEF, 2012). A fundamental concern of governments in these three countries (as is the case all over the world) is the promotion of equity. This has typically been pursued by providing all children with access to early childhood services and/or ensuring that all children, regardless of social background, have equal access to quality services. However in resource-constrained environments, such as Cambodia and India, government policy indicates that priority is given to the poorest and most vulnerable sectors of society. However, in all three countries there is inequity, with the more advantaged children having higher access rates to ECCE, which also tends to be of a higher quality than for other children (Rao and Pearson, 2007; Rao et al., 2012a, b; UNESCO, 2006).

Cambodia

Cambodia has a population of about 14 million, with around 1.5 million children below 5 years (UNICEF, 2012). In 2007, when our study was conducted, it had an under-5 mortality of 91 and a high rate (37 per cent) of stunting (UNICEF, 2008). By 2010, the under-5 mortality rate had decreased to 58, but there still is a high rate of moderate to severe stunting (40 per cent in 2006-2010) in Cambodia (UNICEF, 2012). In 2005-2006, the enrolment rate in ECCE for 3-5 year olds in Cambodia was about 12 per cent overall (RGO, 2006), and for 5- to 6-year-olds, it was 27.27 per cent (state pre-schools 21.23 per cent; private pre-schools 1.43 per cent; community pre-schools 3.96 per cent and home-based programmes 0.84 per cent). More recent figures indicate that in 2009-2010, the enrolment rate of 3- to 5-year-olds was 20 per cent and that it was 38 per cent for 5-year-olds (UNICEF, 2011). The

Cambodian government would like to give priority for ECCE to children from poor and remote backgrounds, but it does not have the funds to increase state pre-school provision or increase the national budget for ECCE.

Information presented in the following sections is drawn from Rao and Pearson (2007), Rao and Sun (2011), and Rao et al. (2012a). There are three main types of pre-school programmes in Cambodia: state pre-schools, community pre-schools and home-based programmes. State pre-school teachers have the highest academic and professional qualifications, having completed a 2-year full-time teacher-training course after Grade 12, and receive a government salary. Not surprisingly, state pre-schools cost more than other programmes. They operate a 3-hour programme, five days a week during the 38-week school year. Instruction is provided in a proper classroom with a roof, posters with curriculum-related materials are displayed on the walls and toilets and running water are available. Children have access to paper, pencils, books and toys.

In community pre-schools, educational experiences for 3 to 5-year-olds are provided by a member of the village who has typically received 10 days of initial training and who participates in refresher training courses for 3 to 6 days a year. The programme operates for two hours a day, 5 days a week, for 24 to 36 weeks a year. Community pre-school teachers receive a stipend each month for their work, and this is expected to be met by the village. Most classes are held under teachers' houses and there are health and safety issues when this is the case. Further, parents tend to send all their children, including those less than 3 years of age, to the community pre-school, making the job of the teachers very difficult.

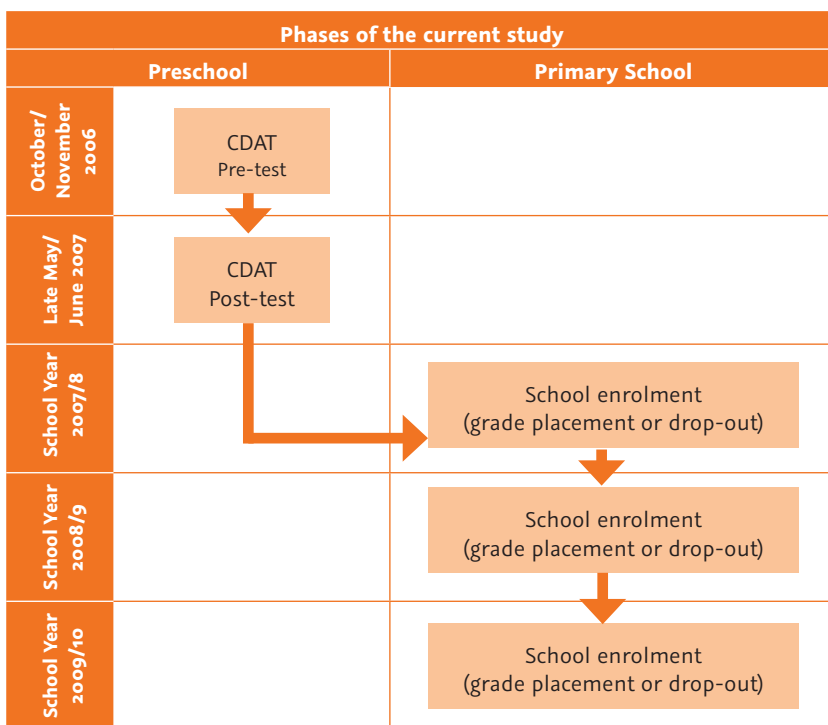
Home-based programmes are offered through mothers' groups formed in villages. Again, the government expects each village to provide funding and resources through the local commune council. The groups are facilitated by a 'core' mother in the village who has generally received a 2-day training course in the use of the programme materials. Typically, the groups meet early in the morning before women go to work in the fields. Home-based programme materials include advice on nutrition, general well-being and developmental stages.

Our study included a randomized sample of 880 5-year-olds (55 per cent girls) from six provinces in Cambodia who were attending one of the three key pre-school programmes described above or no programme at all. The Cambodian Developmental Assessment Test (CDAT), a culturally relevant measure, was used to evaluate developmental gains associated with each

of the three programmes. Children were assessed at the beginning and end of the school year. UNICEF further followed these children when they were in primary school for another 3 years (2007, 2008, and 2009) to track their school enrolment and progression through primary school (Zanolini, 2011).

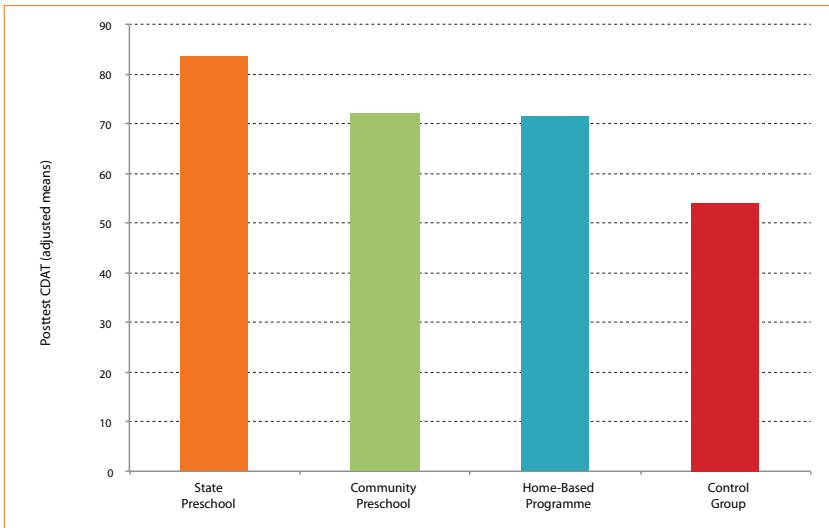
We hypothesized that children attending state pre-schools, which are funded by the Cambodian government and form part of the formal education system, would perform better than those attending community pre-schools and home-based programmes. We also, however, hypothesized that some kind of programme might be better than none; specifically, we suspected that the community pre-schools and home-based programmes, which cater for children who do not have access to state pre-schools, would result in improved outcomes, although having a smaller impact.

Figure 1. Data collection plan in Cambodia



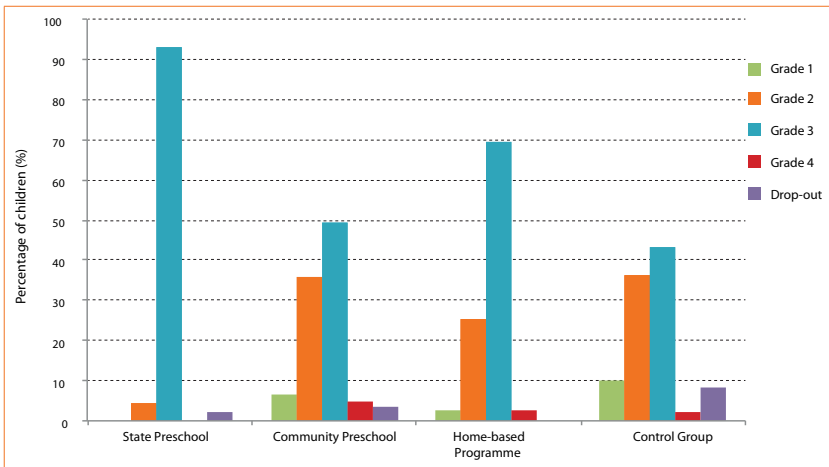
Source: Authors.

Figure 2. Cambodian Developmental Assessment Test post test scores for children from different programmes (n = 880)



Source: Rao, N., Sun, J., Pearson, V., Pearson, E., Liu, H., Conostas, M. A., & Engle, P. L. (2012). Is something better than nothing? An evaluation of early childhood programs in Cambodia. *Child Development*, 83, pp. 864-876.

Figure 3. Pre-school participation and school enrolment in Grade 3 (2009-2010) (n = 956)



Source: Rao, N. (2011, February). *Preschool participation and school enrollment in Cambodia: A longitudinal study*. Invited paper. Hong Kong: PECERA (Hong Kong) Annual Meeting.

Not surprisingly, children attending the relatively well resourced state pre-schools achieved significantly higher scores on the CDAT and were less likely to repeat grades than those attending community pre-schools and home-based programmes. There were no significant differences between the

community pre-schools and home-based programmes on gain scores on the CDAT. It is interesting to note that, while the degree of impact was influenced by the type of programme that children attended, all children who attended pre-school programmes had significantly better developmental outcomes, including school enrolment and grade promotion, than those who did not (See Figure 3). It appears that some type of pre-school experience is better than none.

China

The following section is based on Rao and Sun (2010) and Rao et al. (2012b). China has a population of 1.3 billion, with 81 million children under 5 (UNICEF, 2012). In 2006, the GER for pre-primary education (4- to 6- year-olds) was 39 (UNESCO, 2008) and in 2008, it was 44 (UNESCO, 2011). In 2007, if one includes 3-year-olds, the GERs for children ranging in age from 3 to 6 years were 55.6 and 35.6 for urban and rural areas respectively (National Bureau of Statistics of China, 2008). On the basis of these figures, we can conclude that while 17 million 3- to 6-year-olds from rural areas attend ECCE, about 32 million do not (Government of China, 2007). As in other countries, poverty is a barrier to children's participation in ECCE. The majority of China's population live in rural areas (57 per cent), where there are higher levels of educational poverty and children would particularly benefit from ECCE. Further, China's remarkable economic growth in the past decades has increased inequities, particularly with respect to the urban-rural gap.

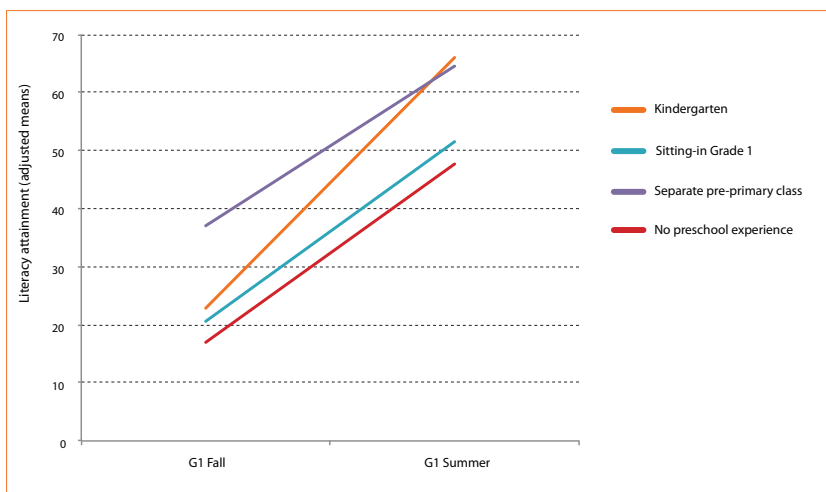
According to state-issued documents, there are three main types of early childhood centres in China: nurseries, which provide care for children from birth to 3 years of age; kindergartens, which provide care and education to children between 3 and 6, or 7 years of age; and pre-primary classes, which cater to the needs of children from 5 to 6 or 7 years of age, and which are typically attached to rural primary schools. However, for children aged 5 and above, we found another type of provision in rural Guizhou, where we conducted our study. Some rural primary schools allowed children below 7 years of age to sit-in on Grade 1 classes so that they had some exposure to formal learning environments before starting Grade 1. These children received the same instruction from the Grade 1 teacher and followed the same schedule as children officially enrolled in Grade 1.

Kindergartens are typically managed by educational authorities or communities and provide formal ECCE. They usually have child-appropriate furnishings, toys, and educational materials and adopt play-based methods

in daily teaching. Kindergarten teachers normally have basic training in ECCE. Kindergartens are not common in remote rural areas. Pre-primary classes, which are found in many rural primary schools, help 5- to 6-year-olds to adapt to a formal school environment before enrolment in Grade 1. In these classes, elements of the Grade 1 syllabus form part of the curriculum, and few toys are provided. Teachers in these classes do not typically have formal teaching qualifications for pre-school children. Because of their accessibility and focus on enhancing rural children's school-preparedness, separate pre-primary classes are an important form of ECCE in rural China.

In our study, we randomly selected 207 children who had different pre-school experiences (kindergarten, separate pre-primary class, sitting-in on a Grade 1 class, and no pre-school experience), and we observed teaching activities in the three different types of early childhood programmes. Children's school readiness was assessed at the beginning of Grade 1, and their literacy and mathematics attainment was assessed in the autumn semester and 10 months later (at the end of the school year). Our analyses were based on 170 children who completed the assessments at the end of Grade 1 and showed that children from kindergartens and separate pre-primary classes showed significantly higher school readiness than other children. Furthermore, children from the kindergarten programmes showed higher mathematics and literacy achievement at the end of Grade 1 than children who merely sat in on Grade 1 classes, or had no pre-school experience. Figure 4 shows the differences in literacy achievement across groups. Although children from kindergartens showed lower literacy scores at the beginning of Grade 1 than those in the separate primary class in the autumn, no differences were evident at the end of Grade 1. This may be due to the child-centred kindergarten curriculum compared to the more didactic practices in separate primary schools. Furthermore, the cumulative advantages offered by kindergarten programmes may be evident at a later point in development (sleeping effect). Observations of the classroom teaching episodes further indicated that kindergarten classes provided a relatively better learning environment, including more stimulating learning materials, more age-appropriate activities, and had more qualified teachers for children than the other two types of pre-school programmes, and that the separate pre-primary classes were also more appropriate for pre-school children than the Grade 1 classes where whole group instructions are normal teaching activities and the pre-school children are typically neglected by teachers. We found that sitting in on Grade 1 was better than not receiving any form of ECCE programme for mathematics attainment, although these children do not receive adequate attention from the teachers and this approach to ECCE is at odds with state-issued curriculum guidelines.

Figure 4. Literacy attainment in the G1 autumn and summer assessments for children with different pre-school experiences



Source: Rao, N., Sun, J., Zhou, J., & Zhang, Li. (2012). Early achievement in rural China: The role of preschool experience. *Early Childhood Research Quarterly*, 27, pp. 66-76.

Our results suggest that the higher quality kindergarten programmes should be expanded in rural areas, but we understand that this requires considerable resources which may not be easy to mobilise. Hence, it may be more realistic and incur less expenditure to encourage the establishment of more separate pre-primary classes in primary schools in rural areas. However, in such cases, schools would need technical and professional support to do so.

India

India has a population of 1.1 billion including around 128 million children under 5 (UNICEF, 2012). India has a high under-5 mortality rate (63 in 2010), and high rates of moderate to severe stunting (48 in 2006-2010). The Integrated Child Development Services (ICDS) scheme has been the Indian government's major early childhood intervention strategy. The ICDS is a Head Start-type intervention designed to promote the early development of Indian children from economically disadvantaged families. Under this nationwide programme, children up to the age of 6 benefit from a package of services that includes medical checks, immunizations, referral services, supplementary feeding, pre-school education, and health and nutrition education. The programme was initiated in 1975 and in 1995, the government made a commitment to universalize the ICDS for all eligible beneficiaries. This has led to a marked expansion of the programme, which now serves

over 77 million children under the age of 6 (Ministry of Women and Child Development, Government of India, 2013).

Rao (2010) examined the influence of pre-school quality on the development of sixty-seven 4-year-old children from poor and rural families in Andhra Pradesh, India who were attending two different ICDS centres. Since government-funded inputs were the same for both centres, one would expect no differences in structural quality between them. Children's development was assessed using a modified version of the McCarthy Scales of Children's Abilities and through physician ratings. Pre-school quality was assessed through repeated systematic observations and by the Tamil Nadu Early Childhood Environment Rating Scale (Isley, 2001). Results indicated that one centre received a higher score on the ECERS (Centre I: 78) than the other (Centre Y: 51). These two centres did not differ in structural variables (infrastructure, personal care routines and physical learning aids), but there were differences in sub-scales related to process quality. Higher pre-school quality was associated with better overall development, while pre-school quality accounted for 31 per cent of the variance. It should be noted that even Centre I would be considered to be of poor quality by Euro-American standards. Nonetheless, findings from this study underscore the fact that even such programmes do have benefits for the development of children from disadvantaged families in India.

As the higher quality centre was closer to the Project Office, we believe that the Anganwadi worker's (early childhood educator) exposure to informal interactions with the Child Development Programme Officer positively influenced her interactions with the children and her professional development. Results from this study suggest that more attention should be given to process quality, and more professional support should be provided to early childhood educators.

As elsewhere, the scaling-up of government services brings concern over a decrease in their quality. Another concern is the quality of provision in the for-profit sector. While the government has been focusing its efforts on meeting the needs of the most vulnerable section of society, it has not paid attention to the quality of private centres, which have rapidly proliferated and are also attended by children from economically disadvantaged families. There are no government regulations for registering and operating pre-schools, no curriculum guidelines and no requirements for staff to have professional qualifications. An estimated 10 million children receive early childhood services from privately owned and operated programmes. While a few prestigious private schools offer very high quality programmes, it has

been estimated that 95 per cent of the pre-schools in the private sector use age-inappropriate methods (Rao and Sun, 2010).

Conclusions and recommendations

There are some methodological limitations in the three studies discussed in this chapter, including the small sample sizes, lack of randomized sampling, and shortcomings in the statistical approaches adopted. Nevertheless, they contribute to the limited literature on pre-school effectiveness in the developing world. What do these studies tell us about the relationships among ECCE attendance, ECCE quality and child outcomes in low-resource environments?

- In Cambodia and China, children who attended any form of pre-school had better school readiness than children who had no ECCE.
- In Cambodia, China and India, children from higher quality programmes had better school readiness than children from lower quality programmes.
- Children who attended high quality ECCE programmes had higher literacy and mathematics attainment in Grade 1 than children in less age-appropriate programmes in China.
- In Cambodia, children from the high quality programmes were less likely to repeat grades or drop-out of school than other children.

The quality of the programmes we observed in Cambodia, China and India would be deemed rather low by Euro-American standards (The state pre-schools in Cambodia and kindergartens in China had large class sizes by these standards). However, in these poor and rural contexts, where maternal education is low and there are fewer resources for learning in the family and community, these programmes make a difference to children's school readiness.

The findings from these studies improve our understanding of the relationship between pre-school quality and child development, contribute to further programme development and provide empirical data for evidence-based ECCE practices and policy in Asia and beyond. Further, we hope that data on differences in child development as a function of programme type, parental education, urban/rural residence, and family wealth will lead to targeted

programmes for the vulnerable as a first step toward universal access to high quality programmes.

While other stakeholders also have responsibility, the onus is on governments to drive equity (access + quality) in the early childhood sector. There is a need for governments to (i) move beyond only increasing access and to focus on the quality of provision; (ii) implement systems of quality assurance which take into consideration the range of programmes available, the ages of children served and contextual variables; and (iii) evaluate their strategies to promote equity. With few exceptions, governments in Asia have typically focused on input indicators and neglected process and output indicators in the evaluation of their strategies to promote equity. The promotion of high quality education for all children is clearly the strategy to achieve equity and ‘Build the Wealth of Nations’ (UNESCO, 2010b).

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Chapter 12

The challenge of local
relevance: using the wealth
of African cultures in ECCE
programme development

Robert Serpell and A. Bame Nsamenang

Introduction

Human development from infancy to adulthood is acknowledged in all societies as a process demanding protection, care and guidance. In African pre-colonial cultures these were provided by a child's mother, elder siblings, other community adults and playmates (Erny, 1972; Fortes, 1970). With the advent of formal education, certain aspects of support were assigned to formal institutions such as madrassas and primary schools, typically from around ages 5-7 until puberty. However, access to those institutions varied, depending on the child's gender, the family's economic and social status and religious adherence. Despite widespread endorsement by African governments of the principles of Education for All (UNESCO, 1990), access to formal education has remained uneven with many rural children receiving less than their urban peers.

Institutionalised public basic schooling increasingly converges on a single curricular model originating from Western society. As a result, international advocates of early childhood care and education (ECCE) service development have often focused attention on mastery of that curriculum, and justified early intervention as a corrective to the disadvantage suffered by children from low-income families, which in Africa are predominantly located in rural areas or urban slums. Thus, ECCE has been construed as part of a broader modernization agenda through the progressive appropriation of Western culture in opposition to African traditions seen as deficient and/or outdated.

In this chapter, we advance a different perspective, arguing that Africa has its own legitimate conceptions of child development and strategies for supporting it and a rich store of often neglected resources which should be incorporated into ECCE and higher education strategies and inform future research. For the majority of rural African children, success in the public school curriculum is in practice only loosely related to the more fundamental agenda of preparation for economic and social competence in their local communities. Moreover, in an era of falling academic standards and the promotion of consumerism, school curricula would benefit from promoting the values of reciprocal accountability and cooperation that are evident in many African family traditions (Pence and Nsamenang, 2008).

Multiple dimensions of the African context

Within the sub-Saharan region, most of the contemporary, post-colonial states share sociocultural conditions that have an important bearing on the circumstances of early childhood development: a history of colonial occupation by a Western European power; rural-urban contrasts in lifestyle; rapid social change; widespread biculturation; low prevalence of literacy; widespread poverty (amidst rich natural resources exploited by foreign-dominated corporations); high prevalence of infectious and parasitic diseases (including HIV and AIDS); and limited institutionalisation of systematic research (on early childhood development or indeed on any other topic).

In several countries of the region, a European language originally imposed by Christian missionaries and/or a colonial power has been retained as the principal medium of legislation, administration, mass communication and education, resulting in an enduring pattern of cultural hegemony (Serpell and Hatano, 1997; Wolff, 2006). Great social prestige is attached to these languages and many parents want their children to acquire greater competence in them than they themselves have achieved.

Mazrui (1986) has posited that Africa is heir to a triple cultural heritage, blending the ideas, institutions and practices of Christianity, government and bureaucracy imported from the West; Islamic religion imported from the Middle East and a set of deep-seated philosophical themes endogenous to African culture. For some rural African communities, differences between the indigenous concept of human development and socialisation and the formal educational model of cognitive growth in public schooling create a continual challenge of local accountability by schools to the communities they aspire to serve (Nsamenang, 1992, 2005; Serpell, 1993, 1999b). Thus African societies need to find ways of coordinating their multiple linguistic and other cultural resources that respect their integrity, minimise conflict and generate productive syntheses consistent with the goals of progressive social change. Such tensions and challenges are especially conspicuous for the period of early childhood development when parents worldwide tend to place greatest confidence in intuitive beliefs. Therefore policy-makers and practitioners should pay special attention to documented knowledge, attitudes and practices that inform public response to systematically planned ECCE services, which have a relatively short history in sub-Saharan Africa.

Extrapolations from developmental science to the design of ECCE services in Africa

The great majority of scientific studies on child development have been conducted with children of middle-class North American or European families, by authors who grew up in such families, and are addressed to a narrow range of primarily Western audiences (Serpell, 1990; Arnett, 2008; Henrich, Heine and Norenzayan, 2010). Consequently, great caution should be exercised when extrapolating the concepts and theories originating from that research to the rest of the world. It is widely agreed that the human brain develops many of its highly specialised functions through a process known as epigenesis: gradual differentiation of the organism through interaction between its genetic code and the environment. But the nature of changes in neural structures and processes induced by environmental variation is too complex to warrant postulating direct connections between the brain and education (Bruer, 1997). In the current cultural zeitgeist of 'biologisation', there exists a serious danger of allowing weakly substantiated 'brain science' speculations (Hirsh-Pasek and Bruer, 2007; Oates et al., 2012) to mask what are in fact primarily cultural and ideological hunches about what is 'essential' for healthy human development (LeVine, 2002). A distinctive feature of humans, compared to other biological species, is their social organization into groups that not only adapt to, but actively customise, their habitat and transmit cultural artefacts and practices across generations, creating a distinctive developmental niche to which the infant must adapt in the first few years of life (Super and Harkness, 1986).

The International Child Development Steering Group (ICDSG) has proposed a synthesis of theoretical ideas as a policy guide to increase the quantity and quality of ECCE services in areas where there is less systematic, formal provision than in the industrialised nations (Grantham-McGregor et al., 2007; Walker et al., 2007; Engle et al., 2007). This synthesis weaves together a political argument about social justice in response to economic inequalities, and a technical argument about the strategic benefits of prevention. We agree with the broad lines of reasoning and advocacy propounded by the ICDSG. However, their approach tends to exaggerate the degree of consensus within the scientific community in order to convince funding agencies that science has come up with a definitive solution.

For instance, the hypothesis of Bowlby (1969) and Ainsworth et al. (1978) that healthy social and emotional functioning depends critically on a secure attachment between infant and mother, which in turn depends on specific

patterns of maternal behaviour, has been challenged on the grounds that responsibility for infant care is variable across societies (Weisner and Gallimore, 1977), and that the sensitivity of a caregiver's behaviour cannot be defined or measured independently of cultural context (e.g. Rothbaum and Morelli, 2005; Keller and Otto, 2009). The negative impact of harsh punishment on children's mental health seems to depend on how normative such punishment is perceived to be (Lansford et al., 2005). Lancy (2007) has argued that in many Majority World societies, the Western patterns of mother-infant play advocated by some ECCE programmes are so inconsistent with local cultural practices and beliefs as to be dysfunctional in those contexts. The same may well be true of patterns of speech addressed to infants, which vary widely across cultures (Schieffelin and Ochs, 1986).

Psychological intervention programmes (educational or therapeutic) must, for both epistemological and ethical reasons, rely on the conscious, voluntary participation of their recipients in the programme. 'The expert paradigm that informs certain clinical interventions with special populations takes the patient out of her normal social context and replaces it with an artificial one, structured to optimize conditions for the amelioration of the patient's condition' (Serpell, 1999a, p. 42). While this may be justifiable in the case of biological processes, such as the chemical treatment of intestinal parasite infection (Grigorenko et al., 2007), when this paradigm is extended to modes of social interaction between children and their adult caregivers, intervention to change the latter's behaviour is likely to disturb the prevailing sociocultural system. To abandon a long-standing traditional practice calls into question the implicit theory that informs it, and may affect interpersonal relationships in the child's family and community, as well as the social distribution of responsibilities for child-rearing.

Psychosocial intervention to optimize the development of young children cannot be operationalized with the same degree of cross-cultural equivalence as a vaccine or breast-feeding. Importing a culturally alien package of cognitive stimulation would only be justifiable if research showed that existing, local stimulation techniques were less supportive of children's development, and such research evidence does not exist. The design of appropriate, effective ECCE services for African societies requires close attention to prevailing sociocultural conditions especially in rural areas, including the strengths and limitations of local child-rearing knowledge, attitudes and practices.

Culture-sensitive methods of assessment

Much of the systematic research on early childhood development in Africa has been hampered by the use of imported measures inadequately adapted to the local context (Greenfield, 1997; Serpell and Haynes, 2004). Most current tests for pre-adolescent children presuppose exposure to Western artefacts such as written texts, pictures, puzzles, building blocks and TV, and practices with adults such as joint storybook reading. Such exposure is quite rare and very unevenly distributed among Africa's children, and is generally absent for those growing up in subsistence agricultural or pastoral communities. However, it is possible to assess the cognitive development of African children in ways that take account of the learning opportunities afforded by their home and play environments. For instance, a test for the assessment of general cognitive ability among children in rural African eco-cultural settings was developed in Zambia. The Panga Munthu Test (literally 'Make a Person' Test) (PMT) invites the child to construct a clay model of a human figure and is scored for the amount of appropriate detail. Zambian norms have been compiled by age and school grade for children aged 7-12 (Kathuria and Serpell, 1998), and the test is also applicable for children aged 4-6 (Ngenda, 2011).

Tests originally developed in the West have been adapted for the assessment of neurocognitive impairment in Kenya (PCD, 2002). Abubakar et al. (2008) have reported evidence of reliability and validity of the Kilifi Developmental Inventory, to assess the progress of children aged 6 to 35 months across developmental milestones of locomotor skills and eye-hand co-ordination. This applied research included perceptions by local adults in determining the validity of test items and the acceptability of assessment procedures. This grounding in the local culture gives providers of ECCE services a powerful foothold from which to collaborate with family members in the design, implementation and monitoring of health and educational interventions for young children at risk for developmental disabilities.

Further research is needed to 'chart the conceptual leap' from indicators to underlying theoretical concepts about human development, and for training programmes to nurture the emergence of 'culture-informed and context-tuned "experts" especially with the nerve and adroitness to dare step out of the Euro Western box to articulate their own or creatively gain from donor-positing guidelines and indicators' (Nsamenang, 2009, p. 119). Valuable groundwork for such psychometric research and development has been provided by the South African Human Sciences Research Council's Indicators Project (Dawes et al., 2007).

African conceptions of child development

Three complementary lines of scholarship have sought to generate knowledge about child development and socialisation rooted in endogenous, African ways of knowing: analysis of traditional proverbs, theory-building, and documentation of parental ethno-theories. The first approach has examined the indigenous formulations of child development and socialisation values embedded in African languages and oral traditions. Several collections of proverbs have been published in different African languages (e.g. Milimo, 1972), and their content has been analysed to show the recurrence of the themes of shared communal responsibility for children's moral guidance and the importance of providing it early in life (Abubakar, 2011).

The African social ontogeny proposed by Nsamenang (1992) is phrased within an eco-cultural perspective, and draws from writings by African scholars in philosophy and the humanities (e.g. Mbiti, 1969; Moumouni, 1968). The theory explains a worldview shared among various ethnic groups, and is grounded in systematic observational research and personal experience of the socialisation practices of the rural Nso people of Cameroon (Nsamenang and Lamb, 1995). The growth of social selfhood takes place in seven phases, each characterized by a developmental task. In the first phase, the naming ceremony projects the kind of socialized being the neonate should become. The major task of this phase is success in social priming: babies are cuddled and teased to smile along with adults; parents and other caregivers offer food items and playthings, and lure them verbally and nonverbally to return the 'gifts' – a prelude towards induction into the 'sharing and exchange norms' that bond the social system. Rabain (1979) and Mtonga (2012) describe similar infant teasing practices among the Wolof of Senegal and among the Chewa and Tumbuka of Zambia. Such interactions are believed to cultivate generosity.

The second phase, 'social apprenticing', roughly corresponds with childhood. Its principal task is to recognize and rehearse social roles that pertain to four hierarchical spheres of life: self, household, network, and public. Adults assign responsibility to preadolescent and adolescent children including the care and socialization of younger children which serves the function of priming the emergence of social responsibility. The priming strategies embedded in indigenous African childcare practices have important implications for the design of culturally appropriate forms of intervention to optimize developmental opportunities for children. In many African communities, far from a form of exploitation, caregiving responsibilities assigned to preadolescents and adolescents are part of 'an indigenous educational strategy that keeps children in contact with existential realities and the

activities of daily life [that] represents the participatory component of social integration' (Nsamenang, 1992, p. 157). A case study in Zambia found that this strategy was successfully integrated into a service-learning programme at a primary school that promoted social responsibility among both girls and boys and generated improved academic performance (Serpell, 2008).

The generalisability of Nsamenang's 'West African' theory across the many different societies in sub-Saharan Africa is debatable. For instance, Levine et al. (1994) describe mother-infant interactions among the Gusii of rural Kenya in the 1950s and 1970s that stands in marked contrast to Nsamenang's description of social priming through cuddling and teasing. Gusii mothers, according to Levine et al., 'are not expected to talk to or gaze at their infants or play with them' (Levine et al., 1994, p. 148), and they explain how this (strange to Western eyes) emotional detachment is compatible with healthy emotional development in later life. Part of their explanation is that the infants receive playful stimulation and emotional support from their elder siblings and other child caregivers. The contrast between these ethnographic accounts serves as a warning that wide variations occur across different ethnocultural groups within the African region (DeLoache and Gottlieb, 2000), and that further detailed research on socialization practices is needed (Marfo, Pence, LeVine and LeVine, 2011).

Several researchers have sought to document through empirical research the implicit ethnotheories held by African parents and other indigenous experts about child development and socialization. Serpell's studies among the Chewa in Zambia were designed to generate an informed account of the system of meanings that define what constitutes intelligence in a rural African community. The rural Chewa perspective that emerged can be summarized as follows: *nzelu* includes both *ku-chenjela* (cognitive alacrity) and *ku-tumikila* (social responsibility) but *ku-chenjela* without *ku-tumikila* is dangerous. Similar ethnotheoretical perspectives have been documented in several other African societies, notably by Dasen et al. (1985) for the Baoule concept of *ng'louele* (Côte d'Ivoire) and by Bissiliat et al. (1967) for the Djerma-Songhai concept of *lakkal* (Mali). In each of these African language groups, a distinction emerges between cognitive alacrity (*ku-chenjela*) and social responsibility (*ku-tumikila*), with a combination of the two a highly valued personality trait (Serpell, 1989).

Extrapolating from this, Serpell (1993) proposed a list of socialisation practices of rural Chewa society that are designed to stimulate, guide or promote the cognitive, moral and social development of children towards culturally cherished goals. Similarly, Barry and Zeitlin (2011) conclude from

their research with mothers of young children in Senegalese villages that ‘a curriculum of endogenous knowledge and practices exists, which essentially relies on learning through orders and observation’ (Barry and Zeitlin, 2011, p. 134). For instance, mothers massaged their 1-2-month-old infants’ limbs, helped their 9-month old infants to walk by holding their hand, assigned their 15-18-month-old toddlers increasingly complex tasks, and sent their 19-25-month-old toddlers on increasingly challenging errands. Ogunnaike and Houser (2003) describe the use of errands as development-promoting socialisation activities for 2-year-olds among low-income Yoruba families in rural, semi-urban and urban Nigerian settings.

African games and songs: neglected resources for the enrichment of ECCE curricula

Another significant feature of the developmental niche described by many researchers on African early childhood is the prominence of elaborate play activities, unsupervised by adults. Marfo and Biersteker (2011) note that while major Western psychological theories attribute to play an important role in child development, this is mainly focused on cognition, whereas anthropological studies in Africa (e.g. Fortes, 1970; Schwartzman, 1978; Lancy, 1996) have emphasised that play also serves as an interactive process of social enculturation, structuring opportunities for the rehearsal, critique and appropriation of cultural practices. The cognitive and social structure of African games has been extensively documented. Music and dance are notably rich dimensions of most African cultures and children participate in both from an early age. Mtonga (2012), for instance, analysed the texts of Chewa and Tumbuka children’s songs and games observed in rural and urban areas of Zambia, highlighting how they reveal ‘reasoning and understanding the psychology of other participants’, and ‘playful and skilful manipulation of certain word-sounds in order to distort meaning, create new concepts, or paint a satirical caricature...’. He also notes that children’s play in these communities is generally inclusive of multiple age groups and of children with physical handicaps.

Yet indigenous games are seldom deployed as resources for enrichment in ECCE programmes in Africa, despite the heavy emphasis on play in the curricula imported from Western preschool orthodoxy. Okwany, Ngutuku and Muhangi (2011) describe a number of recent initiatives in Kenya and

Uganda where a systematic attempt was made to ‘leverage indigenous knowledge for child care’, by deploying local traditional songs, proverbs, and food production, preparation and preservation practices as resources for the enrichment of children’s intellectual, emotional and nutritional development, rather than ‘downgrading’ them in favour of those imported from the West. Unfortunately, as Hyde and Kabiru (2008, p. 82) note, such efforts are relatively rare, and ‘centre-based programmes in Africa tend to be heavily influenced by Western culture and sometimes are not relevant to the needs of children and society’.

Barry and Zeitlin (2011, p. 134) suggest that ‘it is possible to improve and enrich ... “endogenous” practices by adding the knowledge and products of modern science’, contending that ‘parents must learn how to add frequent spoken language, verbal explanations, and verbal discipline to the old methods of physical demonstrations and commands that prepare children for their social and economic roles.’ However, these authors acknowledge that their attempts to promote these new practices through ‘Trials of Improved Practices’ encountered some resistance. ‘Mothers of 0-2 month-olds told researchers that the family ridiculed them so much when they talked to the newborn infant that they couldn’t continue’ (Barry and Zeitlin, 2011, p. 132). And ‘all but the most educated members of the population were found to refuse to teach their children the names of objects outside of the context of commands even if they understood the importance of teaching vocabulary’ (Barry and Zeitlin, 2011, p. 133). Thus a challenging topic for future systematic inquiry is to investigate whether current child-rearing practices of middle-class, cosmopolitan Western families are (a) superior in effectiveness to traditional practices of rural African communities, and (b) transposable into low-income African communities without detrimental impact on the local sociocultural system of child socialisation.

Relatively little research is available on the emotional dimensions of African child development. Kithakye and her colleagues (2010) have explored the applicability of contemporary Western theory and assessment to the behaviour and experience of children growing up in a low-income neighbourhood of Kenya’s capital city, Nairobi. These researchers make a compelling case for the relevance of emotional flexibility to the patterning of behaviour among children in that environment. But further research is needed to establish the receptiveness of local parents and teachers to interventions grounded in this theoretical perspective from Western psychology (Eisenberg et al., 2007).

Child-to-Child: an African educational strategy

Despite robust efforts by African governments over recent decades to broaden access to schooling, the structure of formal educational provision in most countries requires most of those who start out in Grade 1 to 'drop out' long before completion of the full 12-year curriculum. Thus the process of formal education is perceived by teachers, parents and pupils alike as one in which students are challenged to climb up a narrowing staircase (Serpell, 1999b). Dropping out at earlier stages is perceived as failure, and the individual's return to the community a source of disappointment. The experience of a few years of schooling is not generally perceived as adding value to the individual's productive capacity within the community. Thus, the purpose of schooling is widely understood as extractive recruitment of the best and brightest individuals out of the community into a higher, powerful, elite social stratum. A number of different ways of focusing education have been proposed in search of alternatives to the narrowing staircase model, including apprenticeship, life-long learning, school production units, health education, and the Child-to-Child approach (CtC).

CtC is designed to mobilise children as agents of health education (Pridmore and Stephens, 2000). It differs from the narrowing staircase model by focusing on the promotion of social responsibility in pre-adolescent children, an educational goal that resonates with the Chewa concept of *nzelu*. The widespread African practice of entrusting preadolescent children with the care of younger siblings was a major inspiration for the original proponents of CtC, which has been applied in more than 80 countries worldwide (CtC Trust, n.d.). A case study was conducted of integrative curriculum development by a group of Zambian primary school teachers using the CtC approach (Serpell, 2008). The insight that pre-adolescent children can take on responsibility as agents of infant care and nurture, within the context of primary health care and progressive social change, was re-appropriated by the African teachers at this school as a way of incorporating traditional cultural practices into the formal educational process. Striking long-term benefits were claimed by the graduates of the school's CtC curriculum, including a growth of egalitarian relations between the genders, even within adult marriages (Serpell et al., 2011).

Culture-sensitive ECCE programming for rural African communities

The research we have reviewed has implications for the design of interventions to protect, support and promote the optimal development of young African children, especially the majority who are raised within extended families in rural communities that depend on subsistence agriculture and use one or more of the continent's indigenous languages for everyday communication. ECCE programming should focus on local strengths as well as challenges. The use of exogenous tests often gives rise to underestimates of a child's capabilities. Exploratory research and development are needed to identify locally appropriate methods of developmental assessment. Rather than seeking to promote 'homogenization of the world around Euro-American developmental values and educational models' (Marfo, 2011), we recommend that priority be given in ECCE curriculum development and practitioner education to explaining and celebrating the cognitive, social and emotional power of African games, music and dance. ECCE programmes in rural African communities should not rely on separating young children from their pre-adolescent elder siblings and peers and placing them under the exclusive care of adults. ECCE practitioners should be oriented to the potential of the Child-to-Child approach. For everyday discourse about the behaviour of young children, most African parents, especially in rural communities, rely on indigenous languages, rather than the exogenous languages that dominate the formal school curriculum and the Koranic curriculum of the madrassas. Using locally familiar languages serves to connect the practitioners of ECCE with their young charges' home community in ways that afford the construction of bridges of cross-cultural compatibility (Jordan, 1985).

Inclusion of most vulnerable children within ECCE programmes is not only morally imperative. These are the children for whom a felt need for intervention will be most readily acknowledged by members of the local community. Public policy in African societies should affirm and protect the rights of these children to inclusion in ECCE, and funding formulas should include positive discrimination in favour of them, with targeted subsidies from the public authorities responsible for quality assurance, licensing and oversight.

Implementation of our recommendations will face considerable economic, political and institutional challenges. Many of these arise from the endurance of Western cultural hegemony in the publication and training practices of the international community of research and higher education.

Effective advocacy for evidence-based decision-making can be supported by demonstration projects that:

- incorporate and adapt indigenous cultural resources in ECCE (e.g. Mwaura and Marfo, 2011; Newman, 2007);
- include cultural relevance among the criteria applied by accreditation bodies for approval of ECCE services, institutions and training programmes (Mavimbela, 2001);
- integrate African cultural resources into teaching resources for higher education in Africa;
- create higher education curricula that bridge orthodox western higher educational practices and the demands of an African sociocultural context;
- institutionalize child development research at African universities (Marfo and Pence, 2011).

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Chapter 13

Curricula in early childhood care and education

Glen Palmer

Introduction

The patterns and routines of daily life provide an authentic curriculum for young children around the world. Whether the context be a rich village life, an urban environment or an impoverished settlement, through participating in and observing activities and relationships around them, young children learn the necessary values, skills and knowledge. However, globalisation is changing those contexts. Populations have become more diversified and urbanised and technology has brought the outside world into even the most remote communities. Becoming a competent adult in this changing world requires additional skills and knowledge. For this reason school learning has become increasingly important and, with it, a greater emphasis on learning and development prior to school.

It is important that the curricula of programmes introduced to children in these early years complement rather than replace curricula provided by family and community. As Ikupu and Glover comment in reference to Papua New Guinea ‘...the future can be much brighter (for children), provided that education and care services build on what communities are already achieving with their young children’ (Ikupu and Glover, 2004, p. 17). This chapter explores some of the key issues and challenges in developing and implementing early childhood curriculum, while at the same time retaining this critical focus.

A question of quality

There is overwhelming evidence of the lasting benefits of high quality ECCE programmes, especially for vulnerable and disadvantaged children (UNESCO, 2006, 2011a, 2012; OECD, 2006; NAEYC and NAECS/SDE, 2003). While much of the evidence comes from large-scale U.S. programmes such as the High/Scope Perry Pre-school Programme and Head Start, positive results have also been emerging from programmes in low-resource countries (Engle, 2009; The World Bank, 2011; Yanez, 2011a; UNESCO, 2011a). ‘These studies demonstrate that the most effective interventions were comprehensive (health, nutrition and development); targeted younger and disadvantaged children; and were of longer duration, greater intensity, and higher quality’ (Engle, 2009, p. 18).

Spurred on by the Dakar Framework for Action on Education for All (EFA), adopted in 2000, the message about the importance and potential of ECCE has been spreading throughout the world. The promise that high quality ECCE programmes can have national benefits is very appealing and is a compelling argument for promoting ECCE. However, the rhetoric has not always been matched by public investment in ECCE, often resulting in an expansion of programmes and increasing enrolments with little attention to quality.

As Woodhead (2009, p. 40) comments: 'A huge gulf exists between highly publicised, high-quality programmes and the much larger number of less visible, in some cases barely "good enough" programmes experienced by millions of children, especially in resource-poor countries'. While quality is a relative concept (Dahlberg et al., 2007; Tobin 2007) without attention to quality in ECCE programmes, '...we will not close the gap in child outcomes between the more and less disadvantaged' (Britto et al., 2011).

Therefore ensuring quality is an essential component of public investment in early childhood programmes. While this may seem unattainable for many resource-poor countries, evidence suggests that effective programmes can exist in many diverse circumstances when there is commitment, collaboration and action at all levels from government ministries, governmental and non-governmental organizations, teachers, tertiary institutions, parents and communities.

Curricula and quality

The curriculum is a driving force behind any ECCE programme. It is 'an integral part of the engine that, together with the energy and motivation of staff, provides the momentum that makes programmes live' (Epstein et al., 1995, p. 114). It follows therefore that the quality of a programme is greatly influenced by the quality of its curriculum. In early childhood, these may be programmes for children or parents, including health and nutrition interventions and prenatal programmes, as well as centre-based programmes for children. In all cases, the curriculum should identify desirable goals and provide a plan or guideline for how they might be met.

In developing nations, programmes for children under three are more likely to be embedded in community-based programmes in which parents are endorsed as the primary teachers of young children and given support to fulfil that role. These programmes generally cater for ages from pre-birth

to school entry with the curriculum having goals for both parents and children. They are often accompanied by a training manual and delivered through participatory workshops and other negotiated and community-based activities (see for example, UNESCO 2011b, 2011 c). Apart from strengthening the role of parents, these programmes respond to gaps that have persisted in the developing world despite global attention to ECCE; i.e. a focus on under threes and servicing the most marginalised children and families. While some incorporate weekly activities for older pre-school children – such as A New Day for Kids (ANDK) in Cambodia (Malkin, 2011) – they are not a substitute for a pre-school programme with a trained teacher who has the skills to plan and implement an effective curriculum. This is an important ingredient in high-quality ECCE programmes for pre-school-aged children.

Curricula for pre-school children have long been a hotbed for debate. Much of this revolves around content and pedagogy; the extent to which academic content should be included in the curriculum and whether formal instruction or child-initiated exploration, supported by adults, is more effective (Katz, 1999). Proponents of an academic curriculum are likely to favour a focus on basic skills, especially literacy and numeracy, and structured pre-determined activities for achieving related goals. Internationally, there is strong opposition to this type of ECCE curriculum and defence of a broad-based curriculum that supports a child's overall development including health and physical development, emotional and spiritual well-being, social competence, intellectual development and communication skills (Bennett, 2004). The type of document that emerges from this perspective is likely to be more open, offering a framework which teachers and parents can use to develop curricula specific to their contexts.

This approach, while desirable, presents a dilemma for curriculum designers in countries where staff have limited training. National frameworks are particularly important in these situations. The challenge is to provide a national framework with sufficient detail to guide practice and ensure some level of quality across the country, while enabling teachers to retain a sense of ownership of the curriculum. Ideally, teachers should be able to work within the framework and develop their own curricula, relevant to their contexts and children.

Curriculum approaches

There is no single curriculum that is 'best' for all situations. However, a comparison of different curricula shows certain approaches to be generally more effective than others. For example, High/Scope conducted longitudinal research of children in programmes using three different curriculum models:

- The Direct Instruction model, in which teachers initiated activities using academic goals.
- The traditional Nursery School model, in which teachers responded to activities that children initiated, with a minimum of structure.
- The High/Scope model, in which teachers and children both initiated activities. Teachers arranged the room and the daily routine so that children could plan, do and review their activities, while teachers provided support as needed.

By following the pathways over many years of children who began all three programmes, Schweinhart and Weikart (1997) determined that the High/Scope model was most effective, and that children in the Direct Instruction model were most likely to have behaviour and social problems later in life. These are significant findings for curriculum designers in both developed and developing nations as the High/Scope model has been adapted for use in countries around the world. Schweinhart and Weikart concluded that the goals of early education should not be limited to academic preparation for school, but should also include helping children learn to make decisions, solve problems and get along with others.

The National Association for the Education of Young Children (NAEYC) has also identified the following indicators of effective curricula (NAEYC and NAECS/SDE, 2003):

- Children are active and engaged
- Goals are clear and shared by all
- Evidence-based
- Valued content is learned through investigation, play and focused, intentional teaching
- Builds on prior learning and experiences
- Comprehensive
- Professional standards validate the curriculum's subject matter
- The curriculum is likely to benefit children

Young children have an enormous capacity for learning. We want to keep alive their joy of learning, their curiosity and their enthusiastic way of engaging with the world around them. A well-developed, developmentally-appropriate curriculum can do this, but it must also be built on strong and meaningful foundations including the positive practices of parents and communities. In this way children's learning and development are enhanced, and parents also become part of the journey.

Curriculum development and implementation: key issues and challenges

A cross-sector approach

Comprehensive programmes addressing health, nutrition and development have proven to be the most effective in early childhood, especially in programmes directed at very young and vulnerable children (UNESCO, 2012; Engle, 2009). This requires a genuine commitment from agencies and individuals to work together, to plan projects collaboratively, and to involve parents and communities. At the same time, coordination of a project generally rests with one sector. For curricula, this is typically education, although for very young children the health sector may be better positioned. Yanez (2011) comments that a major finding of the Bernard van Leer Foundation is that learning during the first three years should not be the exclusive domain of the education sector. 'While all sectors must work together, the primary responsibility should be on the health sector, which is better positioned to reach and adapt to the vulnerability of target populations' (Yanes, 2011, p. 3).

A cross-sector approach is not without challenges. Divergent expectations of key stakeholders, competing demands on their time, lack of trust, inexperience with ECCE and lack of prior experience in working across sectors can demand immense efforts to build a workable platform for collaboration.

Nevertheless, once diverse stakeholders meet to share a common goal, inter-sectoral barriers can be broken and communication channels opened. For example, through the Fiji Education Sector Programme (FESP), kindergarten teachers began to network with health and other community workers, inviting them into their centres and sharing community workshops with them. These teachers, many of whom were isolated geographically and professionally, gained support and additional resources from working with

other community service providers, and their curriculum was enhanced to the benefit of all, especially children and families.

Widening the base of participants in curricula development allows for different perspectives on issues and encourages discourse. In addition, a cross-sector approach strengthens the sustainability of a programme. Increased understanding about young children and their development, and commitment from a wide group of people, including parents and those with status (e.g. religious leaders and village chiefs) is an investment in the continuity of a project and its outcomes.

Adapt or develop?

Considerable expertise is required to develop an effective curriculum, one that is not just a collection of activities, but also addresses philosophical and pedagogical concerns. Stakeholders need to consider at the outset if they have the requisite expertise, or the means to acquire it, as well as the financial resources to support the development of a curriculum. Unless those developing the curriculum 'are fully versed in what constitutes a curriculum, you are likely to end up with bits and pieces that may or may not come together to create a whole curriculum' (Evans et al., 2000, p. 202).

Adapting a proven, commercially-available curriculum can be an acceptable option. However, the philosophy, values and approaches of that curriculum must be suited to the children served by the programme. 'To make a well-informed choice, staff (and other stakeholders) need to identify their program's mission and values, consider the research and other evidence about high-quality programs and curricula, and select a curriculum based on these understandings' (NAEYC and NAECS/SDE, 2003, p. 8). Even then, the selected curriculum is likely to require extensive modifications if it is to be effective in the new context. With reference to Hong Kong, Singapore and Shenzhen pre-schools, Li et al. (2012, p. 618) caution that: 'using Euro-American norms to unify the learning of young children under varying contexts is absolutely an impossible mission. Best pedagogies could be adapted or assimilated into another society but could never be directly transplanted'.

In the Pacific region, the New Zealand curriculum, Te Whariki (Ministry of Education New Zealand, 2006) has been a successful model for several island nations, including the Cook Islands, Vanuatu and the Solomon Islands. At the same time, each has developed a curriculum unique to its particular context. For example, the early childhood policy in the Solomon Islands emphasises

the use of vernacular languages in the pre-school, and this is reflected in its curriculum, Valuim smol pikinini blong iumi (Ministry of Education and Human Resource Development, 2009; Glasgow et al., 2011). The early childhood curriculum is thus being seen in the Pacific region as a way of strengthening and supporting local languages and cultures.

Beliefs, values and principles

It is important that those responsible for the curriculum articulate values and beliefs relevant to their nation. These will include beliefs and understanding about children, their care, development and learning. It is equally important that they challenge values and beliefs that are inconsistent with human rights and the common good.

A good starting point is to ask 'What do you want for your children and your nation?' This question can engage people at all levels allowing values and different perspectives to emerge. Revisiting this periodically is beneficial to help people refine their thinking. Responses can be encapsulated in a vision statement which is usually placed at the beginning of a curriculum document (see example below).

Our vision

That the children of Fiji develop into healthy, happy and responsible individuals, with reverence for God. We want them to have a strong sense of identity, appreciate their own as well as others' cultures, have respect for the environment, and become lifelong learners who will contribute to the peace and prosperity of our nation, Fiji.

This statement appears in three languages (Fijian, Hindi and English) at the beginning of Na Noda Mataniciva: Kindergarten Curriculum Guidelines for the Fiji Islands (Ministry of Education, 2009a)

In a multicultural society we can expect a diversity of beliefs, values and perspectives to emerge. This can create considerable tension and introduce many challenges for curriculum writers. Foremost amongst these is the tension between perceptions of young children as passive learners, dependent on adults for instruction, and perceptions of children as active constructors of their own learning (Katz, 2009). Proponents of the former generally favour a more academic and prescriptive pre-school curriculum with formal teaching of the alphabet and other basic skills, while those supporting a

'constructivist' approach encourage children's active engagement with materials and people; they support a more open curriculum, with emphasis on offering children diverse opportunities and materials from which they can construct their own learning.

This debate is played out in practice across the Asia Pacific region as governments and training institutions strive to introduce constructivist approaches into systems that have been driven for decades by perceptions of the teacher as all-knowing and the learner as passive. This is usually a legacy of colonialism, but can also be rooted in cultural practices and images of children. It is being tackled head-on in some emerging nations. For instance, in Timor-Leste (East Timor) the government is encouraging new ways of teaching and learning even in the face of some stakeholders who still hold a passive view of learners.

Space can be created in curricula to honour and reflect divergent stakeholder views. For example, children in most indigenous and oral communities learn a lot by listening and watching, and by direct instruction. The skills of reciting, performing and memorisation may be valued and emphasised within some social groups and countries. These can be acknowledged and nurtured within a curriculum, even in one that promotes child-centred, interactive and play-based teaching and learning.

At the national level, the onus is on curriculum writers and the team to explore diversity, to identify common ground and to reach a consensus on what is in the best interests of all children. At the community level, educators need the freedom to follow individual pathways while striving to meet goals based on societal norms and values (Oberhuemer, 2005).

Staff and training issues

Ongoing training and professional development are essential if teachers are to implement a curriculum effectively. In the case of kindergarten curriculum, professional development needs to be extended to principals and teachers in the school sector to ensure a shared understanding of kindergarten pedagogy and practice, and thus provide continuity for children's learning as they make the transition to school. Parent and community workshops are also vital for shared understanding and ongoing support for learning and development.

Close links between curriculum teams and ECCE professionals in tertiary institutions, as seen in the Pacific Island nations of Fiji and the Solomon Islands, can greatly facilitate curriculum implementation. Tertiary institutions can ensure that new graduates join practice with a solid knowledge of the curriculum, and with the skills and confidence to promote new directions in teaching and learning. They are also well placed to conduct in-service training through workshops, conferences and distance education courses.

Ages to be addressed by the curriculum

Well-resourced countries have moved, or are moving, towards developing ECCE curricula that cover all children from birth to either school entry or age 8; for example, The Early Years Learning Framework for Australia (Commonwealth of Australia, 2009) and Te Whariki, the New Zealand Early Childhood Curriculum (Ministry of Education New Zealand, 1996). This approach is desirable as it has the potential to unite early childhood services which are typically fragmented. However, focusing the curriculum on a given age range, say 0-3 or 3-school entry, and encouraging a cross-sector approach, as discussed above, may be more realistic in some countries.

Regardless of the age range addressed, it is desirable that the curriculum, or modified versions of it, can be used in various types of programmes – pre-school, child care, play groups and so on.

Content and organization

Early childhood curriculum designers have some hard decisions to make about content. It needs to strike the delicate balance between being accessible to diverse stakeholders and encompassing a diversity of cultures and contexts while detailed enough to guide teachers of all levels of training and experience.

Apart from statements on beliefs and principles and general information, the curriculum should have an outline of expectations for children's learning and development, often called outcomes, and pedagogical guidelines that suggest the processes through which children can achieve the outcomes. Teachers may want considerable help with this, but extensive learning experiences are best contained in a separate resource book or in other supplementary materials. Ultimately, a curriculum is intended to guide practitioners. However, quality should not be compromised in order to simplify the curriculum because of teachers' limited training or low

literacy. Instead, curricula should actually impel better and more relevant training of diverse professionals involved in its design, development and implementation.

Standards and outcomes

With increasing knowledge about early learning has come pressure to identify what pre-school children should be learning. This has led to a focus on standards and accountability.

While setting specific goals and assessment has long been taboo in ECCE programmes, lessons from Head Start show that defining standards and monitoring are crucial in producing effective programmes (Yanez, 2011, p. 3). This finding is being widely heeded. However, recognising that standards are not universal (Tobin, 2007), many countries have begun developing their own. In 2002, UNICEF and Columbia University initiated the Going Global with Early Learning and Development Standards project in six countries: Brazil, Ghana, Jordan, Paraguay, Philippines and South Africa. In 2006 the project was extended to a number of other countries in the Asia-Pacific region: Cambodia, China, Fiji, Lao PDR, Mongolia, Thailand and Viet Nam (Miyahara and Meyers, 2008). Since then, several other countries in the region have been active in determining country-specific Early Learning and Development Standards (ELDS) for their young children. A further project is underway to develop an index of standards that might be applicable to all countries in the region. Given the diversity within any one country, it remains to be seen whether or not this is feasible.

Standards provide a basis for setting goals or outcomes for children. For example, in Vanuatu, ELDS were developed, validated, and then used to develop a curriculum that was published in both French and Bislama, a local Creole language. In Fiji, ELDS and the pre-school curriculum were being developed simultaneously, and tended to feed off each other.

A curriculum based on standards (often called outcomes in this context) should help educators identify and define goals; it also ensures greater accountability. However, this presents a potential dilemma for early childhood curriculum writers intent on preserving the unique integrated, holistic, play-based features of early childhood curriculum. In providing expectations for learning and development it is critical not to lose sight of the fact that young children learn largely through play and exploration, and that their learning is

integrated, not segmented into subject areas (Palmer, 2008). 'Providing play, exploration, and active learning opportunities and recognising the value in daily routines and the importance of caring adults as guides and observers are still the best ways to teach young children' (Gronlund, 2006, p. 16).

A further issue arises over the validation of standards or outcomes for early learning and development. Some of the ELDS projects in the Pacific have had a validation component built into them. This is a rigorous process and requires considerable professional as well as community input.

Standards/outcomes can positively affect pre-school teaching and learning. They can enable teachers to offer a richer, more purposeful and comprehensive curriculum, and to have realistic expectations for children's learning and development. They can focus attention on what individual or groups of children need to learn or develop, leading to more thoughtful suggestions for experiences that might help them achieve those outcomes.

The rigour that has entered ECCE curriculum is not intended to support prescriptive curricula, nor replace play-based or child-centred learning. Rather it is intended to give purpose to the curriculum and to the learning experiences that teachers offer children. However, as Meisels (cited in NAEYC and NAECS/SDE, 2003, p. 4) comments, it can backfire:

In response to expectations that all programmes should have a formal or explicit curriculum, programs sometimes adopt curricula that are of poor quality; align poorly with children's age, culture, home language and other characteristics; or focus on unimportant, intellectually shallow content. In other cases, a curriculum may be well designed but may be implemented with teaching practices ill-suited to young children's characteristics and capacities.

It is probable that in the past many teachers have focused on activities. Using outcomes requires them to focus primarily on goals for children's learning and development, and then to design experiences to help them achieve those goals. If outcomes are the destinations, educators must use their knowledge, imagination and resources to create pathways for children to reach them. In this way, teachers retain control of curricula and can develop them to respond to the diversity of their particular communities.

Assessment

Assessment is an integral part of curricula. ‘Curriculum is the plan for enabling children to reach desired outcomes; assessment is the process of looking at children’s progress towards those outcomes’ (Copple and Bredekamp, 2006, p. 47). Using the term ‘assessment’ can cause considerable tension amongst ECCE educators with a western perspective. While most are familiar with the process of observing children and using this information for planning, many associate ‘assessment’ with formal testing, a process widely considered as inappropriate for use with young children.

Nevertheless, testing is a common feature in many societies, including those, such as China, with a Confucian heritage (Li et al., 2012). Countries and schools that support a teacher-directed approach are likely to encourage testing of even very young children. In these situations, pre-school children may be interviewed and tested prior to school entry and may be offered or denied access on the basis of their results (Palmer, 2008). Grade 1 teachers and parents may also expect children to enter school competent in a narrow range of skills related to literacy and numeracy. Expectations for children’s social and emotional readiness for school may be given little consideration. The following example was provided during interviews for the kindergarten curriculum guidelines in Fiji (Ministry of Education, 2009a, p. 122):

My granddaughter was looking forward to going to school after kindergarten. Her parents had applied for a place and were asked to take her for an interview. Two weeks later the parents went to school to check her interview result. The head teacher’s reply was that she did not get through. Her parents asked for the reasons and were told that she could not shape her letters and numbers. The head teacher also added that my granddaughter could not put the alphabet and numbers in order. She jumbled both her letters and numbers when writing.

Talking a common language is a positive way forward in difficult situations. Engaging with the term ‘assessment’ can help ECCE educators show that they do assess children although perhaps not in a formal sense. It can allow them to articulate the importance of comprehensive assessment and the contribution of all domains of development to long-term well-being. When assessment is conceived too narrowly, it can undermine children’s self-confidence and their eagerness to learn.

To support teachers, curriculum designers need to include information on assessment, as well as some guidelines for helping teachers identify children's progress on the outcomes. Indicators of what children might do to show their progress on achieving an outcome can also be included, together with examples of how staff can record the information. It takes professionally-trained teachers years to become competent in these procedures. Expectations for staff with minimal training must be realistic and ongoing professional development provided.

Sharing this information with parents is highly desirable. It strengthens relationships and builds a deeper understanding of how their young children are learning and developing.

Continuity of curriculum in ECCE services and schools

Even children who have participated in high quality ECCE programmes may have difficulty as they make the transition to school. Limited understanding about child development, learning and curriculum means that many Grade 1 teachers use inappropriate curricula and pedagogy with young children. There is evidence of children from some countries dropping out within the first two years of school or having to repeat classes (Arnold et al., 2006). While there are various reasons for this, more continuity between the pre-school and school, and their respective curricula, can go a long way towards easing this unfortunate attrition.

The use of outcomes by pre-school teachers can bridge this gulf. If these are comprehensive, they can focus on all aspects of a child's learning and development, including intellectual development and related academic skills. In this way children develop the foundation skills necessary for successful school learning, including important social and learning behaviours. Grade 1 teachers for their part can provide a curriculum that builds on children's earlier learning, including their first language, sets realistic expectations or outcomes for learning at this stage and incorporates an early childhood pedagogy. This is particularly important for children who have not attended pre-school before enrolling in primary school. While attending pre-school for at least a year is strongly recommended, the reality is that for many of the poorest and most disadvantaged children, this is still not possible. Strategies need to be put in place to support these children as they make the transition from home to school. For example, in Cambodia, Grade 1 teachers in some schools provide children with a modified pre-school curriculum in the first two months of school (UNESCO, 2012). Other

countries are using the Getting Ready for School programme which uses a Child-to-Child approach. It involves a series of interactive learning games and activities which focus on early numeracy and literacy for children 5-6 years of age. The activities are designed to be used by children in Grades 5 and 6 of primary school who facilitate weekly group sessions for the pre-school children over a period of 35 weeks. The programme was initiated in 2007 by UNICEF and the Child to Child Trust from the United Kingdom and piloted in six countries – Bangladesh, China, Democratic Republic of the Congo, Ethiopia, Tajikistan, and Yemen. Its success has led to its adoption by other countries, such as Timor-Leste, where it is currently being trialled (UNICEF and Open Society Foundations, 2011).

The processes used while developing an ECCE curriculum can go a long way towards breaking down barriers between schools and ECCE services. In Fiji there was a concerted effort to involve head teachers and Grade 1 teachers in all curriculum workshops; trainers were also drawn from both the ECCE and school sectors. As a result, greater understanding and respect grew between teachers in both sectors and a more continuous curriculum for children evolved. Many Grade 1 teachers are now using the pre-school curriculum guidelines in their classrooms.

Resources

A curriculum for young children relies heavily on having a variety of materials that children can manipulate and investigate and on interactions with caring people who can extend their learning. For optimum impact, the materials and interactions need to be appropriate for the ages, developmental levels, cultures and abilities of all the children in the programme.

These requirements present challenges for planning and implementing an ECCE curriculum in many nations but they are not insurmountable. In general, ECCE services should be suited to the resources available in their specific contexts. What children in less endowed contexts do not have in commercial learning materials, they often have in their natural environments. Using these materials, teachers and the community can work together to create numerous resources for young children of all ages.

Having to be resourceful can enhance the creativity of ECCE teachers. Even if commercial materials are available, they are best supplemented by locally-made resources which parents can reproduce at home for their children.

A further challenge pertains to human resources. While child-adult ratios vary across countries and with different ages and programmes, a sufficient number of adults need to be present if children are to experience the interactions characteristic of a high-quality early childhood programme. Although some children may do well in classrooms with large numbers (Li et al., 2012), this is not usually the case for children from low-income, disadvantaged or second-language backgrounds who need smaller classes and more individual attention (Bennett, 2007). Improving the adult-child ratio is generally feasible by harnessing the help of parents and community members. With support, they can be encouraged to get involved and thereby enhance both their children's learning and their own.

Conclusion

Any country can produce ECCE curricula of world standards but implementation is likely to be challenging unless considerable attention is given to training and professional development of staff. Tertiary institutions can play an important role in this, through both pre-service and in-service courses. However, they and other stakeholders require strong government ECCE policy to carry out their roles fully.

Those who embark on the curriculum journey must decide at the outset if they have the resources to develop a curriculum 'from scratch'. Adapting a proven curriculum may be a better option, but only if the underpinning philosophy and pedagogy are consistent with their beliefs, values and principles.

While using a cross-sector approach may slow the progress of a project, it is invaluable. This is well supported by research showing that the most effective ECCE programmes incorporate health, nutrition and learning. This approach also ensures greater communication with communities and their involvement in the process of curriculum development. Not least of all are the partnerships formed between ECCE educators and those in the school system. Nations can enhance children's successful transition to school through these partnerships.

Whether the curriculum is for adults or children it should include clear statements about the beliefs and principles that underpin it; it should outline expectations or outcomes for learning and development, identify how those outcomes can be met, and describe how educators can determine learners' progress towards those outcomes.

Although circumstances vary from country to country, it is hoped that the issues that have emerged in this chapter provide some useful insights for those embarking on a curriculum development project. The process of developing a curriculum is a powerful learning experience with positive outcomes for all those involved.

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Chapter 14

Institutional frameworks and governance for early childhood systems: multisectoral coordination and integration

Emily Vargas-Barón

Introduction

Institutional frameworks, policies and governance processes for national early childhood care and education (ECCE) are necessarily complex.¹ This is due to the multisectoral nature of national ECCE policies and systems of services, and to the types of sectoral institutions into which they are embedded.

This chapter draws upon recent studies and the author's experiences in policy planning, systems development and research that seek to improve and expand holistic ECCE services. Despite the challenges entailed in achieving the level of multisectoral coordination and integration required to develop effective ECCE systems and services, some countries have made significant progress at national, provincial and municipal levels. A few examples of good practice from selected countries are highlighted, with a focus on policy planning, advocacy, institutional structures, systemic dimensions and coordination roles. Some recommendations are offered for improving ECCE institutional frameworks and governance through promoting better ECCE multisectoral coordination, and where feasible, service integration.

This chapter:

- introduces core concepts and definitions regarding ECCE governance and multisectoral coordination and integration;
- identifies and addresses challenges entailed in multisectoral coordination and service integration;
- presents some relevant experiences in policy planning and systems development;
- considers options for structuring ECCE multisectoral coordination and integration; and
- offers recommendations for developing strong ECCE systems.

1 Consistent with UNESCO's terminology, Early Childhood Care and Education (ECCE) is used in this chapter. Its usage recognizes that different countries, institutions and stakeholders use other terms, such as early childhood development (ECD), early childhood education (ECE), and early childhood care and development (ECCD) (Choi, 2002).

ECCE policies and services are multisectoral because to attain holistic child development, each child's health, nutrition, hygiene, development, education and protection must be given full attention from pre-conception to transition to primary school. Therefore, ECCE requires the full participation of health, nutrition, sanitation, education and protection sectors. At a minimum, ministries of health, education and protection must be fully involved in ensuring that comprehensive, continuous and well-coordinated services support child and family development.

ECCE 'governance' refers to policies, organizational structures, decision-making processes and services to achieve national goals for the expansion, equity, access, quality and accountability of ECCE systems. Multisectoral coordination and integration are key aspects of all successful ECCE systems.

Multisectoral coordination and integrated services

Tangible differences exist between sectoral services, multisectoral coordination and services, and integrated services. This section reviews some of their main attributes.

Multisectoral coordination and services

Some observers believe that it is exceedingly difficult, if not impossible, to establish effective multisectoral institutional coordination and governance for ECCE. However, in addition to separate sectoral services, multisectoral coordination is being used successfully in a growing number of countries because it is required to provide services for holistic early childhood development. Several countries have established effective multisectoral coordination systems including Belarus, Bosnia and Herzegovina, Brazil, Chile, Colombia, Estonia, India, Latvia, Lesotho, Lithuania, Mexico, Myanmar, Nepal, Philippines, Russian Federation, Rwanda, Senegal, Singapore and others.

Some ministries are structured for multisectorality. In some countries, health and protection ministries are combined, thereby facilitating coordination and services for health and child protection. Examples of such arrangements include: the U.S. Department of Health and Human Services, the Ministry of

Health and Social Protection of Republika Srpska (Bosnia and Herzegovina), Colombia's Ministry of Health and Social Protection, Georgia's Ministry of Health, Labour and Social Affairs, India's Ministry of Health and Family Welfare, and others. Also, protection ministries often have mandates for multisectoral service coordination and integration, due especially to their role in implementing the Convention on the Rights of the Child and other international instruments.

Although education ministries are coupled occasionally with sports, culture, science and/or technology, they are rarely combined with health or protection ministries. Briefly, in the 1930s and 1940s, Brazil established a Ministry of Education and Health. No other example of a combined health and education ministry could be found.

Thus, purposeful efforts must be made to build strong cooperative and formal relationships among ECCE ministries. Without such coordination, these ministries will lack a common vision for developing ECCE systems, will rarely coordinate their services, will often engage in an unnecessary duplication of services, and will compete rather than collaborate for budgetary resources to serve young children and families.

Multisectoral ECCE approaches are essential to create a continuous and coordinated system of services for pregnant women, young children and parents. Other sectors, such as finance, planning, rural and/or urban development, culture, justice and gender, are often involved, depending upon each country's array of ministries, institutional cultures, salient needs and demands for services, as well as the historical development of their ECCE services. All of these ministries must be invited to participate in policy planning and in establishing multisectoral structures for early childhood development.

Multisectoral coordination can occur at any level in a country. It may be found at only one level (national), at some levels (national and local), or at all levels (national, regional/provincial, district, township/county and community levels).

Multisectoral ECCE systems usually use both informal and formal systems of coordination and a variety of institutional and governance structures. Informal multisectoral coordination usually depends upon personalities and friendship networks and it tends to be impermanent. Formal multisectoral coordination features signed interagency agreements to collaborate on activities, such as conducting joint planning, services, referrals, and monitoring and evaluation activities.

However, most multisectoral programmes and services are not integrated. Rather they are separate sectoral services that are juxtaposed and interrelated through intersectoral agreements, partnerships and/or networks.

The *Zones de convergencia* (Convergence Zones) of Cameroon, led by the Ministry of Planning, is an example of a multisectoral system of public and non-public services in each community. Services are planned at the national level, guided and managed at the provincial level, and through training, adapted to fit community needs and capacities. Formal agreements are signed with each community and service. Whenever a family participates in one of five sectoral services (such as parent education or preschool education), it is always referred to the other four services (nutritional support, health care, sanitation and birth registration/child protection). A Community Committee monitors, evaluates, oversees and reports on joint activities but it does not manage the separate sectoral services. This approach can be successful in situations with strong national and/or provincial leadership for multisectoral coordination and where enough local services exist.

Integrated ECCE services

Integrated ECCE services unite resources and personnel from several sectors into a single programme managed by one administrative unit. They usually create a synergy that helps to ensure vulnerable children receive essential services. Integrated ECCE programmes often provide comprehensive, continuous, culturally and linguistically appropriate services for education, health, nutrition, sanitation and protection that help to achieve holistic child development.

Integrated services are configured in many ways. Specialists, paraprofessionals and/or volunteers are trained using the contents and methods of several sectors or fields. They become 'polyvalent' service providers who offer a wide range of ECCE services. Programme examples include: *Hogares comunitarios* (Community Homes) of the Colombian Institute of Family Welfare (ICBF), Colombia; *Madres guías* (Mother Guides), Child Fund, Honduras; and *Educa a tu hijo* (Teach Your Child), Cuba. These programmes include curricula, educational materials and methods from several sectors, and they collaborate with several ministries and other community services.

Another integrated approach to increasing access and improving service quality features a clustering of sectoral services into one site under one management body that conducts cross-training, pools budgets, and provides

'one-stop services'. Examples of this approach include: the *Integrated ECD Centres* sponsored by ministries of education, health and social protection of Republika Srpska and the Federation of Bosnia and Herzegovina; integrated community ECCE services including Mother Circles, preschools, health, nutrition and sanitation services of Myanmar developed by the Department of Social Welfare and many NGOs, FBOs and CBOs; and the *Muhororo-Style Integrated ECD Centres* in Rwanda that were developed through multisectoral planning with community groups.

Several countries have not attempted to develop fully integrated ECCE services. They are especially needed in nations with few resources for children, major gaps in their sectoral services or inadequate multisectoral coordination. Integrated services usually feature the strong participation of sectors, fill major gaps in local services for children and families, and coordinate with other children's services in each community.

Integrated ECCE programmes may be initiated at the community level, as in Rwanda and Honduras, or purposefully developed through national-level initiatives, as in Bosnia and Herzegovina, Colombia, Cuba and Myanmar. Coordinated multisectoral services are often developed informally at the local level; however, national leaders may establish more formal multisectoral systems, as was the case in Cameroon.

The types of sectoral services included in multisectoral and integrated systems vary according to the needs and demands of each nation and community, and both may successfully target vulnerable children. Varying institutional cultures, the extent of gaps in ECCE services, and the types of ECCE leaders seem to explain best the decision to develop systems for multisectoral coordination or for integrated 'one stop' services.

Common challenges to multisectoral and integrated planning and service provision

Strong sectoral orientations and prevailing institutional cultures

A major challenge to multisectoral coordination and integrated ECCE services is the continued dominance of sectoral planning, budgeting and service provision. Many services will remain sectoral, such as immunisations, pre-school education and child protection. However, to achieve holistic child

development, multisectoral approaches are needed to develop continuous, comprehensive and culturally and linguistically appropriate ECCE services.

Existing ‘institutional cultures’ in ministries whose personnel encountered difficulties in trying to develop inter-ministerial activities often affect the development of multisectoral ECCE coordination and service integration. For example, education ministries usually have large budgets due to the size of their payroll and numbers of schools. Ministries of health compete with them for their slice of the annual national budget. Given this competition, some education ministries have developed units for school health and nutrition services, thereby duplicating health services and avoiding close inter-ministerial coordination. However in some instances, education ministries have wanted to ensure an acceptable quantity and quality of health and nutrition services.

Challenges to multisectoral coordination and integration can become major if ministerial and civil service leaders are loath to collaborate. However, in several nations, such as Chile, Colombia and Ghana, ministries found that multisectoral coordination has led to budgetary increases and programme improvements for all participating ministries. Once ‘converted’ to conducting multisectoral coordination, ECCE professionals often become leading advocates for multisectorality.

Needs for high-level ECCE policy advocacy

In some countries, ministers of finance and planning and other national leaders have become well informed about the benefits and high rates of return of quality ECCE services (Verdisco, 2008). They have advocated for ECCE policy planning, systems development and service provision. However, this alone does not guarantee multisectorality.

In other countries, ECCE policy advocacy and training is urgently required with leaders and personnel in ministries, non-governmental organizations (NGOs), faith-based organizations (FBOs) and community-based organizations (CBOs). Advocacy should include information on the benefits of multisectoral coordination and service integration, especially when many ECCE needs and service gaps exist in their nations.

Lack of leadership for multisectoral and integrated approaches

Sometimes countries lack leadership for multisectoral coordination and integration as they begin to develop a comprehensive ECCE system. This is often related to a paucity of national experience in inter-ministerial coordination, a lack of leadership for multisectoral coordination in the national cabinet, competition for annual budgets, inter-ministerial politics, and even interpersonal rivalries.

To overcome these challenges, candidates for ECCE leadership should be identified and trained to conduct multisectoral coordination. These new leaders can promote positive multisectoral behaviours and help to overcome others' fears or apathy.

Lack of experience in participatory processes, negotiations and consensus building

Some governmental leaders may lack experience in conducting processes for participatory policy planning within and/or across ministries, including holding consultation workshops at central, regional and local levels. Some policy leaders may not conduct any consultation workshops or they may only consult with other governmental leaders rather than also including representatives of the civil society and private sector. They may depend upon external experts to write their policies and they may believe that securing expert advice is more important than involving citizens at all levels in developing social policies. Indeed, some international specialists have promoted this approach, declaring that 'evidence' should be the main or even the sole guide for ECCE policy planning.

Consequently, some national leaders require coaching on how to conduct participatory ECCE policy planning processes. They need training regarding the importance of securing strong policy support at all levels to ensure that policies will be well implemented and services will be well coordinated and/or integrated.

Furthermore, many national leaders may lack experience in conducting inter-ministerial negotiations and consensus building processes which are essential for successful multisectoral planning and coordination. They may require external support to achieve consensus on sensitive issues and especially on those with budgetary implications.

Confusion, challenges and successes related to decentralisation

Many countries have decentralised several functions of the central government while others are only beginning the decentralisation process and yet others are centralized. Most countries have encountered major challenges in decentralisation and they have often negatively impacted ECCE services. In some countries, ministerial programmes evaluated to be highly successful disappeared when their budgets were decentralised. For example, the *Proyecto de Atención Integral a Niños y Niñas Menores de Seis Años de la Sierra Rural (PAIN)* of Peru provided pre-school education for rural ethnic minorities (Vargas-Barón, 2009). Once the services of the Peruvian education ministry were decentralised, this valuable programme lost its support and disappeared.

In some cases, central governments did not establish roles and responsibilities for the decentralisation of children's budgets. Subsequently, municipalities diverted funds for children's services to other activities, such as road construction, municipal salaries, etc. Other issues have led to poor policy implementation, especially if detailed guidance and training for the decentralisation of central funds were not included in organizational plans for building ECCE systems. In contrast, other countries, such as Chile and Colombia, have been highly successful in decentralising ECCE services because they established the roles, responsibilities and regulations of ECCE systems, from local to national levels (Ibid.).

Challenges in addressing issues of inclusion, diversity, equity and quality

As reflected in Goal 1 of Education for All, 'Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children,' there is a high level of international agreement that ECCE systems and services should be universal and focus on inclusion, diversity, equity and quality (UNESCO, 2000).

It is not a trivial matter to ensure that ECCE systems and services guarantee and attain the full inclusion of all groups. Purposeful efforts must be made to provide universal and targeted services with the appropriate levels of individualisation and intensity required to ensure each child develops well. However, most national ECCE systems and services lack guarantees for inclusion and still mainly serve middle- to upper-income groups. Although private child care systems tend to be for the elite, this is not always the case.

In many low- and middle-income countries (LMIC) where mothers must work outside of the home in fields or factories, private child care and pre-school services for low-income parents exist and they are usually of very poor quality.

In economies of scarcity, prevailing inequities exacerbate the difficulties countries already face in serving young children, and multisectoral and integrated ECCE services are needed to address challenges entailed in achieving full inclusion, equity and quality.

Multisectoral early childhood policy planning, systems development and coordination

Because of differing ECCE needs, institutional cultures, services, human capacity, training systems and financial resources, countries have structured their ECCE policies, systems and coordination in many ways. The prerequisite for developing well-functioning ECCE systems of governance is the development and adoption of multisectoral ECCE policies and strategic plans, and in some nations, legislation. Depending upon each country's institutional culture, at least one of these approaches is required to develop a well-functioning ECCE system.

If systems of governance remain the sole jurisdiction of separate sectoral policies and/or laws, it is difficult if not impossible to achieve effective ECCE multisectoral coordination. Countries that continue to depend solely on sectoral approaches have been unable to develop comprehensive and continuous ECCE systems. Instead, they develop a patchwork quilt of laws and guidelines that ultimately lead to confusion, service gaps and inequitable services.

National-level multisectoral and integrated ECCE policy planning and governance

By mid-2012, at least 33 countries had formally adopted ECCE policies and/or strategic plans (Vargas-Barón and Schipper, 2012). By mid-2013, another 15 nations had adopted such instruments. In addition, 30 countries are developing ECCE policies, and some are close to adoption (Author's files). In total, approximately 78 countries will soon have adopted ECCE policies, strategic plans and/or laws (Ibid.).

ECCE policies are usually expected to last from 15 to 20 years, whereas strategic plans usually last about five years. These instruments describe ECCE needs in each country as a basis for establishing national ECCE vision and mission statements, goals, objectives, strategies, and high-priority services and activities. Policy instruments help to fill gaps in sectoral services and provide guidance for multisectoral coordination and service integration, depending upon each country's needs. They usually establish the structure and organization of the ECCE system at all levels, and identify roles and responsibilities for each level. Many provide an investment plan and activities for policy advocacy, social communications, accountability, quality assurance and donor coordination. ECCE policies can complement, reinforce and harmonise other sectoral and multisectoral policies and plans.

To ensure full policy implementation, countries usually establish a high-level multisectoral ECCE council and/or a technical committee, including major ECCE stakeholders from all levels of government, civil society and the private sector. They promote policy implementation, advocate for ECCE at all levels, review reports, and establish annual national ECCE plans and budgets.

However, some national councils or committees have not played their roles as planned. Countries that have implemented their ECCE policy instruments successfully have usually also established a well functioning ECCE executive agency, institute or department, often attached to the lead ministry or occasionally, the prime minister's or president's office. This entity for policy implementation often plays the following roles: annual planning and budget preparation; vertical and horizontal multisectoral coordination; support for service design; quality assurance including pre- and in-service training; accountability through leading service monitoring, evaluation and reporting; policy advocacy and social communications; and functions as the secretariat of the multisectoral ECCE council and/or technical committee. Examples of effective long-standing entities for policy implementation include: Colombia's ICBF; Mauritius' Early Childhood Care and Education Authority; and Ghana's National Early Childhood Coordinating Committee of the Ministry of Women and Children's Affairs.

Several countries have developed effective multisectoral ECCE policies. Two of the most successful multisectoral policies were *Chile Crece Contigo* linked with *Chile Solidario*. The Ministry of Planning and Cooperation and the Executive Secretariat for Social Protection of Chile led the development and implementation of these policies that focused on providing multisectoral and integrated ECCE services and breaking the cycle of poverty. In collaboration with the Presidency and the National Planning Department, the Colombian

Institute of Family Welfare (ICBF), which is Colombia's lead institution for ECCE planning, guided a multisectoral and participatory policy planning process for several years that involved all sectors.

Ministries of finance and planning sometimes play leading roles in promoting multisectoral ECCE policy planning and systems development because they have the power to convene line ministries, lead or promote multisectoral coordination processes, and encourage cross-service monitoring and evaluation. The ministries of planning in Cameroon and the Central African Republic (CAR) were mandated to lead ECCE policy planning and service coordination (Cameroon) and ECCE integration (CAR). The involvement of ministries of finance and planning in ECCE policy planning in Bosnia and Herzegovina, Chile, Colombia, Rwanda and Senegal contributed positively to the development and implementation of effective ECCE policies and/or strategic plans.

Ministries of education are frequently designated as the lead ECCE agency; however, some countries have selected ministries of planning, health, social protection or welfare or combined ministries of gender, children, families and community development. If the ministry of education becomes the lead agency, experiences in countries such as Cambodia, Lesotho and Rwanda have shown that it should fully involve ministries of health and protection to achieve effective multisectoral coordination. In addition, inter-ministerial coordination is required to ensure vulnerable children are served, learning outcomes improved and the internal efficiency of education systems increased.

Due to national decisions to consolidate child development, care and education services in the education ministry and the impact of major neuroscience research findings, which expanded emphasis on the foundational period from birth to 36 months of age, many ministries of education are now broadening their scope of action to include the early years (Kaga et al., 2010).

In some countries, social welfare and protection ministries, such as those in Burkina Faso, Cameroon, Myanmar, and Senegal also provide educational and developmental services for infants, toddlers and their parents, sometimes in collaboration with police units for child protection and regulations for orphanages and other agencies. Some of these ministries have required significant help to develop high-quality curricula, materials, methods, training, monitoring and evaluation. Initially, they may also lack service standards and guidelines for multisectoral coordination and the integration of 0 to 3 child services. Of course, health ministries have important services

for children 0 to 3 but they rarely assume the educational and developmental roles noted above.

As ministries of education expand their mandates to include the years from birth onward, they collaborate more closely with ministries of health and of protection in order to provide comprehensive parent education, improve early care and development services, and establish early childhood intervention services (ECI) for children with developmental delays, malnutrition, chronic illnesses, disabilities and atypical behaviours.

Provincial-level experiences

ECCE policies usually establish multisectoral provincial ECCE committees. However, some provincial ECCE committees still mainly engage in sectoral cooperation whereas others proactively handle multisectoral planning and coordination.

As noted, countries are at different levels of development with respect to decentralisation. Provincial authorities often lack pre- and in-service training, guidance documents, monitoring and evaluation instruments, and supervisory systems required to ensure they fulfil responsibilities delegated to them. Provincial systems for ECCE planning, training, supervision, monitoring and evaluation have traditionally been mainly sectoral in nature. In some countries, even though provinces have been instructed to forge multisectoral collaborations, they have been slow to develop them. Until provincial leaders perceive direct benefits from multisectoral coordination, they tend to maintain their sectoral habits.

Without national policy guidance or strong demand from communities, multisectoral provincial ECCE systems are rarely set up at the outset of ECCE systems development. Because of this, it is imperative to establish provincial roles, responsibilities and regulations in policy documents and to call for horizontal and vertical coordination at the provincial level.

China has a highly articulated provincial ECCE system (Feng, 2011). In addition to central ministries and committees, China created several levels of provincial control and decision-making, including roles and responsibilities for provincial departments, city bureaus, district and county offices and township sections. Inequities in the financial basis of townships and districts led to challenges in funding ECCE services, especially for families living in poverty. Policy adjustments were made to ensure low-income communities

received additional support for their ECCE services from central, provincial, city, and township levels. The central government used its convening power to promote better multisectoral coordination at all levels. The Chinese provincial experience finds its parallels in other large countries.

Smaller countries face yet other challenges at the provincial level. If a country lacks strong provincial ECCE coordination, it may also lack a policy framework for its ECCE system. Some small nations, such as Montenegro, even lack a provincial level. Some countries have weak provincial governments and yet others have developed a fully decentralised system.

In all but the smallest nations, a provincial ECCE system should be designed that is appropriate to the country's governance structures, institutional cultures and ECCE needs and services.

A recent study of selected large-scale, successful ECCE programmes in Latin American countries found that over time, all had developed strong provincial systems of management and financing, along with effective vertical and horizontal systems of coordination (Vargas-Barón, 2009). The study posited that demand from the local level for provincial support, and ECCE policies and plans from the national level led to the development of roles, responsibilities, regulations and coordination activities at the provincial level (ibid.).

Based on experiences to date, countries beginning to develop their ECCE systems might focus first on their national and community levels, and subsequently on establishing multisectoral provincial structures. However, in most countries of substantial size, the provincial level must be well developed to ensure a comprehensive ECCE system is developed. These countries could learn from Latin American experiences and design complete provincial ECCE systems from the outset.

Community-level ECCE development

Integrated and multisectoral ECCE services are often initially developed at the community level. However, some integrated ECCE services that originate in communities tend to lack attributes that would enable them to go to scale and secure support from provincial and national levels. They remain pilot programmes and many disappear after a few years because they lack features required to achieve sustainability (Vargas-Barón, 2009).

Other community-level ECCE services have been sponsored by national and sometimes provincial organizations. In general, these service models are more likely to have complete programme development processes, substantial financial support and other requisite attributes for going to scale and achieving sustainability. Large-scale ECCE programmes that were studied in Latin America all featured highly flexible systems for meeting local needs, ensuring community participation and oversight and using local human and material resources (Ibid.).

Sometimes successful, large-scale ECCE services developed at local levels are mentioned in ECCE policies or strategic plans thereby helping to establish their legal basis and long-term financial and material support. However, it is important to note that ECCE policies or strategic plans should not be converted into documents promoting single ECCE programmes. ECCE policies and strategic plans must embrace several effective programme approaches from all sectors as well as call for the developing new services to fill gap areas.

At district, township and community levels, multisectoral community ECCE committees are usually formed, sometimes as autonomous ECCE committees or as sub-committees of a municipal or town council. They often become the most creative level of ECCE systems because they work for their own children and parents and the future of their communities.

In Myanmar, highly effective community pre-school centres have become sustainable due to the establishment of community pre-school management committees that developed diversified fundraising mechanisms (Thein Lwin, 2012). Formal and informal leaders, parents and service providers usually become actively involved in community ECCE committees. They prepare annual community or municipal ECCE plans and budgets, guide services, volunteer and conduct oversight activities. Strong and sustainable community-level ECCE committees have been developed in many countries, including Cameroon, China, Colombia, Honduras, Lesotho, Montenegro, Myanmar and Rwanda. They usually prepare annual reports and plans if they perceive that their work is making a difference and regularly receive modest financial support, materials and recognition.

Within effective national ECCE systems, structures created at national, provincial and community levels often develop the following attributes: criteria for membership; formally established roles, responsibilities and regulations; planning authority and responsibilities for coordination and reporting; continuous training and support to carry out monitoring,

evaluation and reporting processes; and at the community level, oversight activities conducted by parents and the community committee.

Recommendations

To promote effective multisectoral and integrated approaches for establishing strong ECCE policies, systems of governance and services, some recommendations are offered:

Plan the preparatory phase of ECCE policy planning carefully to ensure effective multisectoral coordination.

Ensure that multisectoral participation and coordination is fully developed during the preparatory phase for ECCE policy planning, and maintained throughout the policy-planning period. The following entities should be included:

- Relevant government ministries;
- Civil society (NGOs, FBOs, CBOs, associations, higher education institutions);
- Private sector (clinics, pre-schools, media, businesses, corporations, banks, foundations, etc.);
- International development partners.

Ensure ECCE policy planning processes are fully participatory.

Secure support for participatory policy planning processes that include consultation forums, high-level interviews and a situation analysis on the status of children and families; institutional, human, training and financial resources; and relevant policies, plans, laws and standards.

Achieve multisectoral agreement for establishing a national ECCE institute or department to achieve effective ECCE policy implementation.

Promote negotiations and consensus building to develop an effective ECCE policy and system, including the establishment of an entity for policy implementation, multisectoral coordination, and service integration.

Use inclusive approaches to overcome inequities and provide high-quality ECCE services.

Because inequities and exclusion exacerbate challenges found in countries with limited investments in young children, a multisectoral ECCE effort is required to develop ECCE policies, strategic plans and comprehensive ECCE systems to achieve full inclusion, equity and quality.

Define in policies the organizational membership, roles and responsibilities at each level.

Vague statements in policy instruments regarding institutions and governance for ECCE systems often cause later problems. Organizational membership, roles and responsibilities should be clearly defined at each level.

Ensure ECCE policy instruments support multisectoral coordination and integration.

ECCE policies, plans and service work plans should include guidance for multisectoral coordination and integration. If current ECCE policy instruments lack such guidance, they should be officially amended or revised.

Create a new ‘multisectoral institutional culture’.

For ministries and other sectoral organizations to support multisectoral coordination and service integration, it is necessary to create a multisectoral institutional culture that rewards leaders for multisectoral coordination and designates responsibilities to key personnel for forming collaborations, partnerships and networks to plan and implement services. Evaluations of multisectoral coordination and integrated services should be conducted.

Develop guidelines for personnel who promote multisectoral coordination.

Multisectoral work should not be considered as ‘voluntary’ but rather as an integral part of staff members’ core roles and responsibilities. To accomplish this, ministerial and organizational leaders must model positive behaviours and attitudes regarding multisectoral coordination and integration. They

should distribute writings regarding the importance of coordination and integration to improve child and family development, especially for the country's most vulnerable children. Outstanding multisectoral achievements should be rewarded publicly.

Provide positive rules and incentives for multisectoral coordination and/or integration.

ECCE ministries should jointly establish rules for acceptable behaviours as well as incentives and systemic supports for multisectoral work, including placing roles and responsibilities for multisectoral coordination and integrated services in staff members' terms of reference; stating the amount of time they are expected to engage in inter-agency activities, i.e. 20 per cent, 30 per cent or more; establishing formal, written inter-agency official agreements; preparing performance reviews that include inter-agency work plus 360 degree reviews from personnel in other agencies; and providing annual awards for outstanding achievement in multisectoral coordination and service integration.

Identify examples of outstanding multisectoral coordination and integrated services, and promote their expansion.

Often positive examples of multisectoral coordination and integrated services exist but are overlooked. Once identified, efforts should be made to promote these examples and take them to scale within each country.

Promote the decentralised planning of integrated ECCE services.

Some ECCE services could become integrated through promoting decentralised and comprehensive municipal planning, pre- and in-service training, monitoring, evaluation and community oversight. Experiences in community planning, service implementation, and monitoring, evaluation and oversight should be exchanged.

Create standards, guidelines and regulations for ECCE services and personnel.

For each major type of ECCE programme, it is essential to establish service and personnel standards as well as guidelines and regulations for managing and implementing the services.

Establish formal inter-institutional agreements for multisectoral and integrated ECCE services.

Many countries have relied on informal arrangements to conduct multisectoral coordination but they usually prove to be unsustainable. Therefore, formal agreements should be developed, signed and monitored by all parties.

Develop 'mosaics' of integrated and coordinated ECCE services.

As needed, use integrated and well-coordinated multisectoral approaches to develop mosaics of high-quality ECCE services and support activities that are designed to achieve scale at national or provincial levels.

Conduct research on integrated and multisectoral ECCE services.

Relatively few studies have been conducted on ECCE multisectoral coordination and integration. Focused research is required on such experiences in all world areas, including: baseline situation analyses and pre and post evaluations; experimental and quasi-experimental designs; the effectiveness of pre- and in-service training systems for multisectoral and integrated ECCE services; institutional cultures of ministries and agencies that favour (or not) multisectoral coordination and/or integrated services; methods and effectiveness of vertical and horizontal systems of coordination at all levels; alternative methods for home visiting and group sessions in multisectoral and integrated services; cost studies; and outcomes from multisectoral coordination in contrast to fully integrated services.

Exchange experiences in multisectoral coordination and integration.

A worldwide ECCE initiative to promote multisectoral coordination and integration should be established, with a webpage for exchanging experiences regarding effective ECCE systems development. The objectives of this webpage could include activities to share good practices, lessons learned and research results. Policy briefs and other publications could be sponsored, along with exchange visits among ECCE systems.

Conclusion

In order to establish strong national ECCE systems and expand high-quality ECCE programmes, it is essential to develop effective multisectoral coordination and integrated services. To accomplish this and achieve national objectives for holistic child development, countries must expand their investments in well-coordinated multisectoral and integrated services. The roles of communities and parents are of fundamental importance, along with the development of national systems that provide public and non-public ECCE services for children and families, and especially the most vulnerable ones. Priority should be given not only to central leadership and coordination but also to provincial and community planning, and the coordination and oversight of cost-effective and comprehensive ECCE services, from preconception to inclusive primary school.

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Investing against Evidence The Global State of Early Childhood Care and Education

P. T. M. Marope and Y. Kaga (Editors)

Early childhood care and education (ECCE) has become a key concern for education policy-makers and stakeholders. There is mounting research evidence on its benefits for children's capacities and educational achievements as well as its critical role in realizing equitable, quality education and lifelong learning. Addressing the themes of investment rationales, equity and quality, this book features various lessons from research and experience from different continents. It argues for reversing the trend of 'investing against evidence' so that children – and especially the disadvantaged ones – and societies can reap the proven benefits of quality ECCE.



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