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Potential and perils of the early years: The need to integrate violence prevention and early child development (ECD+)

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ABSTRACT

In recent years, a growing number of studies have documented the prevalence of violence against children as well as its consequences. Across every country and cultural context in which research have been conducted, studies have consistently shown that exposure to violence negatively impacts the health and well-being of children, and hampers their development. Many actors have worked to implement programs aimed at addressing this problem, and some, in particular parenting programs, have shown promise as a means of effectively reducing child maltreatment.

It is essential, however, to take an integrated approach in settings where fundamental concerns exist over the provisioning of basic health and nutritional needs as well as adequate stimulation. The childs experiences during these early years are critical for their future developmental trajectory and life course. Additional program components, generally implemented as part of early child development programs, are indispensable for ensuring the healthy development of the child.

This position paper takes a global perspective in summarizing the key literature and approaches from both violence prevention and early child development, outlines common objectives shared by the two fields, and demonstrates the urgent necessity for holistic cooperation across the two fields. It concludes by suggesting approaches and priorities for better integration to ensure that all children can reach their full potential.

Content

Maltreatment and violence against children are severe problems. An estimated 300 million children around the world under the age of five endure violence (Walker et al., 2011). While specific data are not available for all countries, researchers have found a high prevalence of child maltreatment in almost every country where studies have been conducted (Mercy, Butchart, Rosenberg, Dahlberg, & Harvey, 2008; World Health Organization, 2006). High levels of violence are associated with poverty, household overcrowding and low parental education levels, aggravated by unemployment and social isolation (Krug, Mercy, Dahlberg, & Zwi, 2002; Pinheiro, 2006).

Furthermore, research has shown that conditions of chronic stress are associated with increased violence in homes, harsh punishment and negative intra-family relationships (Mollica et al., 2004). The impact of exposure to prolonged violence and stress is especially prominent in early childhood, involving chronic activation of the body's stress response system (Phillips & Shonkoff, 2000). The biochemical environment imposed on an infant's brain during critical development stages has permanent effects on the anatomy and the brain (Caldji et al., 1998). The most profound outcome is alteration to brain functions (Kaufman, Plotsky, Nemeroff, & Charney, 2000) which can manifest later in childhood and throughout life as deficiencies in physical health, socio-emotional well-being, memory and learning.

There is growing recognition that violence prevention is a key public health issue (Mercy et al., 2008; World Health Organization, 2010). Violence during childhood has been linked to negative risk factors and risk-taking behaviors that appear later in life (Walker et al., 2011), ranging from depression and obesity to alcohol and drug abuse. These factors, in turn, are major contributors to increased rates of heart disease,

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cancer and suicide (World Health Organization, 2006). The resultant death, morbidity, and disability (Shonkoff, Boyce, & McEwen, 2009) of child maltreatment create a significant economic burden, comparable to those created by stroke or diabetes (Fang, Brown, Florence, & Mercy, 2012).

Although the evidence base for effective strategies to address child maltreatment is still limited, a promising array of prevention and response programs has demonstrated great potential to reduce incidence and impacts of child maltreatment. Parenting programs have been shown to be a particularly effective means of reducing violence within families (Fraser et al., 2013; Knerr, Gardner, & Cluver, 2013; Lundahl, Nimer, & Parsons, 2006). A recent systematic review of parenting programs in low and middle-income countries (LMICs) suggests that parenting interventions are feasible and can be an effective means for improving parent–child interactions and parental knowledge in relation to child development (Knerr et al., 2013). To monitor progress in this direction, the World Health Organization (WHO) has developed a parenting program evaluation toolkit that includes violence prevention outcome measures (Wessels et al., 2013).

Programs that focus exclusively on maltreatment, however, may be insufficient in settings where fundamental concerns exist over the provisioning of basic health and nutritional needs as well as adequate stimulation. A more integrated approach is essential to ensure the healthy development of the child. Early childhood, in particular, has been identified as the most critical stage regardless of context.

As Nobel Prize recipient James Heckman puts it: "Family environments of young children are major predictors of cognitive and socio-emotional abilities, as well as a variety of outcomes such as crime and health."

> "*The [Early Childhood Development] field strives to ensure young children's overall well-being during the early years (ages 0–8), providing also the foundation for the development of adults who are healthy, socially responsible, intellectually competent, and economically productive.*"

Early childhood – the period from prenatal development to eight years of age – is critical for cognitive, social, emotional and physical development. Basic concepts of early brain development have been developed over decades of work in the fields of neuroscience and behavioral research, and help to explain how this period lays a critical foundation not only for life success but also for a prosperous and sustainable society. The basic principles of neuroscience indicate that early preventive interventions will be more efficient and produce more favorable outcomes than remediation later in life (Irwin, Siddiqi, & Hertzman, 2007). Effective early childhood programs generate benefits to society that far exceed program costs. Extensive analysis by economists has shown that education and development investments in the earliest years of life produce the greatest returns. These returns, which can range from $4 to $9 per dollar invested, also benefit the community through reduced crime, welfare, and educational remediation.

Health is a prerequisite for children's optimal growth and development. Chronic illness and maternal depression are just two of the conditions that can affect the physical and mental health of the child or their primary caregiver, potentially leading to deleterious effects on a child's long-term development (Phillips & Shonkoff, 2000).

Nutrition begins *in utero* and relies on mothers receiving adequate nourishment. Children who are undernourished themselves, or born of undernourished mothers, are more susceptible to infections. Lack of protein and micronutrients such as iodine, iron and key vitamins can all contribute to chronic illness (Irwin et al., 2007).

Early cognitive stimulation – including techniques to encourage the development of motor, language, and thinking skills – also has a significant positive impact on children's development outcomes. Opportunities for play and exploration influence synaptic formation, and are linked to the development of secure attachments to caregivers as well as healthy relationships with other children (Irwin et al., 2007).

Additional program components that address these concerns are usually implemented as part of Early Childhood Development (ECD) programs. In addition to nutrition and early stimulation measures, these programs include other health interventions such as immunization, hygiene, sanitation and deworming. They can also encompass educational and support measures for caregivers aimed at improving young children's capacity to develop and learn. Indeed, a key requisite for ECD is consistent caring, support and affection from caregivers (Irwin et al., 2007).

Randomized control trials have verified that ECD interventions combining health and stimulation provide a host of benefits to children including improved cognition, fine motor and socio-emotional skills. These outcomes, in turn, facilitate increased readiness for primary school, and correspondingly higher enrolment rates and improved academic performance (Lake, 2011).

There are increasing efforts within the ECD field to work towards an integrated approach that combines health and education interventions to more comprehensively address the needs of a child. A systematic review of early childhood interventions in 24 countries across Africa, Latin America and the Caribbean, Europe, Asia and the Pacific has shown that interventions that were either educational or mixed (*e.g.* stimulation and nutrition, care and nutrition) demonstrated the largest statistically significant effects on cognition when compared with interventions focused solely on nutrition (Nores & Barnett, 2010).

The reality of implementation still reflects multiple dividing lines within the fields themselves. Within the ECD community, a fault line generally runs between health (including nutrition) and education (including child care) groups, even in high-income countries (HICs) such as the USA. Such fragmentation is reflected in communications and advocacy efforts, leaving the fields without a unified set of messages and "asks" that are grounded in evidence. Similarly, violence prevention actors themselves are divided into silos focusing on violence against children, or against women, with different groups working on almost every type of violence.

It is not surprising then that the communication between ECD and violence prevention programs and expert communities is limited. There are considerable opportunities for closer collaboration between the two fields, because both fields share the same overarching goal of improving children's lives and could benefit from greater efforts towards exchange of experience and methods.

Both fields also place an emphasis on primary prevention, focus on whole populations rather than individuals, recognize the need for interdisciplinarity and multi-sectorial action, insist on the importance of an evidence-based scientific approach, use multi-level ecological models to understand risk factors, organize prevention programs, and adopt a life-course perspective.

As in violence prevention, parenting programs are a key mechanism for delivering services to improve children's health and education outcomes. Rigorous evaluations in the US have demonstrated improved outcomes for children who receive additional support at an early age (Cunha, Heckman, & Schennach, 2010). Similar findings were found in a systematic review of the evidence from the developing world, including India, Colombia and Jamaica (Nores & Barnett, 2010).

While a few exceptional ECD and violence prevention programs have improved certain aspects of children's development, very few have consistently adopted an integrated approach to early childhood.

A few examples from HICs include Triple P, Nurse–Family Partnership and Early Start (MacMillan et al., 2009; Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009).

The cost-intensiveness and copyrights associated with these US programs (Mikton, 2012), however, bar their widespread application across many parts of the world, including in LMICs.

The handful of successful examples from LMICs includes, for example, a program developed by the Mother Child Education Foundation (ACEV) in Turkey. An experimental study in 1998 recorded a drop in negative