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- 6 Hales H, Warner L, Smith J, Bartlett A. Census of young people in secure settings on 14 September 2016: characteristics, needs and pathways of care. https://www.england.nhs.uk/wp-content/uploads/2018/10/securesettings-for-young-people-a-national-scoping-exercise-paper-2-censusreport.pdf (accessed June 1, 2020).
- 7 Goldman PS, Bakermans-Kranenburg MJ, Bradford B, et al. Institutionalisation and deinstitutionalisation of children 2: policy and practice recommendations for global, national, and local actors. *Lancet Child Adolesc Health* 2020; published online June 23. https://doi.org/10.1016/S2352-4642(20)30060-2.

If not now, then when? The importance of intervening early to provide family-based environments for all children



Poverty, social deprivation, and disasters threaten children's development, and hinder their ability to thrive, to be physically and mentally healthy, to be happy and build positive relationships, and to become productive adults. Far too many children around the world are growing up in adversity. In 2019, globally, an estimated 386 million children were living in extreme poverty.1 In 2016, a global survey of 96 countries reported 1 billion children aged 2-17 years had experienced either physical, sexual, or emotional abuse in the past year.2 In 2015, UNICEF reported one in eight children were born in a situation of conflict and humanitarian crisis.3 Such adversities create stressors in families, putting at risk the provision of nurturing care for children, and in a post-COVID-19 era these adversities are likely to substantially rise, increasing inequalities in society and making many more children vulnerable to institutionalisation. In the Lancet Group Commission on deinstitutionalisation, Philip Goldman and colleagues4 report the high number of children already being raised in institutions. The evidence presented and their call to action to ensure abandoned children can thrive in family-based care environments rather than in institutions matters now more than ever as the global community addresses unprecedented challenges to ensure a generation of children are not left behind with respect to their survival, health, development, learning, and safety.

Children's progressive attainment of sensory–motor skills, cognitive–language skills, socioemotional skills, and sense of self are driven by biology and environment.⁵ These capacities are the building blocks of human development that enable us to think, solve problems, communicate, express our emotions, form relationships, and create and develop new ideas. The foundations for these building blocks are shaped early in life, starting from conception and continuing throughout the first

5 years, when the brain undergoes its most rapid period of development and the plasticity of the developing brain is at its most modifiable by the environment. Risks such as infections, environmental toxins, malnutrition, low stimulation, family distress, neglect, and violence can disrupt normal brain development. These risks activate a physiological stress response system in the body and excessive activation of these systems can result in toxic effects on the developing brain, with long-term detrimental implications for adult health, behaviour, and productivity. Numerous studies have shown the negative effects of adverse childhood experiences and chronic neglect on outcomes in the life-course as well as their intergenerational impacts, including for children growing up in institutionalised care. 6,7 Conversely, supportive and responsive care shaped by reliable interactions with adults in a safe and stimulating environment protects the developing brain.

Therefore, in order for children to thrive, it is insufficient to provide only for their basic health, nutrition, and sanitation needs. Children require individualised responsive care from a dependable adult. Infants and young children convey their needs and wants through verbal and non-verbal communications, which depend upon a caregiver's sensitive, contingent, and developmentally appropriate response. Responsive caregiver-child interactions are an essential ingredient for early childhood development because they help foster a relationship of trust and secure attachment, and, through the provision of a safe and enriched learning environment, support young children to explore their environment safely, practise new skills, and solve problems. Institutionalised care, on the other hand, is characterised by features that deprive young children of these opportunities, with unresponsive care and a lack of attention to their individual needs.8



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Early intervention matters. A consistent body of evidence shows that parenting programmes that promote responsive care and safe and enriched stimulating environments for young children benefit their development. Research on institutionalised care shows that intervening in the early, developmentally sensitive period of brain development has long-term benefits. For example, children adopted from Romanian orphanages before 6 months of age were less likely than those adopted later to exhibit insecure attachments associated with poorer mental health outcomes in the life-course. Institutionalised children in Romania placed in foster care before 2 years of age had higher developmental quotient scores at 42 months of age than children placed in foster care after 2 years of age.

Early interventions must be of high quality. The earlier children transition from institutions to family-based care environments, the more likely it is that adverse outcomes in the life-course can be prevented or reduced. However, timing alone is not enough to yield positive benefits. The stability and quality of care offered to children matters. Foster carers or kinship care providers require support to meet the often complex needs of children exposed to institutionalised care and to manage their own stressors, which might otherwise impede their ability to provide optimal care. Interventions might include enhanced training, streamlining access to additional support services for children with complex needs, and caring for the needs of the caregivers. Investments in enhanced foster care might be beneficial in meeting the needs of young children.10 However, as noted by Goldman and colleagues,4 this requires attention to the systems of care for children across health, education, social protection, and child protection to be coordinated, and for investments in nurturing care to be a priority for policy makers. Although establishing a strong foundation through high quality early intervention is important, the stability of family-based care as children transition from early childhood to adolescence and youth is also crucial to build on early gains.

Years of austerity, cuts in early childhood parenting services, care services, and education services, and now a global pandemic, have substantially increased stressors experienced by families with young children, threatening the capacity of these families to help their children to thrive. The inequalities established early in life will result in disadvantaged children having poorer adult health and wellbeing outcomes. Acting now to increase investments in early, high quality parenting support and family-based care can concurrently reduce the risks of young children ending up in institutionalised care, and increase transition of children in institutions to responsive and nurturing family environments. Goldman and colleagues,4 informed by the developmental science and the rights of children, make pragmatic recommendations to make this a reality. Going forward, these approaches must be inclusive and ensure the voices and needs of young children and their advocates are actively sought and heard so they do not remain invisible.

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- UNICEF. Policy brief: The impact of COVID-19 on children. 2020. https://unsdg.un.org/sites/default/files/2020-04/160420_Covid_ Children_Policy_Brief.pdf (accessed June 1, 2020).
- 2 UNICEF. More than 16 million babies born into conflict this year: UNICEF. Dec 17, 2015. https://www.unicef.org/media/media_86560.html (accessed May 2, 2020).
- 3 Hillis S, Mercy J, Amobi A, Kress H. Global prevalence of past-year violence against children: a systematic review and minimum estimates. *Pediatrics* 2016: 137: e20154079.
- 4 Goldman PS, Bakermans-Kranenburg MJ, Bradford B, et al. Institutionalisation and deinstitutionalisation of children 2: policy and practice recommendations for global, national, and local actors. *Lancet Child Adolesc Health* 2020; published online June 23. https://doi.org/10.1016/S2352-4642(20)30060-2.
- 5 Shonkoff JP, Richter L, van der Gaag J, Bhutta ZA. An integrated scientific framework for child survival and early childhood development. *Pediatrics* 2012; 129: e460-72.
- 6 Folger AT, Eismann EA, Stephenson NB, et al. Parental adverse childhood experiences and offspring development at 2 years of age. *Pediatrics* 2018; 141: e20172826.
- 7 Nelson CA 3rd, Fox NA, Zeanah CH Jr. Anguish of the abandoned child. Sci Am 2013; 308: 62-67.
- 8 Berens AE, Nelson CA. The science of early adversity: is there a role for large institutions in the care of vulnerable children? *Lancet* 2015; 386: 388-98.
- 9 Aboud FE, Yousafzai AK. Global health and development in early childhood. Annu Rev Psychol 2015; 66: 433-57.
- 10 Macmillan HL, Wathen CN, Barlow J, Fergusson DM, Leventhal JM, Taussig HN. Interventions to prevent child maltreatment and associated impairment. Lancet 2009; 373: 250-66.