

# EARLY CHILDHOOD DEVELOPMENT: A STATISTICAL SNAPSHOT

BUILDING BETTER BRAINS AND SUSTAINABLE OUTCOMES FOR CHILDREN



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**OVER 200 MILLION CHILDREN** under 5 years of age in low- and middle-income countries – and increasing numbers in OECD countries and emerging economies – will face inequalities and fail to reach their full developmental potential because they grow up with a broad range of risk factors. These include, most notably, poverty; poor health, including malnutrition and infection with HIV; high levels of family and environmental stress and exposure to violence, abuse, neglect and exploitation; and inadequate care and learning opportunities.<sup>1</sup> These factors also include risks that result from emergencies related to conflict, climate change and global demographic shifts associated with migration and urbanization.

Early childhood development (ECD) is one of the most cost-effective investments a country can make to build human

capital and promote sustainable development. Economic analyses from both the developed and developing world point to the same conclusion: Investing in the early years yields some of the highest rates of return to families, societies and countries. The case for investment can be made not only with respect to returns but also to the cost of inaction.<sup>2</sup>

Science has demonstrated that early childhood interventions are important because they help mitigate the impact of adverse early experiences. If not addressed, such experiences can lead to poor health (including obesity, cardiovascular disease and diabetes), low educational attainment, economic dependency, increased violence and crime, and heightened risk of substance abuse and depression – all of which add to the costs and burden to society.

<sup>1</sup> Walker, S. P., et al., 'Child Development: Risk factors for adverse outcomes in developing countries', *The Lancet*, vol. 369, 2007, pp. 145–157; Grantham-McGregor, S., et al., 'Developmental Potential in the First 5 Years for Children in Developing Countries', *The Lancet*, vol. 369, 2007, pp. 60–70.

<sup>2</sup> Britto, P. R., P. L. Engle and C. S. Super, editors, *Handbook of Early Childhood Development Research and its Impact on Global Policy*, Oxford University Press, New York, 2013.



## SAFETY AND PROTECTION

Protecting young children from violence and abuse is not only a human rights obligation; it is also the foundation from which children can develop to their fullest potential and achieve better health, learning and social development outcomes. Through a combination of ECD and child protection interventions (including direct support to families and strengthening systems to be more responsive and accountable), young children can be protected from violence and given the opportunity to develop and grow in a healthy way, from the very first years of life.

## EARLY CHILDHOOD EDUCATION

Investment in good quality early childhood education services prior to entering school improves learning outcomes for children. It also enhances the efficiency of the school system by reducing repetition and drop-out and improving achievement, especially among girls and marginalized groups.

## HEALTH AND NUTRITION

Adequate nutrition during pregnancy and the first two years of life is necessary for normal brain development, laying the foundation for the development of cognitive, motor and socio-emotional skills throughout childhood and adulthood. Appropriate breastfeeding practices can contribute to a child's healthy emotional and cognitive development. In contrast, lack of adequate nutrition (including iodine) and other related consequences such as stunting and low birthweight can compromise children's motor and cognitive development. Children with restricted development of these skills during early life are at risk for later neuropsychological problems, poor school achievement, early school drop-out, low-skilled employment, and poor care of their own children, thus contributing to the intergenerational transmission of poverty.

## STIMULATION AND CARE

Early stimulation and interaction with parents and caregivers jumpstart brain development and promote well-being. Extensive research shows that nurturing, stimulating interaction between young children and their parents and caregivers positively and permanently strengthens the ability to learn – and may even change brain function for life.

# EARLY CHILDHOOD DEVELOPMENT

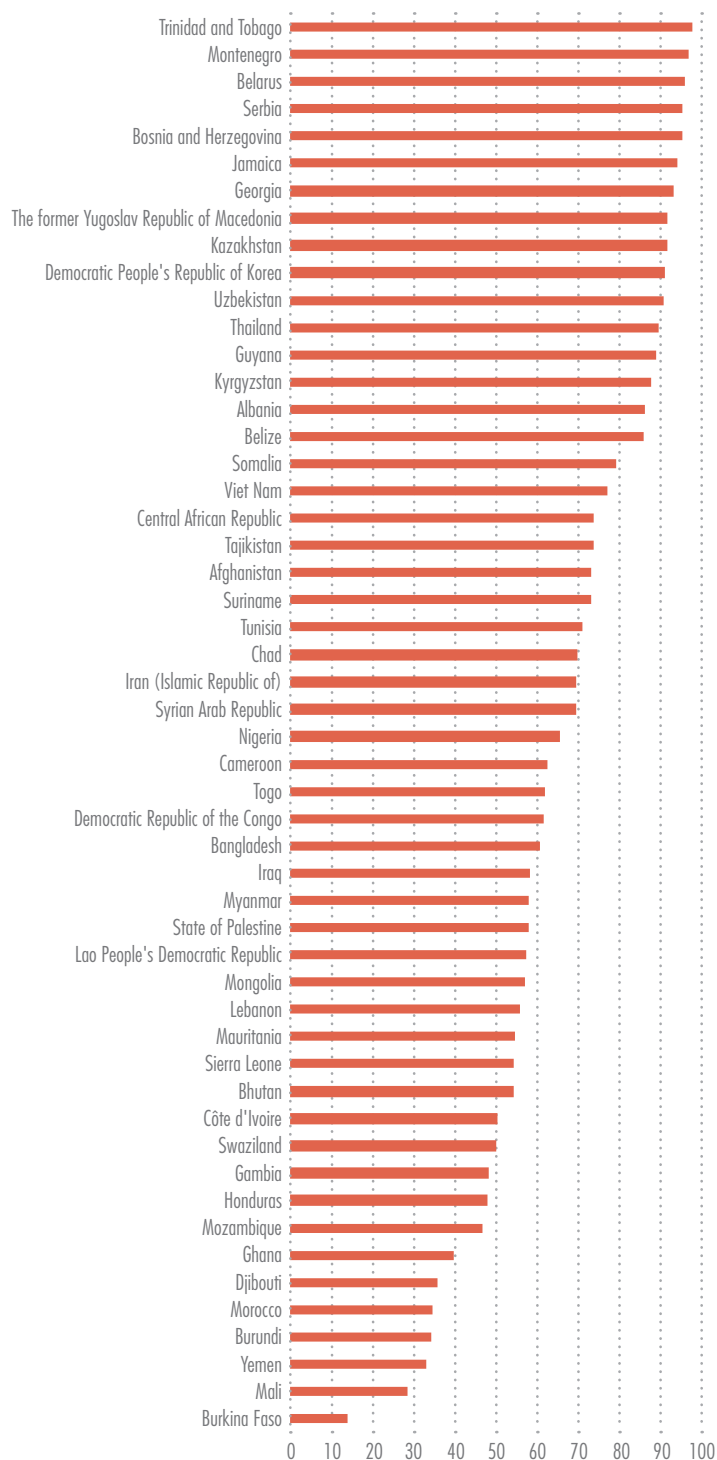
The brain requires multiple inputs: It requires **stimulation and care** to spark neural connections across multiple regions of the brain to increase its capacity and function. It requires access to good quality **early childhood education** programmes that provide children with early cognitive and language skills, build social competency and support emotional development. It requires good **health and nutrition** at the right time to feed and nourish the architecture of the body, including the brain, during the sensitive periods of development. It requires **safety and protection** to buffer against stress and allow absorption of nutrients and growth and development of the nervous system - including the brain. All these aspects of the environment must work together to build a better brain.



# STIMULATION AND CARE

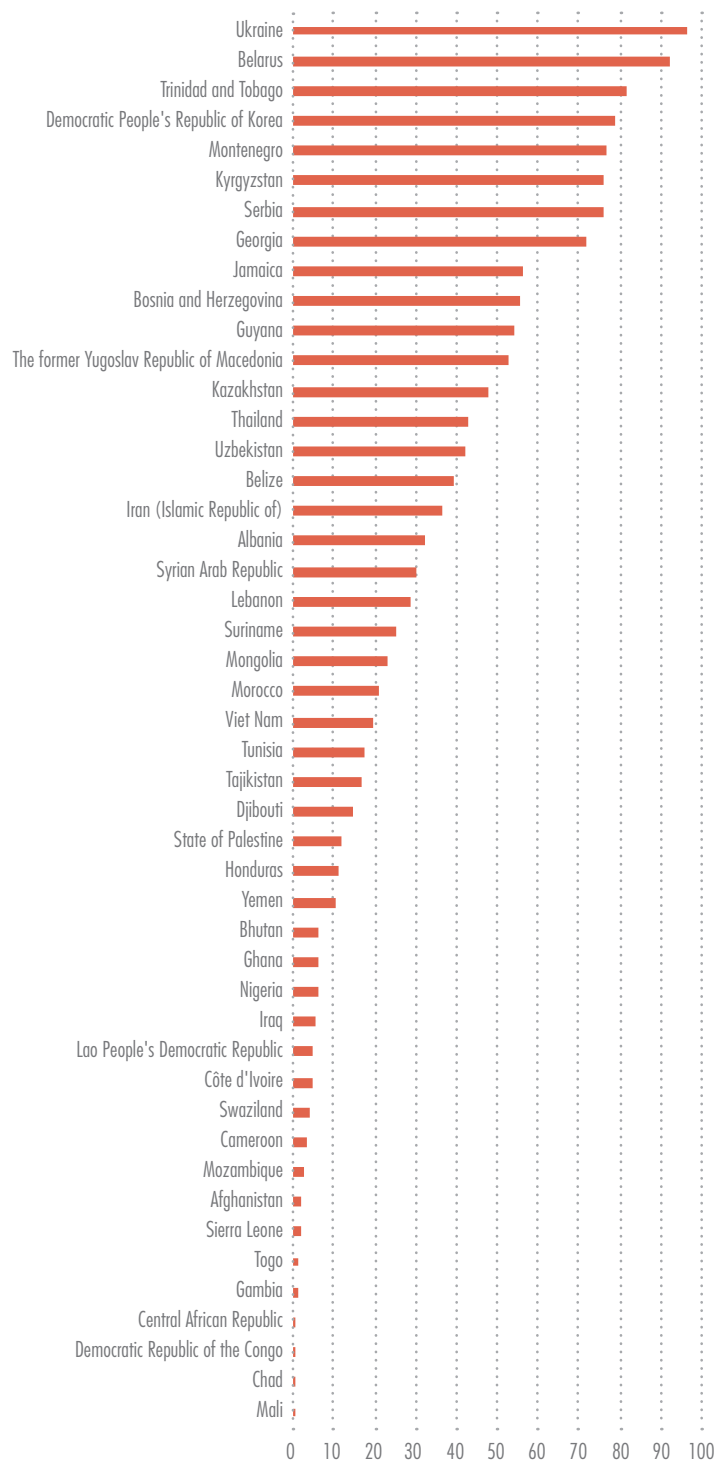
In almost all countries or areas, more than half of children are engaged in early learning activities by adults in the household, but less than half have access to three or more books in the home

Percentage of children aged 36 to 59 months with whom an adult household member has engaged in four or more activities to promote learning and school readiness in the past three days



**Notes:** Activities to promote learning and school readiness include: reading books to the child; telling stories to the child; singing songs to the child; taking the child outside the home; playing with the child; and spending time with the child naming, counting or drawing things. Data for the Islamic Republic of Iran differ from the standard definition. Data for Lebanon, Morocco and Myanmar refer to children aged 0 to 59 months.  
**Source:** UNICEF global databases, 2014, based on Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and other nationally representative surveys, 2005-2012.

Percentage of children aged 0 to 59 months who have three or more children's books at home

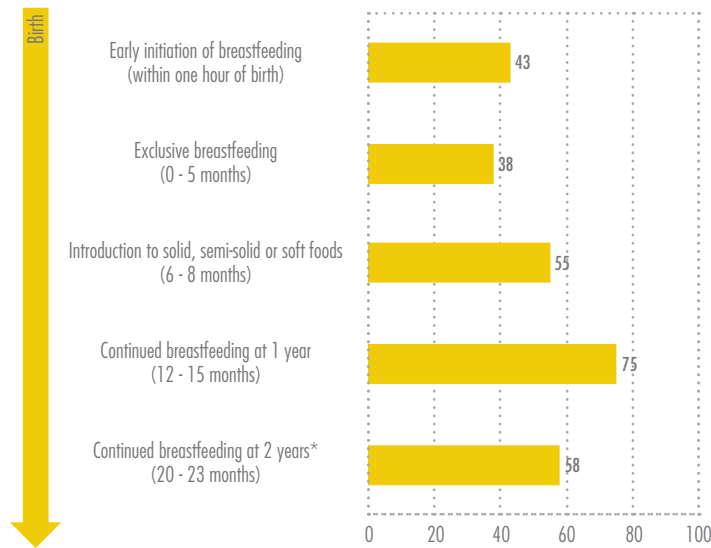


**Note:** Data for the Islamic Republic of Iran and Morocco differ from the standard definition.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2005-2012.

# HEALTH AND NUTRITION

## Globally, less than 40 per cent of infants are exclusively breastfed

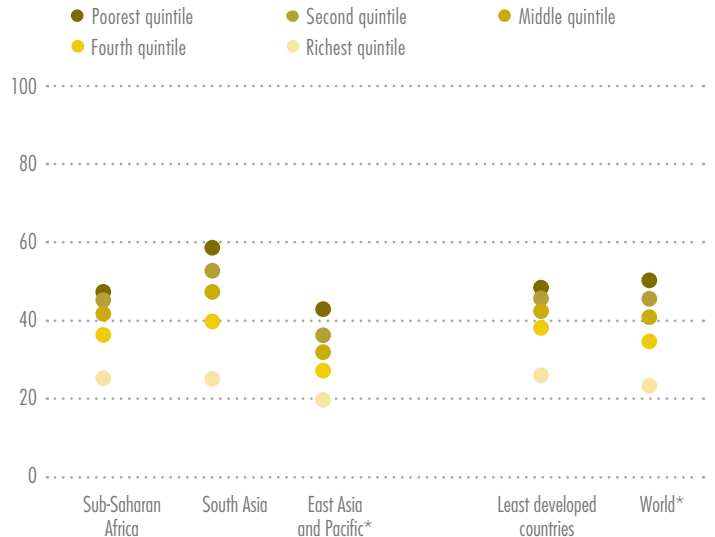
Percentage of children worldwide put to the breast within one hour of delivery; exclusively breastfed; receiving solid, semi-solid and soft food; and continuing to breastfeed at specified ages



\* Excludes China.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2008-2012, with the exception of India (2005-2006).

## Poorer children are far more likely than their richer counterparts to experience stunted growth

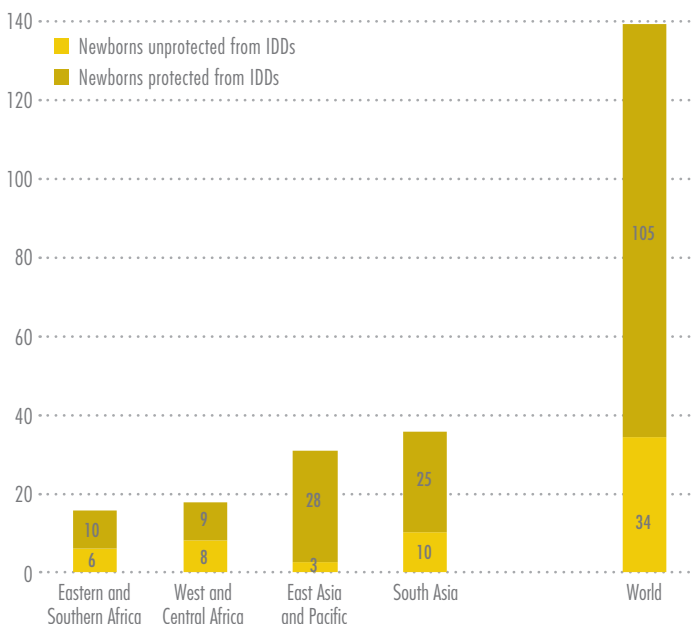
Percentage of children aged 0 to 59 months who are moderately or severely stunted, by wealth quintile



\* Excludes China.  
**Notes:** Estimates are based on a subset of 55 countries covering 55 per cent of the population of children aged 0 to 59 months worldwide. Regional estimates represent data covering at least 50 per cent of the regional population. Data coverage was insufficient to calculate regional estimates for Central and Eastern Europe and the Commonwealth of Independent States, Latin America and the Caribbean, and the Middle East and North Africa.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2007-2011, with the exception of India (2005-2006).

## More than 30 million infants worldwide were at risk of iodine deficiency disorders in 2012

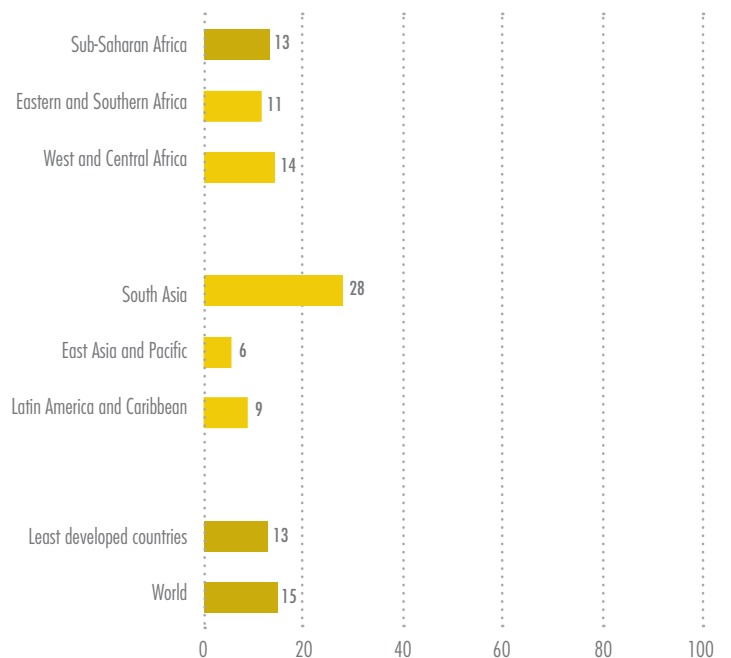
Number of newborns unprotected and protected from iodine deficiency disorders (IDDs) as assessed through household consumption of adequately iodized salt, in millions



**Notes:** Estimates are based on a subset of 57 countries covering 60 per cent of the total population worldwide, applied to total births worldwide. Regional estimates represent data covering at least 50 per cent of the regional population. Data coverage was insufficient to calculate regional estimates for Central and Eastern Europe and the Commonwealth of Independent States, Latin America and the Caribbean, and the Middle East and North Africa.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2008-2012.

## Low birthweight is highest in South Asia

Percentage of newborns weighing less than 2,500 grams at birth, by region

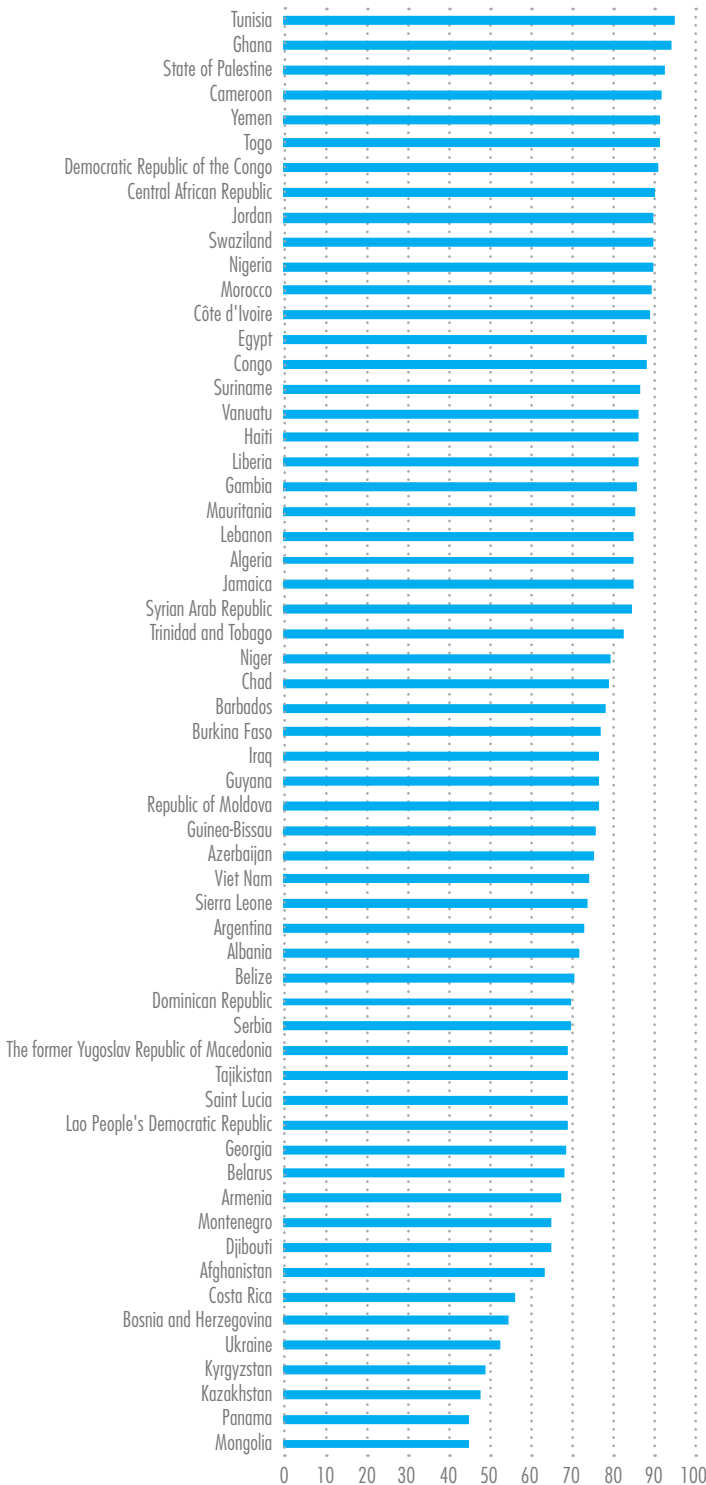


**Notes:** Estimates are based on a subset of 84 countries covering 65 per cent of the births worldwide. Regional estimates represent data covering at least 50 per cent of the regional population. Data coverage was insufficient to calculate regional estimates for Central and Eastern Europe and the Commonwealth of Independent States and the Middle East and North Africa.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2008-2012, with the exception of India (2005-2006).

# SAFETY AND PROTECTION

## Violent discipline is widespread

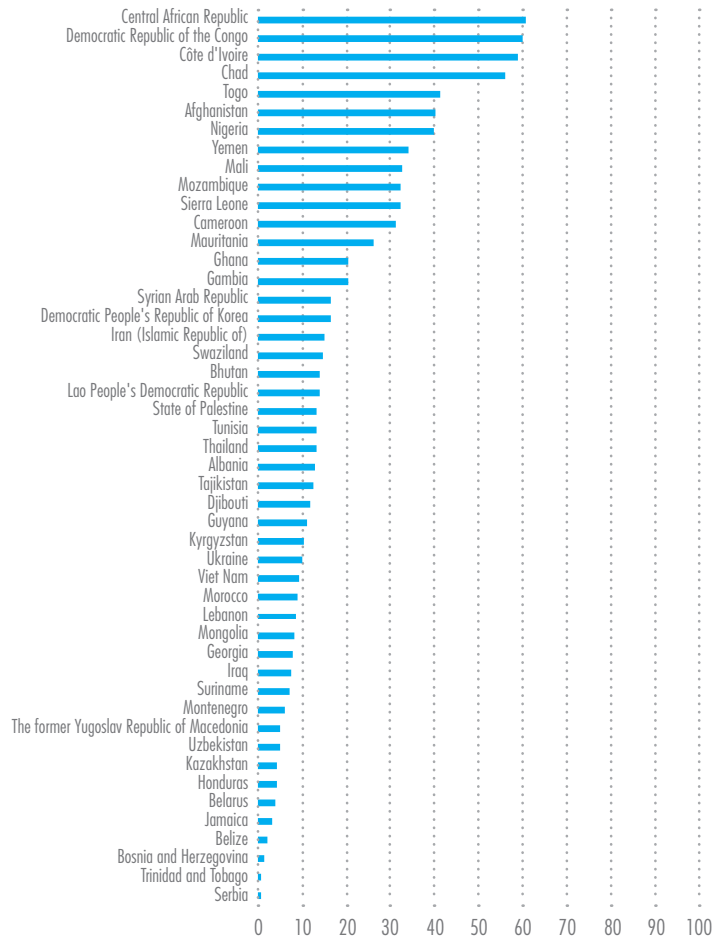
Percentage of children aged 2 to 4 years who experienced any violent discipline (psychological aggression and/or physical punishment) in the past month



**Notes:** Data for Belarus differ from the standard definition. Data for Kyrgyzstan refer to children aged 3 to 4 years. Data for Panama refer to children aged 1 to 4 years. For Argentina, the sample was national and urban (municipalities with a population of more than 5,000), since the country's rural population is scattered and accounts for less than 10 per cent of the total.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2005-2013.

## In the Central African Republic, Chad, Côte d'Ivoire and the Democratic Republic of the Congo, more than half of children under age 5 were left with inadequate care in the previous week

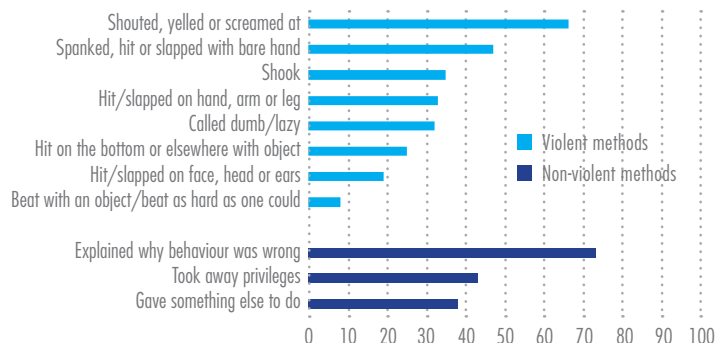
Percentage of children aged 0 to 59 months left alone or in the care of another child under 10 years old in the past week



**Note:** Data for the Islamic Republic of Iran differ from the standard definition.  
**Source:** UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2005-2012.

## Even the youngest children are exposed to violent acts of discipline

Percentage of children aged 2 to 4 years who experienced any discipline in the past month, by type

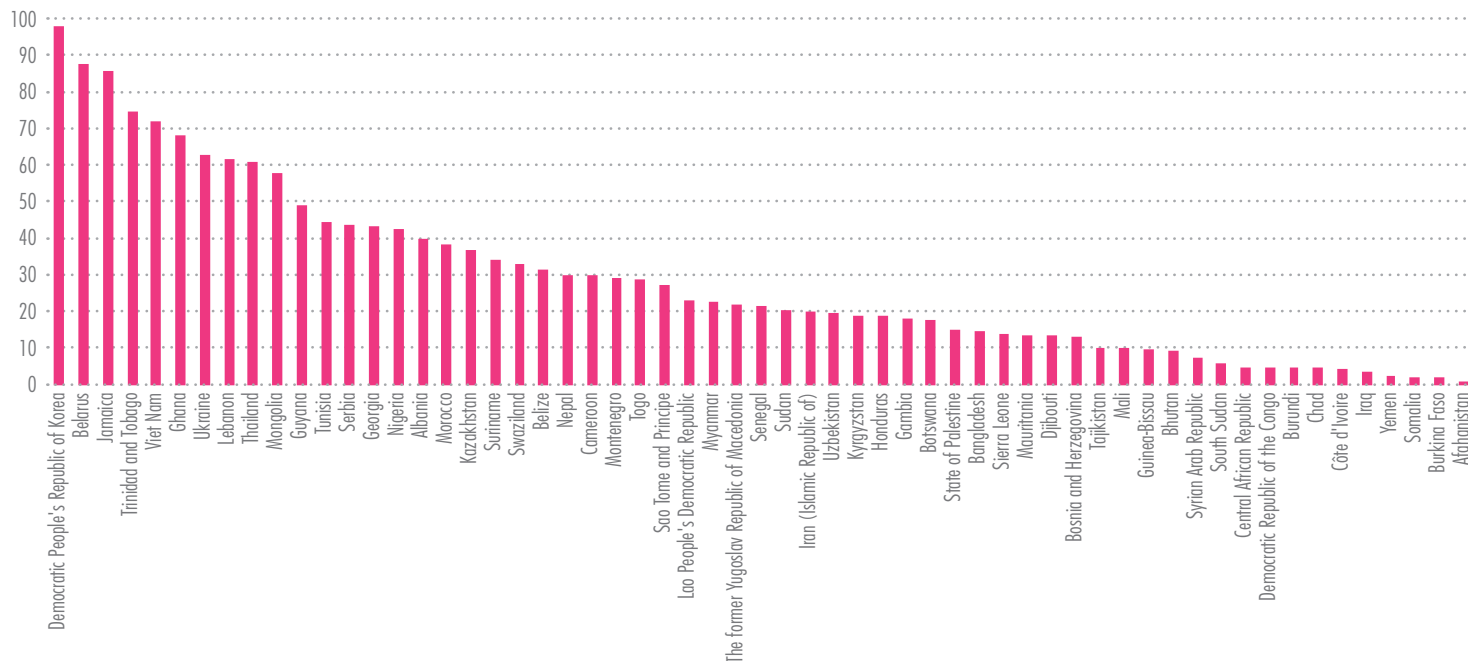


**Note:** These are weighted averages based on comparable data for 54 countries or areas.  
**Source:** UNICEF global databases, 2014, based on MICS and DHS, 2005-2013.

# EARLY CHILDHOOD EDUCATION

## Fewer than 50 per cent of children are attending early childhood education programmes in a majority of countries or areas

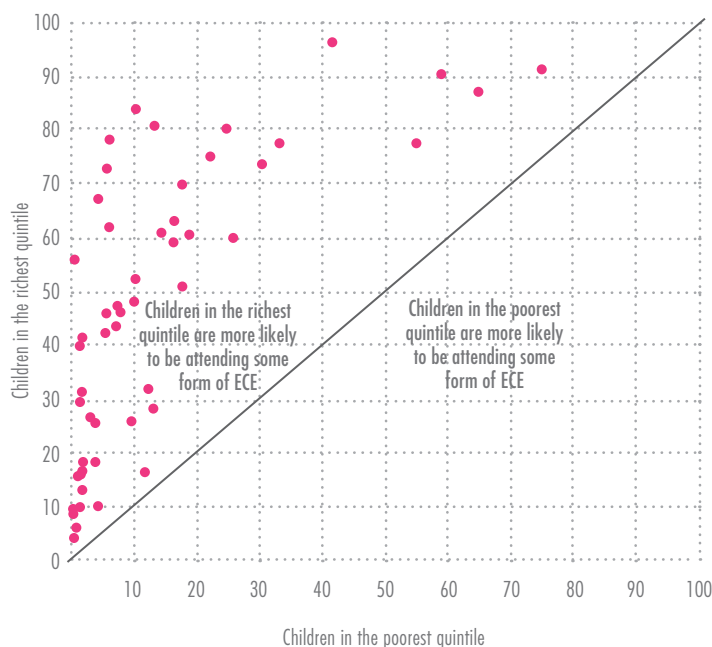
Percentage of children aged 36 to 59 months who attend some form of early childhood education programme



Note: Data for the Islamic Republic of Iran, Nepal and Senegal differ from the standard definition.  
Source: UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2005-2012.

## Across all countries, the poorest children are disadvantaged when it comes to attendance in early childhood education programmes

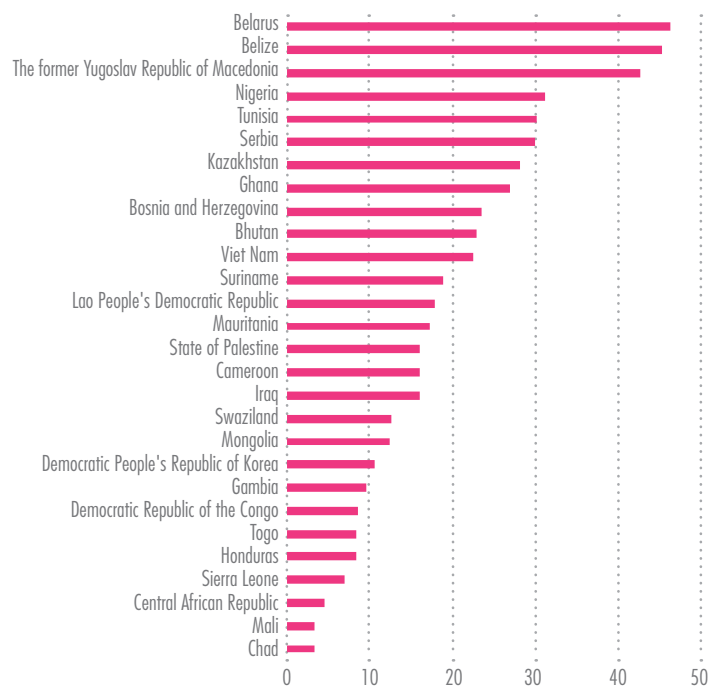
Percentage of children aged 36 to 59 months who attend some form of early childhood education programme, by wealth quintile



Note: Each dot represents a country.  
Source: UNICEF global databases, 2014, based on MICS, DHS and other nationally representative surveys, 2005-2012.

## In all 28 countries or areas with available data, less than half of children are developmentally on track in literacy-numeracy

Percentage of children aged 36 to 59 months who are developmentally on track in the literacy-numeracy domain



Source: UNICEF global databases, 2014, based on MICS and DHS, 2009-2012.





**For information on the data contained  
in this brochure:**

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