Seen, Counted, Included

Using data to shed light on the well-being of children with disabilities

unicef
for every child

To request permission or for any other information on this publication, please contact:

UNICEF Data and Analytics Section
Division of Data, Analytics, Planning and Monitoring
3 United Nations Plaza, New York, NY 10017, USA
Telephone: +1 212 326 7000
Email: data@unicef.org

Suggested citation: United Nations Children's Fund, *Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities*, UNICEF, New York, 2021.

Photography credits: Cover: © Elwa Design Studio, © Eric Krull on Unsplash, Adobe Stock: © ProstoSvet, © isavira, © bigjom, © ronstik, © Noey smiley, © Anneke, © Adam Ján Figel, © Jarretera, © Irina Vorontsova, © chitlada, © arinahabich, © Gudellaphoto, © converse677, © charles taylor, © klavdiyav, © igishevamaria, © mariesacha, © Alrandir, © Дарья Колпакова, © vejaa, © Tierney, © Moon Safari, © kzdanowska, © New Africa, © _nastassia; Page 2: © Elwa Design Studio, © Alis Photo, © kzdanowska; Page 3: © Elwa Design Studio, © Arcansél, © converse677; Back cover: © Elwa Design Studio

Acknowledgements

The preparation of this publication was led by Claudia Cappa and Filipa de Castro (Data and Analytics Section, UNICEF Headquarters), with inputs from Claire Thomson (independent consultant). Munkhbadar Jugder (Data and Analytics Section, UNICEF Headquarters) and Celia Hubert (independent consultant) contributed to data processing, with guidance from Ivana Bjelic and Yadigar Coşkun (Data and Analytics Section, UNICEF Headquarters). Tonatiuh Barrientos, Ariela Braverman and Martín Romero-Martínez (independent consultants) supported the estimation work. Isabel Jijon (independent consultant) was involved in fact-checking. Prashant Ranjan Verma (independent consultant) assisted with accessibility features. The report was edited by Lois Jensen, copyedited by Tina Johnson and designed by Elwa Design Studio (independent consultants).

Valuable feedback and comments were provided by Bisi Agberemi, Diogo Amaro, Elena Atanassova, Rosangela Berman-Bieler, Liliana Carvajal, Alexandre Cote, Enrique Delamónica, Erinna Dia, Mamadou S. Diallo, Ayça Dönmez, Alberto Vásquez Encalada, Solrun Engilbertsdottir, Chika Hayashi, Afrooz Kaviani Johnson, Margaret Kelly, Julia Krasevec, Aniruddha Kulkarni, Asma Maladwala, Bhaskar Mishra, Sakshi Mishra, Suguru Mizunoya, Natalia Mufel, Ana Nieto, Lauren Pandolfelli, Nicole Petrowski, Chemba Raghavan, Vijaya Ratnam Raman, Jennifer Requejo, Lucy Marie Richardson, Tom Slaymaker, Wongani Grace Taulo, Megan T. Tucker and Ann Willhoite. Gratitude also goes to the many colleagues who shared relevant material and lent their support to the preparation and launch of the report, in particular Kokou Sefako Amelewonou, Aurelia Ardito, Yumi Bae, Cynthia Brizuela, Anna Burlyaeva, Talei Cama, José Sierra Castillo, Issa Davies, Deepak Kumar Dey, Boris Diechtiareff, Derya Dostlar, Italo Dutra, Ana Carolina Fonseca, Maud Droogleever Fortuyn, Fazlul Haque, Tess Ingram, Benjamin Johnson, Kristel Jüriloo, James Kaphuka, Farhod Khamidov, Martha Kibur, Shenrui Li, Siraj Mahmudlu, Kanchan Dyuti Maiti, Yetnebersh Nigussie Molla, Lucy Evelyn Vieira Silva Monteiro, Sarah Musau, Bo Pedersen, Meri Poghosyan, Eva Quintana, Luigi Peter Ragno, Lieve Sabbe, Nora Shabani, Nafisa Binte Shafique, Manar Soliman, Mary Thomas, Turgay Ünalan, Jayachandran Vasudevan, Vincenzo Vinci, Hrayr Wannis and Fang Yan.

Technical advice and inputs were provided by Lucian Agafitei (Eurostat); Anjlee Agarwal (National Centre for Accessible Environments, India); Purnendu Kishore Banerjee (National Informatics Centre, India); Clodoaldo Alberto Castiano (Mozambican Association of People with Disabilities, Mozambique); Mulugeta Bayisa Chala (Institute of Health Policy, Management and Evaluation, Ethiopia); Gráinne Collins (Department of Children, Equality, Disability, Integration and Youth, Government of Ireland); Elena de Palma (Italian National Statistics Office, Italy); Clare Farrell (Department of Children, Equality, Disability, Integration and Youth, Ireland); Mónika Földvári (Hungarian Central Statistical Office, Hungary); Lidia Gargiulo (Italian National Statistics Office, Italy); Maíra Bonna Lenzi (Brazilian Institute of Geography and Statistics, Brazil); Mitchell Loeb (Washington Group on Disability Statistics); Jennifer Madans (Washington Group on Disability Statistics); Rafael Meza (University of Michigan, USA); Daniel Mont (Center for Inclusive Policy, USA); Heiko Pfaff (Germany Federal Statistics Office, Germany); Gillian Roche (Central Statistics Office, Ireland); Somaya El-Saadani (Cairo University, Egypt); Brisa Sánchez (Drexel University, USA); Feng Shanwei (China Disabled Persons Federation, China); Alessandro Solipaca (Italian National Statistics Office, Italy); Michael Tefera (Ethiopia Central Statistics Agency, Ethiopia); Nicola Tickner (Department of Children, Equality, Disability, Integration and Youth, Government of Ireland); Işıl Tunacan (Turkish Statistical Institute, Turkey); Heidi Ullmann (National Center for Health Statistics, USA, and Washington Group on Disability Statistics); Julie D. Weeks (National Center for Health Statistics, USA, and Washington Group on Disability Statistics); Yasemin Yazicioğlu (Turkish Statistical Institute, Turkey) and Fatma El-Zanaty (Cairo University, Egypt).

This report was made possible through core funding to UNICEF and a generous grant from the Department of Foreign Affairs and Trade of the Government of Australia.

Seen, Counted, Included

Using data to shed light on the well-being of children with disabilities

unicef
for every child

© UNICEF/UN040426/Preechapanich

Contents

1 Every child has the right to be counted

2 Every child has the right to survive and thrive

3 Every child has the right to a nurturing family environment

4 Every child has the right to learn

5 Every child has the right to protection from violence and exploitation

6 Every child has the right to a safe and clean environment

7 Every child has the right to a fair chance in life

8 Every child has the right to a happy life, free from discrimination

9 Fulfilling the rights of every child

CHAPTER 1

Every child has the right to be counted

Pacifique, 15, from Rwanda, was born with fragile bones and multiple impairments. "The tip is to have self-confidence," he says. "I have not missed a single milestone in school. I am now in my third year of secondary school." But he also knows that not all children like him are as fortunate. "I am thankful that I have supportive parents who did not hide me inside the house as some do when they have children like me. Although my body is disabled, my heart is not," he says. "I know that I have value."

Tung, 7, lives in central Viet Nam. Tung's mother had heart disease and gave birth to him two months prematurely, which left him visually impaired. Since his birth, his parents have been doing everything in their power to nurture and support him. When Tung was 4, they enrolled him in an Inclusive Education Resource Centre, where he has been thriving ever since. He enjoys interacting with his teachers and classmates and participating in new activities. Tung has developed a keen sense of direction and can move about well, without support from others. He is now in grade 1, studying literature, math and music.

Kamilla, 16, is from Kazakhstan. In the autumn of 2018, she participated in a survey and admitted she had had thoughts of suicide within the previous two weeks. Kamilla was subsequently connected to a psychologist. Certain events in Kamilla's life had led to her severe depression. "After those events, I felt like everything was quiet. Like life was just passing, and it was not interesting. Then, little by little, I began to communicate with my mother, we became closer. I found friends. I entered college and had a lot of friends. Things became better and more interesting with time."

Around the world there are nearly 240 million children like Pacifique, Tung and Kamilla. Like every other child in the world, each of them has the right to be nurtured and supported through responsive care and education, to receive adequate nutrition and social protection, and to enjoy play and leisure time. Too often, however, such rights are denied. The reasons vary: stigma, lack of accessible services, institutionalization, physical barriers. But the consequences are sadly consistent. When excluded from society, these children's chances to survive and thrive are diminished along with their prospects for a bright future.

In 2015, the adoption of the 2030 Agenda for Sustainable Development was framed around the pledge of leaving no one behind. It calls for a commitment to ensure that all 17 Sustainable Development Goals (SDGs), comprising 169 targets, are achieved for the benefit of all members of society. It emphasizes reaching those furthest behind first, which inevitably includes children with disabilities and their families.

© UNICEF/UN0425663/Sokol

Monitoring the inclusion of children with disabilities in development efforts has long been held back by the lack of reliable and comprehensive data. Recent years, however, have seen renewed efforts to fill data gaps. The development of new data collection tools has resulted in a substantial increase in the availability and quality of data on children with disabilities, fostering new analyses and contributing to increased knowledge generation.

This report is a testament to these efforts. It offers evidence crucial to decision-making to fulfil obligations, both moral and legal, to give every child an equal chance in life. The largest compilation of statistics on children with disabilities to date, it builds on data from more than 1,000 sources. It documents the scale and characteristics of children with disabilities and begins to shed light on the types of adversity they often face. It includes internationally comparable data from 43 countries and areas and covers more than 60 indicators of child well-being – from nutrition and health, to access to water and sanitation, protection from violence and exploitation, education and life satisfaction. It also presents global and regional estimates of children with disabilities, drawn from data from over 100 countries.

The report's objective is to promote the use of these data to make children with disabilities more visible, bringing about a fuller understanding of their life experiences.

The stories behind the numbers

Behind every statistic is a story of a child – her hopes, his dreams, their ambitions. The data presented on the following pages offer a fleeting glimpse into the lives of children with disabilities around the world. Each number reminds us of the obstacles that too many of these children face and the rights we must uphold for all children.

However, numbers alone cannot tell the whole story. While they document the share of children with disabilities who have never attended school, for example, they are unable to shed light on the factors that prevented their participation. Numbers can tell us the proportion of children who feel discriminated against, but not about the forces that influence their life and happiness.

Numbers are a critical first step, but to go further we need to hear the voices and lived accounts of children with disabilities and their families. In other words, counting is not enough. Children with disabilities also need to be heard. While this report relies largely on quantitative data, it also aims to encourage qualitative investigations and new research that will help us discern the stories behind the numbers.

Understanding disability in children

Children with disabilities are a highly diverse population group. They include children who were born with a genetic condition that affects their physical, mental or social development; those who sustained a serious injury, nutritional deficiency or infection that contributed to long-term functional difficulties; or those exposed to environmental toxins that resulted in developmental delays. Children with disabilities also include those who developed anxiety or depression as a result of stressful life events.

Children with disabilities may have very different experiences based on the interaction of their specific impairment(s) and the environment in which they live (see Box 1.1 on page 9). For instance, children with myopia who do not have access to diagnostic services and glasses will have difficulty seeing, whereas those who have such access will not. Furthermore, children may have similar sorts of functional difficulties but participate in society to varying degrees because of physical, communication and cultural barriers. Access to assistive devices, technology and services, as well as exposure to nurturing relationships and positive social norms and beliefs, are crucial to promoting the inclusion of all children, regardless of their impairments.

Children with disabilities often experience limitations in more than one functional domain. This can be due to the same impairment that manifests in a variety of domains or can be separate impairments resulting in multiple difficulties. For example, children who are visually impaired may also have difficulties with self-care. Additionally, different domains of difficulty often require different forms of support to help ensure the child's participation. These different needs further contribute to the diversity of the population of children with disabilities and call for dedicated responses.

BOX 1.1

Defining disability

Disability is a complex and evolving concept, involving aspects of body function and structure (impairments), capacity (measured by the ability to carry out basic activities without the benefit of assistance in any form), and performance (measured by the individual's ability to carry out these same basic activities using assistance). As stated in the Convention on the Rights of Persons with Disabilities, disability stems from the interaction between certain conditions or impairments and an unaccommodating environment that hinders an individual's full and effective participation in society on an equal basis with others.

The framework of the International Classification of Functioning, Disability and Health (ICF) relies on a three-level model to describe the concept of disability. According to the ICF, disability can occur as:

- An impairment in body function or structure (for example, a cataract or opacity of the natural lens of the eye, which prevents the passage of rays of light and impairs or destroys sight)
- A limitation in activity (for example, low vision or inability to see, read or engage in other activities)
- A restriction in participation (for example, exclusion from school or participation in other social, recreational or other events or roles).

The ICF framework defines disability within a biopsychosocial model, integrating factors pertaining to both the individual and his or her environment. In contrast, the medical model defines disability as a problem resulting from a medical condition. Awareness of the important role of the social context in defining disability led to the development of the social model of disability, which defines disability not merely as a medical condition or diagnosis but rather as a failure of the policy, cultural and physical environments to accommodate differences in function.

© UNICEF/UN0445941/Karimi

Counting children with disabilities

The availability of data on children with disabilities has been a longstanding challenge due to limitations related to the use of narrow definitions and the lack of a standardized data collection methodology.

While most countries have produced estimates of the number of persons with disabilities, the use of different measurement tools limits the validity and comparability of the data. The definition of disability that is used in any given data collection instrument determines who is identified as having a disability and included in the appraisal of evidence. Different conceptualizations and differences in operationalizing the concept of disability will directly impact the quality and utility of the gathered data. Historically, measures of disability have focused on domains related to physical and sensory functioning, while other domains, notably those related to psychosocial functioning, were largely overlooked. Language that was stigmatizing or judgemental was also commonly found in some of the questionnaires used to determine disability status.

An additional limitation to the production of high-quality data on children with disabilities relates to the protocols used to collect them. Non-inclusive data collection methods and analyses can lead to the generation of inaccurate, incomplete, irrelevant or misleading evidence (see Box 1.2 on page 11). The absence of inclusiveness may result in severe underestimations and misidentification of persons with disabilities, aggravating exclusion and preventing the implementation of efforts where they are most needed.

Further to the considerations on measuring disability in general, identifying children with disabilities presents additional challenges. The domains of functioning that may indicate that a young child has a disability are different from those in older children and adults. For example, asking about difficulties related to self-care is relevant among older children and adults but not young children. In addition, measuring functional difficulties is complex since children, especially at younger ages, develop at different rates. Therefore, the identification of functional difficulties in children needs to account for what is a typical variation in development versus a developmental delay or a consequence of a specific impairment. Measuring disability among children requires instruments that are specifically designed to reflect the breadth of functional domains that are relevant for children. During childhood, this implies accounting for all the domains of physical, psychosocial, sensory and cognitive functioning. Furthermore, a comprehensive measure of disability must include all sorts of individual and environmental factors that may prevent children from developing skills and building trustworthy relationships and that inhibit their full and effective participation in society on an equal basis with others.

© UNICEF/UN0198803/Sokhin

BOX 1.2

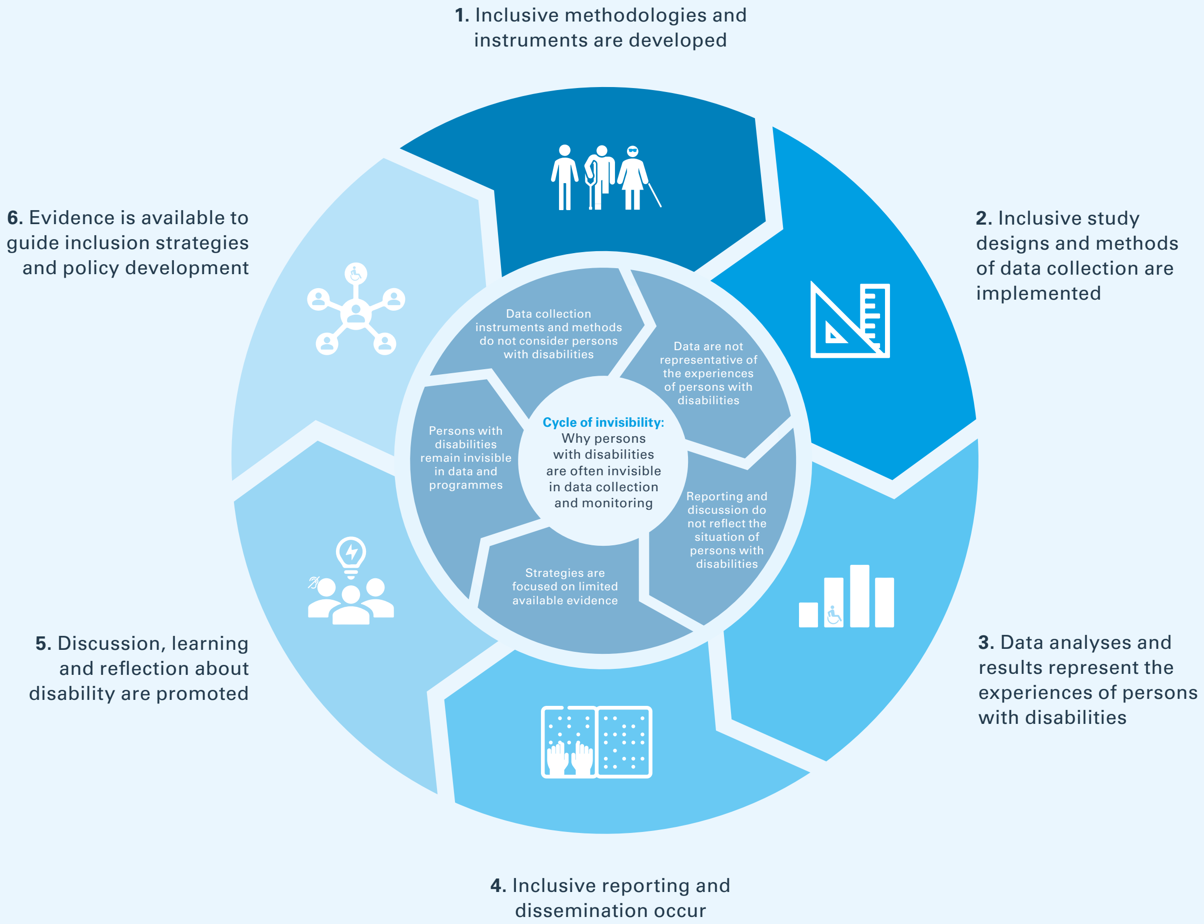
Generating inclusive data

Inclusive data are key to eliminating discrimination on the basis of disability and accelerating global efforts towards inclusive programming.

Inclusivity needs to be considered at all stages of the data generation process – from the design of studies for the generation of country-level statistics to the methodological approaches used in the production of global estimates. This involves using data collection instruments and protocols that allow for the disaggregation of key indicators according to disability status and developing and implementing accommodation strategies to ensure that persons with disabilities can participate in surveys, censuses and programme evaluation data collection. The production of inclusive data also demands the involvement of persons with disabilities in the analysis and dissemination of the findings. This will help ensure that their experiences and needs are adequately reflected in the evidence being generated.

For guidance on how to ensure inclusivity in data collection, see: United Nations Children's Fund, 'Producing Disability-Inclusive Data: Why it matters and what it takes', UNICEF, New York, 2020.

Breaking the cycle of invisibility related to persons with disabilities



United Nations Children's Fund, 'Producing Disability-Inclusive Data: Why it matters and what it takes', UNICEF, New York, 2020.

A new way to measure disability in children

To address the paucity of data on the situation of children with disabilities globally, UNICEF and the Washington Group on Disability Statistics developed the Child Functioning Module for use in censuses and surveys. The module is intended to provide a population-level estimate of the number and proportion of children with functional difficulties.

The module covers children between 2 and 17 years of age and assesses difficulties in various domains of functioning.[1] It conforms to the biopsychosocial model of disability, focusing on the presence and extent of functional difficulties rather than on body structure or conditions. For example, a mobility limitation can be the result of cerebral palsy, loss of limbs, paralysis, muscular dystrophy or spinal cord injuries. Behavioural issues may result from autism, attention deficit hyperactivity disorder or a mental health condition. Basing disability statistics on questions that ask about diagnosable conditions is problematic. Many caregivers may not know their child's diagnosis, particularly if this involves mental and psychosocial conditions; and knowledge about diagnoses is often correlated with education, socioeconomic status and access to health services, all of which may bias collected data. Questions that focus on basic actions, such as those in the Child Functioning Module, serve as a better basis for identifying children with disabilities. For the purposes of social participation and equalizing opportunities, functional status – and how that impacts someone's life – is of greater interest than the cause (medical or otherwise), since children with the same conditions or impairments may have very different degrees of difficulties. For example, one child with cerebral palsy might have a slight speech impairment but can easily be understood while another child with the same condition might not be able to speak at all, making communication challenging. Some of these difficulties are traditionally seen as a 'disability' while others are not.

The Child Functioning Module is comprised of two questionnaires, one with 16 questions for children aged 2 to 4 years and another with 24 questions for children aged 5 to 17 years. The questions are to be administered to the mother or primary caregiver of the child in question. They are designed to identify difficulties according to a range of severity. To better reflect the degree of functional difficulty, each area is assessed against a rating scale.

In addition to collecting data on domains related to physical, sensory and cognitive functioning, the Child Functioning Module includes questions on difficulties in psychosocial functioning. These questions identify children having difficulties expressing and managing emotions, accepting changes, controlling their behaviour and making friends. While all children may sometimes manifest worry, sadness or anxiety, these emotions may be significant and frequent enough to place certain children at higher risk of dropping out of school, withdrawing from family or community life or harming themselves. As with other questions in the module, questions in the psychosocial domains are intended to collect information about difficulties across a spectrum of severity. This allows for the identification of children at risk of experiencing significant disruptions to their well-being and development due to such difficulties. For example, the question on difficulties in coping with change is not intended to identify children who may be stubborn at times or show resistance to some routine changes. Rather, it is intended to identify those who have major issues transitioning from one activity to another on a consistent basis and have difficulty with disruptions to their routine, including children who are on the autism spectrum – a group of conditions often characterized by the need for routines and rituals. These children can struggle with unexpected changes, causing upset and disruption to varying degrees, especially during periods of transition, such as changing schools, moving or taking on more mature roles as they age.[2]

UNICEF/Washington Group Module on Child Functioning

Children aged 2 to 4 years

SEEING
Difficulty seeing

HEARING
Difficulty hearing sounds like people's voices or music

MOBILITY
Difficulty walking

FINE MOTOR
Difficulty picking up small objects

COMMUNICATION/ COMPREHENSION
Difficulty understanding or being understood

CONTROLLING BEHAVIOUR
Kicking, biting or hitting other children or adults

LEARNING
Difficulty learning things

PLAYING
Difficulty playing

Children aged 5 to 17 years

SEEING
Difficulty seeing

HEARING
Difficulty hearing sounds like people's voices or music

MOBILITY
Difficulty walking on level ground

SELF-CARE
Difficulty feeding or dressing themselves

COMMUNICATION/ COMPREHENSION
Difficulty being understood by people

LEARNING
Difficulty learning things

REMEMBERING
Difficulty remembering things

ATTENTION AND CONCENTRATING
Difficulty concentrating on an activity they enjoy doing

RELATIONSHIPS
Difficulty making friends

COPING WITH CHANGE
Difficulty accepting change in their routine

AFFECT

ANXIETY
Seeming very anxious, nervous or worried on a daily basis

DEPRESSION
Seeming very sad or depressed on a daily basis

CONTROLLING BEHAVIOUR
Difficulty controlling their behaviour

Psychosocial functioning is also fundamental in facilitating positive engagement between a child and his or her environment and establishing positive relationships. For example, children who have psychosocial difficulties may face significant barriers in accessing education and other services without support and in building and maintaining social interactions.

The Child Functioning Module was developed in consultation with organizations of persons with disabilities, among other stakeholder groups. These organizations were instrumental in the design of the module, including through their engagement during its validation in the field.[3] The module also underwent extensive review by other experts and was tested in several countries to determine the quality of questions and how well they are understood by people in diverse cultures.[4]

In March 2017, a joint statement issued by multiple UN agencies and Member States, organizations of persons with disabilities and other stakeholders recommended the module as the appropriate tool for SDG data disaggregation for children.[5] The development of the Child Functioning Module and its roll-out as part of the Multiple Indicator Cluster Survey (MICS) programme (see Box 1.3) has led to the release, for the first time, of cross-nationally comparable data on children with disabilities. In addition, many countries have also included the module as part of their nationally representative surveys. Estimates from more than 40 countries have been released as of November 2021, and data from 20 more surveys are expected to become available over the next couple of years.

BOX 1.3

Collecting data on children with disabilities through Multiple Indicator Cluster Surveys

The Multiple Indicator Cluster Survey (MICS) programme is designed to assist countries in collecting and analysing data on the situation of women and children. Since its inception in the mid-1990s, the MICS has enabled nearly 120 countries to collect nationally representative and internationally comparable data on more than 100 key indicators in areas such as nutrition, child health, mortality, education, water and sanitation, child protection, and HIV and AIDS.[6]

The MICS tools, including core questionnaires and modules on specific topics, are developed by UNICEF in consultation with relevant experts from various UN organizations and interagency monitoring groups. The surveys are designed by country teams and implemented by local agencies, typically national statistical offices. The core questionnaires are a household questionnaire, a questionnaire for individual girls and women between the ages of 15 and 49, a questionnaire for individual boys and men aged 15 years and older, a questionnaire on children under age 5 (administered to mothers or primary caregivers), and a questionnaire on children aged 5 to 17 years (also administered to mothers or primary caregivers). The questionnaires are all modular in nature and can be adapted or customized to the needs of the country. Trained fieldwork teams conduct interviews with household members on a variety of topics – focusing mainly on those issues that directly affect the lives of children and women. The MICS is an integral part of the policies and plans of many governments around the world and a major data source for more than 30 SDG indicators.

Starting in 2016, the Child Functioning Module and the Washington Group Short Set on Functioning[7] became part of the MICS and are used to collect data on children aged 2 to 17 years and on adult women and men aged 18 and older, respectively. With the inclusion of these two tools, the MICS programme has become the largest source of internationally comparable data on children and adults with disabilities. When analysed in conjunction with other MICS indicators, the data can be used to document the inequities experienced by persons with disabilities at the global level.

Global and regional estimates

Estimation challenges

Despite the recent increase in standardized data on children with disabilities, the availability of comparable data is still highly uneven within and across countries. Past estimates aimed at quantifying the number of children with disabilities have been largely based on data sources that rely on very different definitions and methods. Moreover, they have mostly been based on medical concepts of disability, which emphasize clinical conditions, sequelae and the presence of specific impairments (see Box 1.4). Typically, shortcomings in terms of data quality, comparability and coverage are addressed by adjusting and harmonizing data through different modelling techniques, with various limitations.[8]

In the context of disability measurement, such shortcomings have serious implications when attempting to produce global and regional estimates of the number of children with disabilities. While data adjustments and modelling are central to overcoming harmonization issues, they cannot address fundamental conceptual differences in what is being measured. Data sources based on a medical definition of disability emphasize a subpopulation with more severe conditions and impairments in 'visible' domains of functioning. As a result, they under-identify children who may have less severe difficulties, or difficulties in domains that tend to be excluded from measurement tools.

BOX 1.4 Previous efforts to estimate the number of children with disabilities

Until this report, no estimation of the global number of children with disabilities had been made that takes into account a broad range of functional difficulties along with behavioural and mental health issues.

The only estimate available for many years indicated that 10 per cent of the world's population had some form of disability.[9] In 2011, this was updated to 15 per cent, and an estimate was produced on the number of children aged 14 or younger with a moderate or severe disability: 93 million children, or 5 per cent of children in that age group.[10] Such global estimates are affected by well-known limitations surrounding disability measurement.

The concept of disability described in the World Health Organization's (WHO's) *Global Burden of Disease 2004* (upon which the 2011 estimate for children is based) refers to the perceived short- or long-term loss of health associated with a condition and is not entirely aligned with the ICF definition of disability. This metric of disability has been criticized for its lack of consideration of core participatory and rights-based principles and for being discriminatory on the value of persons with disabilities.[11]

Another limitation to this approach is that the weights attributed to each impairment do not account for the differential impact that an impairment may have on various individuals as a result of environmental conditions.[12] Since the weights used by the *Global Burden of Disease* do not vary across geographic regions, they disregard the multiple contextual factors that can worsen functionality in persons with the same impairments.[13]

The use of medical concepts of disability also has implications for the quality of data. Reporting of these impairments usually depends on parents' awareness of symptoms and a pre-existing diagnosis. Therefore under-identification remains a problem since diagnosis depends on the availability of health-care facilities where children can be screened.

More recent estimates have introduced improvements, such as increasing the internal consistency of different sources of data by using a meta-analytic approach and adjusting estimates for comorbidity.[14] That said, these latest estimates are still largely focused on the burden of different impairments and medical conditions, rather than on the functional difficulties or restrictions to participation experienced by children with disabilities.

Methodology

The technical work behind this report aimed to produce an estimate of the number of children with disabilities aligned with the Convention on the Rights of Persons with Disabilities and a biopsychosocial concept of disability. The regional and global estimates presented here rely mainly on information about functional difficulties or limitations among children gathered through sources with some degree of international comparability. These include MICS, Demographic and Health Surveys (DHS), the European Health Interview Survey (EHIS) and the European Survey on Income and Living Conditions (EU-SILC). While most of the data sources included in the estimates refer to data collected from 2017 onwards, the data points used for some countries are not the most recent ones, but those most aligned with the concept of disability underlying the global estimate. Detailed technical information on the estimation work and the data sources is provided in the technical annex at the end of the report.

How data were selected

UNICEF maintains a global database of disability data sources from 194 countries and areas. The database includes more than 1,000 data points together with information on methodological aspects that can impact the number of children who are identified as having a disability. The selection of data sources involved an extensive process of data compilation and consultations with country-level experts to overcome limitations on data availability and comparability, and to ensure their views were reflected in the data selection, harmonization and estimation process.

After screening the disability global database, sources of data collected prior to 2005, as well as those not derived from censuses or household surveys, were excluded. An additional selection criterion focused on identifying data aligned as closely as possible with the concept of disability described earlier. This meant selecting sources of data gathered through measurement tools that collect information on functional difficulties rather than specific impairments or health conditions. Another selection criterion was the use of a rating scale to capture the severity of functional difficulties, rather than the use of 'yes' or 'no' questions.

On the basis of these considerations, and in consultation with experts, 103 data sources were selected (see Table 1.1). Collectively, these data sources represent 84 per cent of the world's population of children and at least 50 per cent of the population of children within each region.

Technical consultations

Heterogeneity across data sources is a common concern when generating global estimates. While this can be dealt with using a strictly statistical approach, incorporating country-level expertise into the data selection and harmonization process was considered important.

The estimation work was part of an iterative process that included three technical consultations with experts in the field of data on children with disabilities. They included professionals from national statistical offices, organizations of persons with disabilities and academia.

TABLE 1.1. Data coverage

	Number of countries and areas	Number of countries and areas with available data that met the inclusion criteria	Percentage of the child population covered by the available data
East Asia and the Pacific	33	16	80
Eastern and Southern Africa	25	13	74
Europe and Central Asia	55	31	59
Latin America and the Caribbean	37	14	74
Middle East and North Africa	19	10	73
North America	2	2	100
South Asia	8	5	96
West and Central Africa	24	12	74
World	**203**	**103**	**84**

Following a standard protocol, the consultation sought to obtain the experts' views on the prevalence of children with functional difficulties in their countries. The initial part of the consultation was dedicated to building a common understanding of disability aligned with the ICF and the Convention on the Rights of Persons with Disabilities. This was followed by in-depth discussion of the available country-level information and the results of the data harmonization analyses and estimation work. For each consultation, UNICEF shared details on the process and methodology used for estimations as well as on the selected data sources for each region and country. Experts' inputs in relation to the data harmonization approach were incorporated and reflected in the regional and global estimates.

Data harmonization and final estimates

Instruments that collect data based on a restricted number of functional domains tend to underestimate the percentage of children with disabilities in a given population. Results from several countries that have measured disability among children aged 5 to 17 years using both the Child Functioning Module (involving 12 domains) and the Washington Group Short Set on Functioning (six domains) show that the number of children identified as having functional difficulties by the Short Set is substantially lower than the number identified by the Child Functioning Module. This finding was considered in the final harmonization process. Data sources based on the Short Set were adjusted to approximate the expected prevalence that would have been obtained by the Child Functioning Module, accounting for a country's under-five mortality rate.

Despite screening, selecting and harmonizing data points prior to the estimation process, the resulting data still contained significant variability across countries and regions (see Box 1.5). For this reason, the estimation process was largely based on meta-analyses of proportions that were considered suitable to account for the variability of the data. The final estimates that follow should be regarded as the best possible on the basis of available data and should be seen as indicating orders of magnitude rather than precise figures (see technical annex for additional details).

BOX 1.5

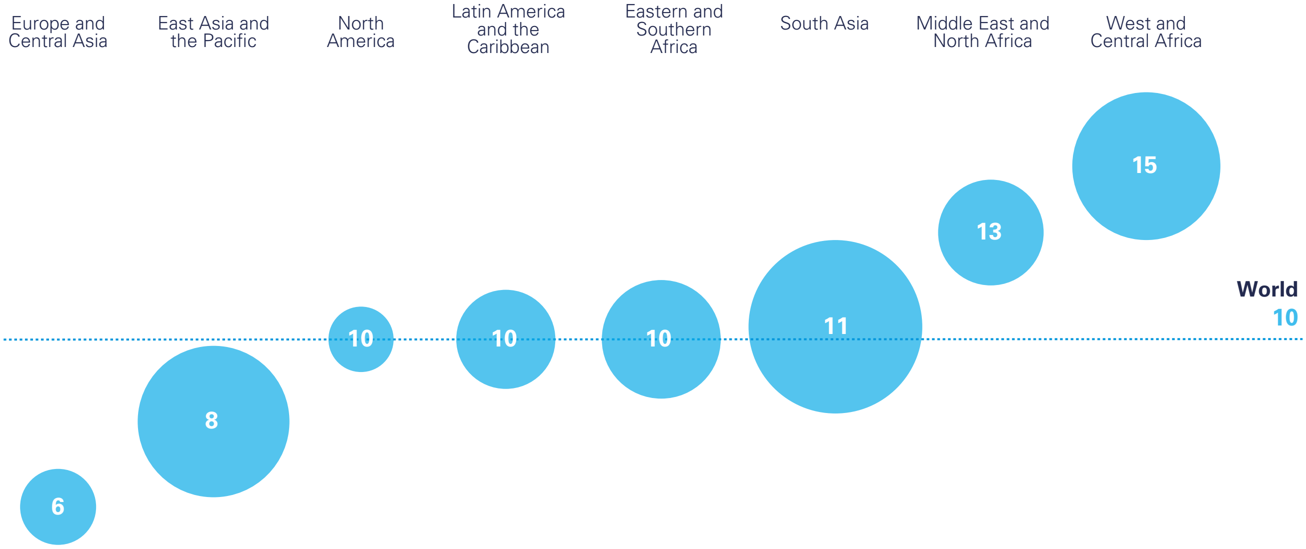
Working together towards more robust and inclusive estimates

Global and regional estimates of the number of children with disabilities remain highly complex and will continue to depend on the availability of adequate and comparable population-level data. Committed efforts and stronger investment are required to nurture the principle of disability-inclusion at all stages of the data collection and statistics production cycle. The objective of making all children with disabilities visible in official statistics and in global estimates can only be achieved by promoting good-quality country-level data. This will require building capacities across the board to bring countries to a common standard of disability statistics. The reliance on sophisticated statistical approaches to overcome the shortage of data and mitigate their flaws will not be sufficient to make this objective a reality. Rather, countries need support to strengthen their capacity to collect, analyse and use disability data through effective technical support and the engagement – and empowerment – of stakeholders, including persons with disabilities. Special consideration should be given to strengthening the availability and quality of data on the youngest children, particularly those under age 2, for which population-level data remain scarce.

Finally, mainstream surveys and censuses do not consider children who do not live in a household. While these children usually represent a small proportion of the child population, their under-identification could be significant in countries with high levels of institutionalization among children with disabilities and those with large 'floating' populations, such as those experiencing armed conflict or forced displacement. More comprehensive global estimates will need to include such children as well.

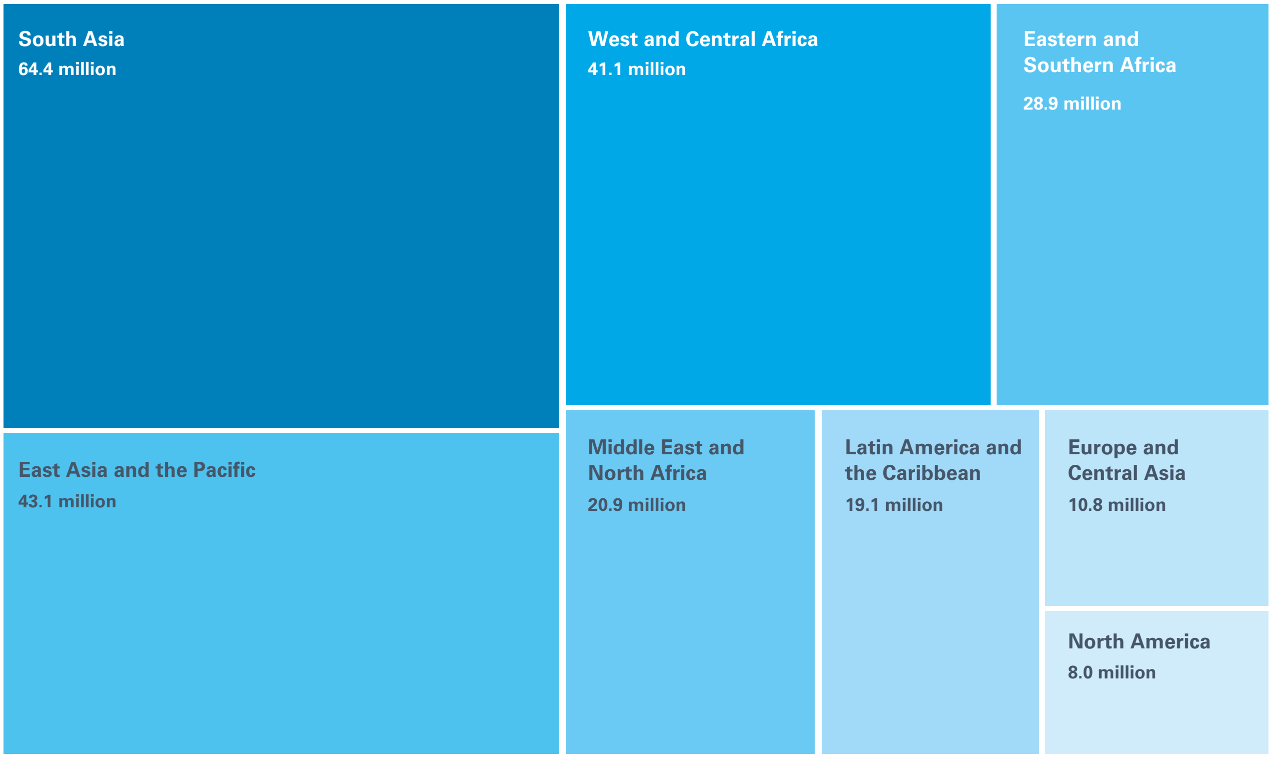
Nearly 240 million children have disabilities – 1 in 10 of all children worldwide

FIGURE 1.1 Percentage of children aged 0 to 17 years with disabilities



Note: The size of the circles reflects the number of children with disabilities in the respective regions.

FIGURE 1.2 Number of children aged 0 to 17 years with disabilities



Notes: The global estimate is based on a subset of 103 countries and areas covering 84 per cent of the global population of children aged 0 to 17 years. Regional estimates represent data covering at least 50 per cent of the regional population of children.

© UNICEF/UN040642/Miljanic

Country estimates

Indicators used in this section

Children with one or more functional difficulties include the following:

- Children aged 2 to 4 years who reportedly kick, bite or hit other children or adults a lot more than other children of the same age and/or who have 'a lot of difficulty' or 'cannot do at all' certain functions. These include:
    - Seeing, even if using glasses
    - Hearing, even if using a hearing aid
    - Walking, even if using equipment or assistance
    - Understanding or being understood when speaking
    - Picking up small objects with their hands
    - Learning things
    - Playing.
- Children aged 5 to 17 years who reportedly seem very anxious, nervous or worried and/or very sad or depressed on a daily basis and/or who have 'a lot of difficulty' or 'cannot do at all' certain functions. These include:
    - Seeing, even if using glasses or contact lenses
    - Hearing, even if using a hearing aid
    - Walking on level ground, even if using equipment or assistance
    - Performing self-care activities, such as feeding or dressing themselves
    - Being understood when speaking to people inside or outside their household
    - Learning things
    - Remembering things
    - Concentrating on an activity they enjoy
    - Accepting changes in their routine
    - Controlling their behaviour
    - Making friends.

Children with more than one functional difficulty include all children who have difficulties functioning in more than one of the domains listed above.

Children with signs of anxiety or depression only present signs of anxiety and/or depression daily but do not have difficulties in the other domains listed above.

Children with one or more severe functional difficulties, without signs of anxiety or depression, reportedly cannot function at all in one or more of the domains listed above but do not show signs of anxiety or depression on a daily basis.

Children with more than one severe functional difficulty reportedly cannot function at all in more than one of the domains listed above and/or they show signs of anxiety and/or depression daily.

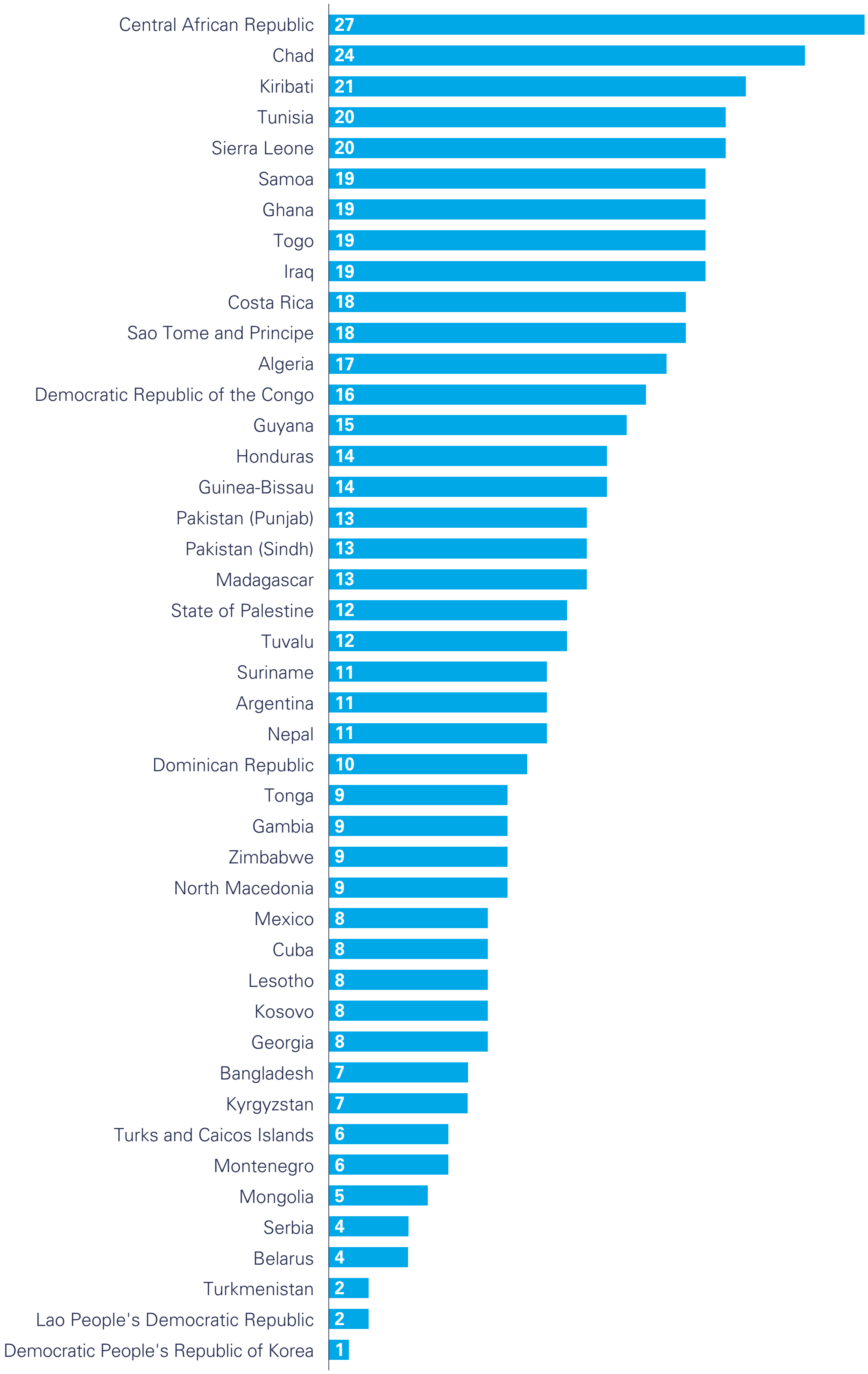
Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo,[15] Kyrgyzstan, Lao People's Democratic Republic (for children aged 2 to 4 years only), Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

© UNICEF/UN0338750/Nabrdalik VII

The proportion of children with disabilities varies significantly across countries and areas

FIGURE 1.3 Percentage of children aged 2 to 17 years with one or more functional difficulties



Notes: All references to Kosovo in this publication should be understood to be in the context of United Nations Security Council resolution 1244 (1999). Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only.

FIGURE 1.4 Percentage of children aged 2 to 4 years with one or more functional difficulties

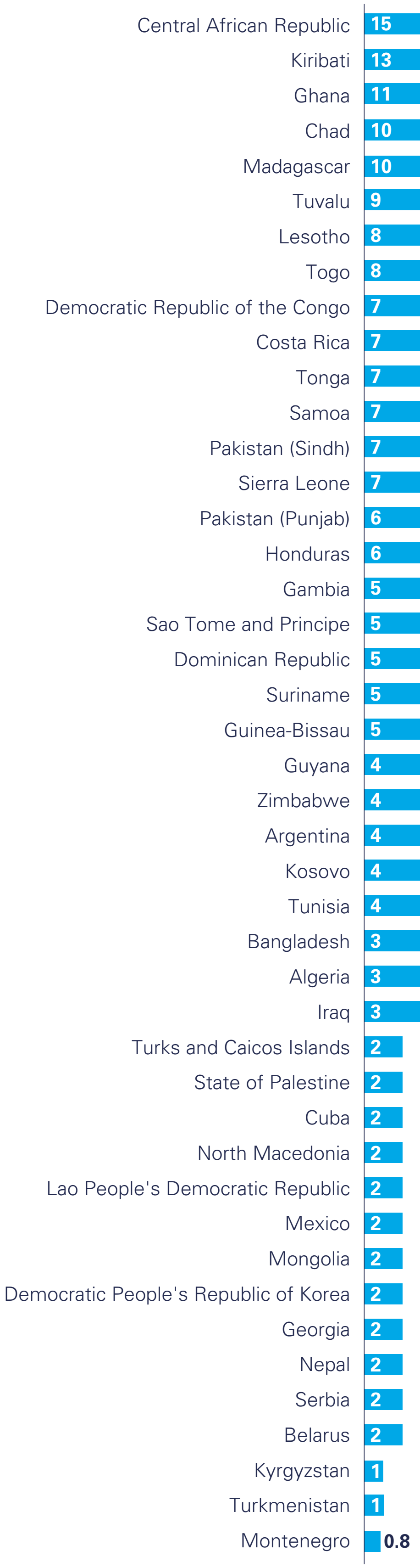
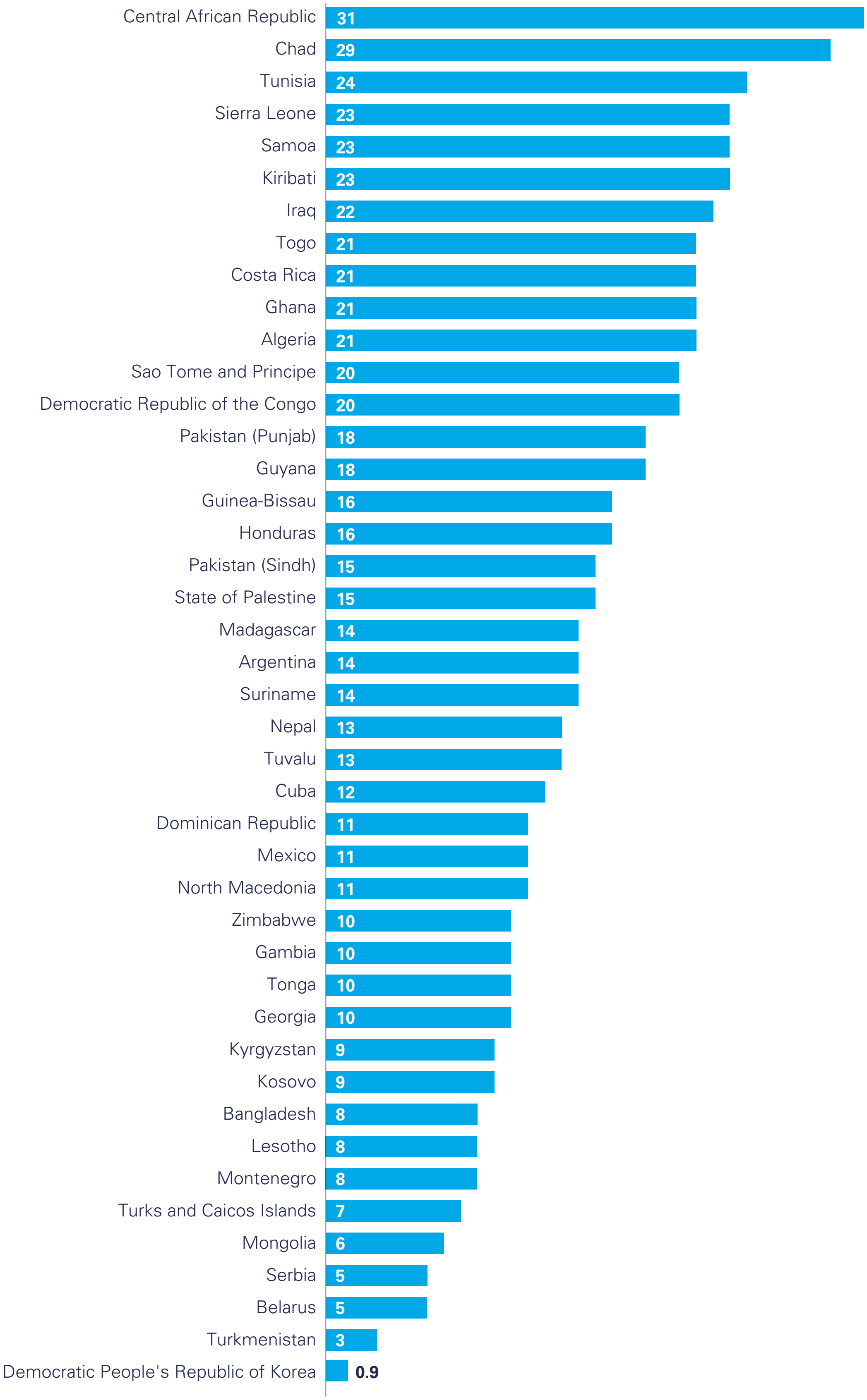
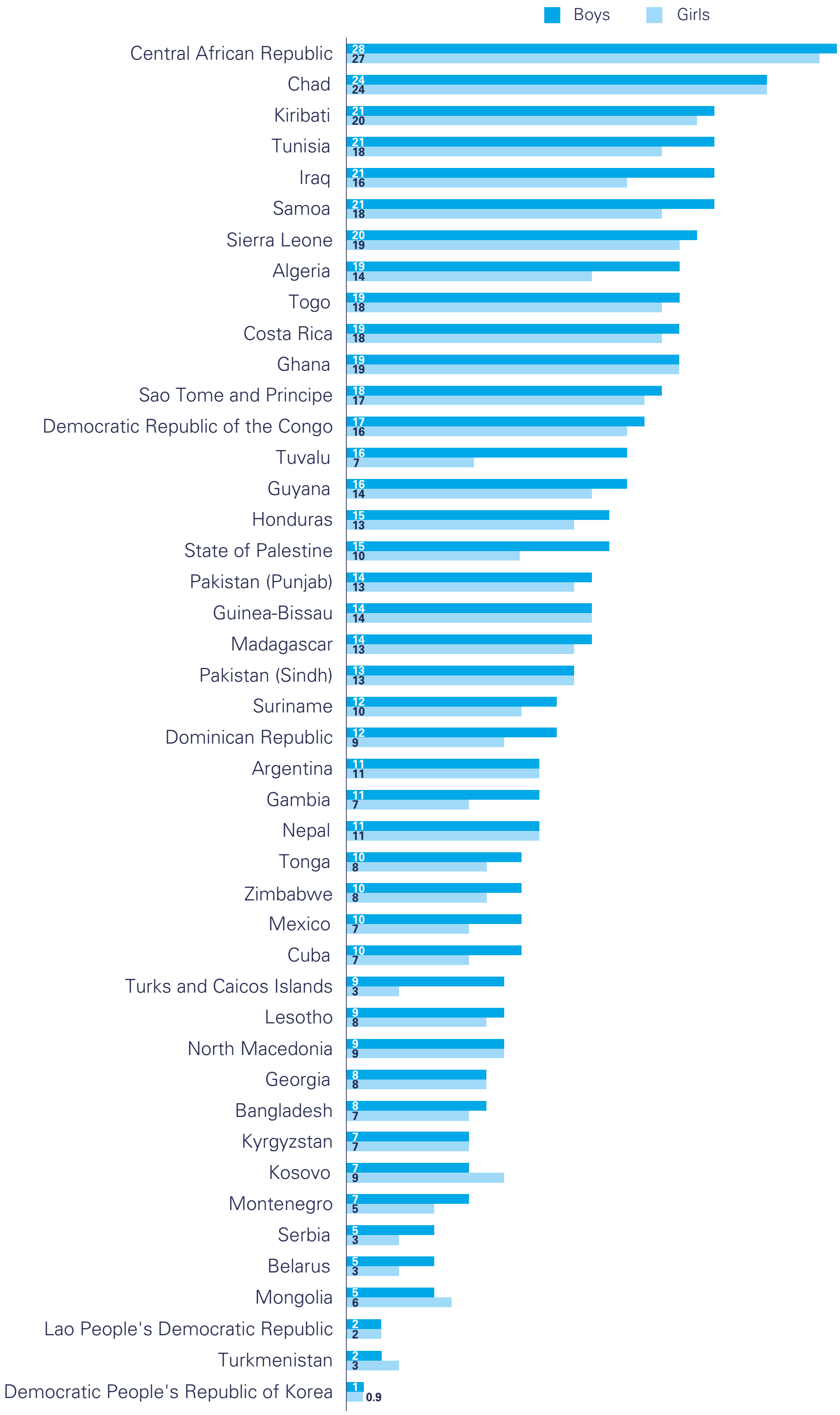


FIGURE 1.5 Percentage of children aged 5 to 17 years with one or more functional difficulties



In most countries and areas, no statistically significant differences are found in the proportion of boys and girls with disabilities. However, in those places where a significant difference is found, a greater proportion of boys have functional difficulties

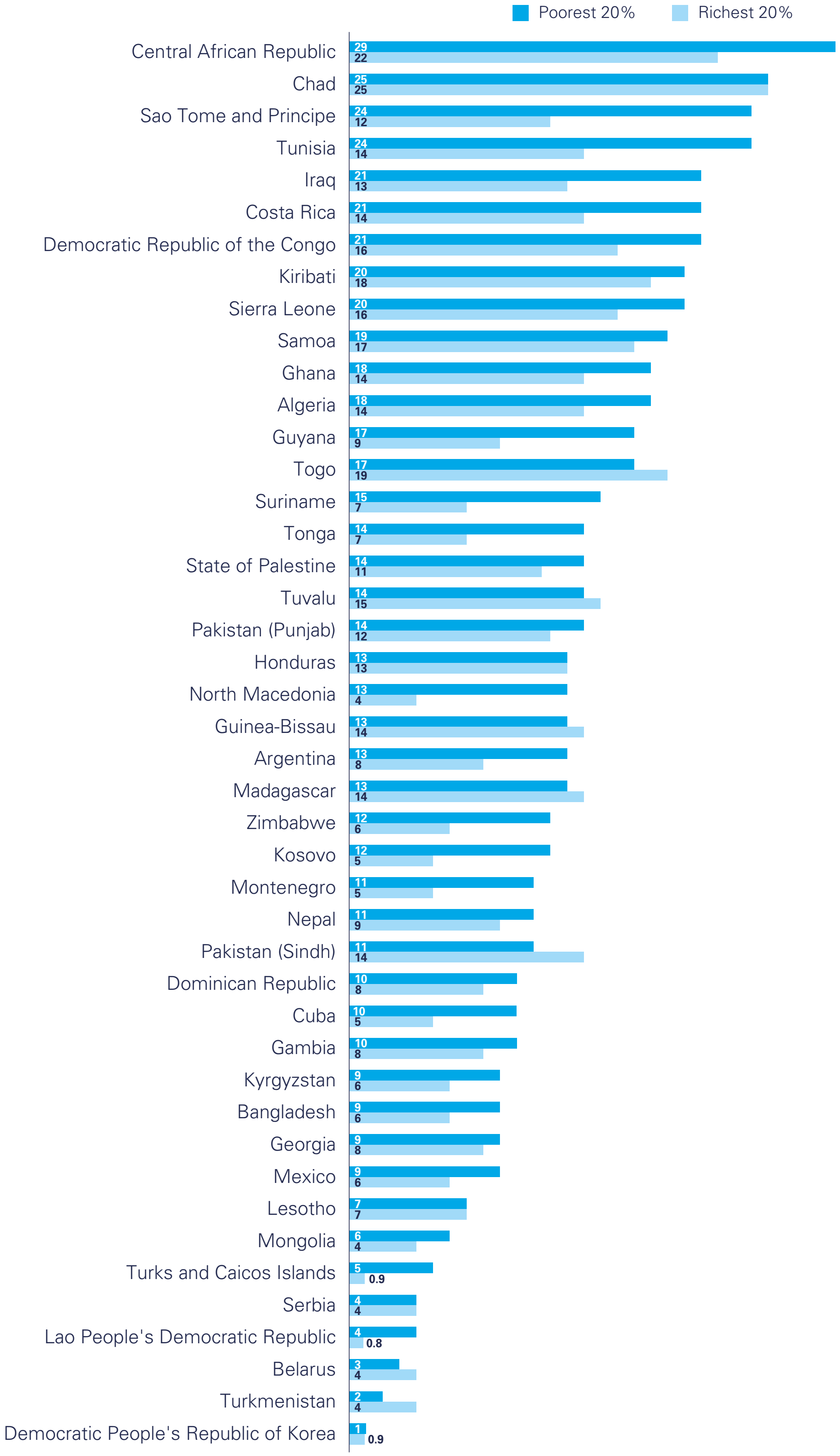
FIGURE 1.6 Percentage of children aged 2 to 17 years with one or more functional difficulties



Note: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only.

In most countries and areas, the proportion of children with disabilities is significantly higher in the poorest households

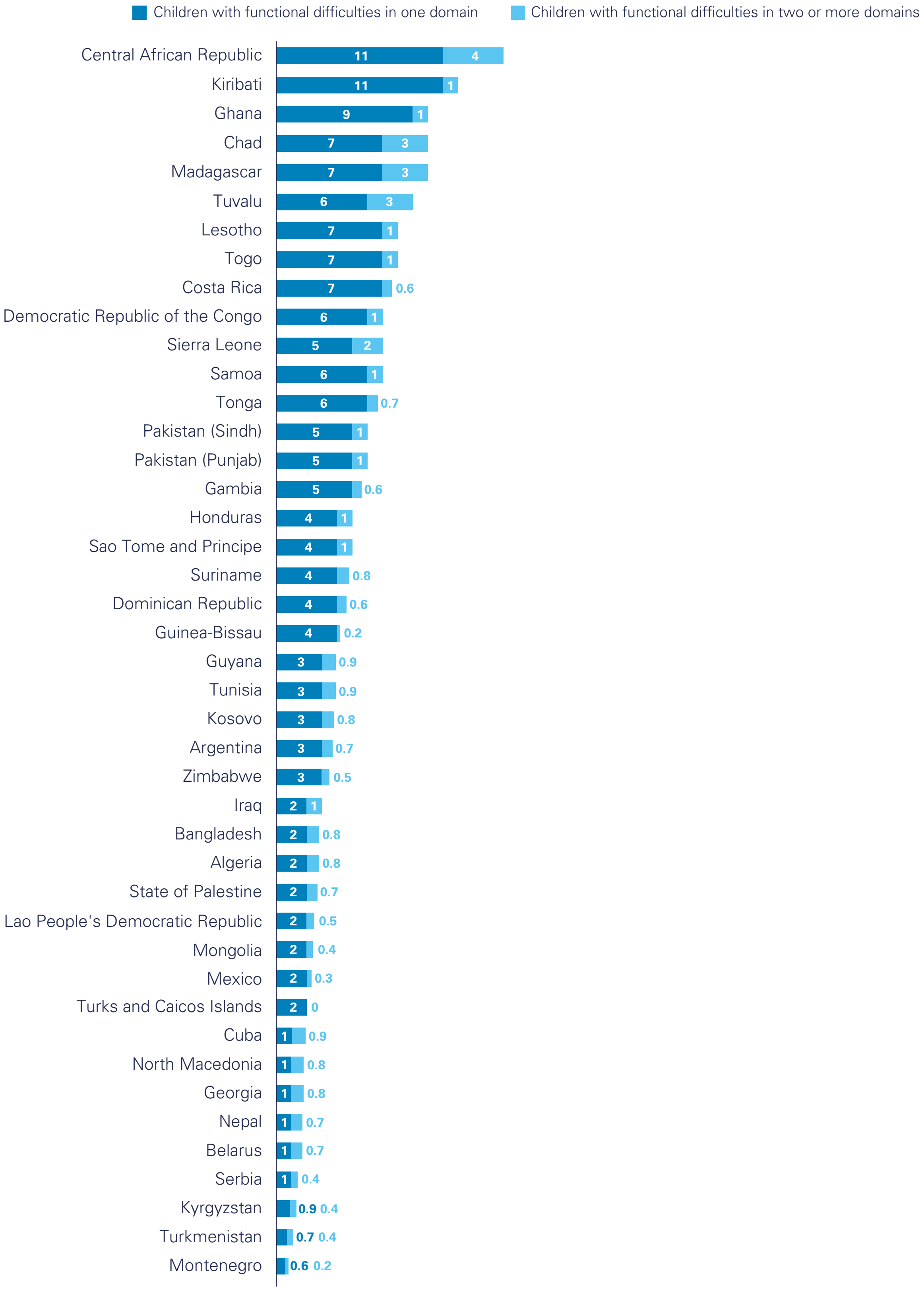
FIGURE 1.7 Percentage of children aged 2 to 17 years with one or more functional difficulties



Notes: Results for the Democratic People's Republic of Korea refer to the richest 40 per cent of children. Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only.

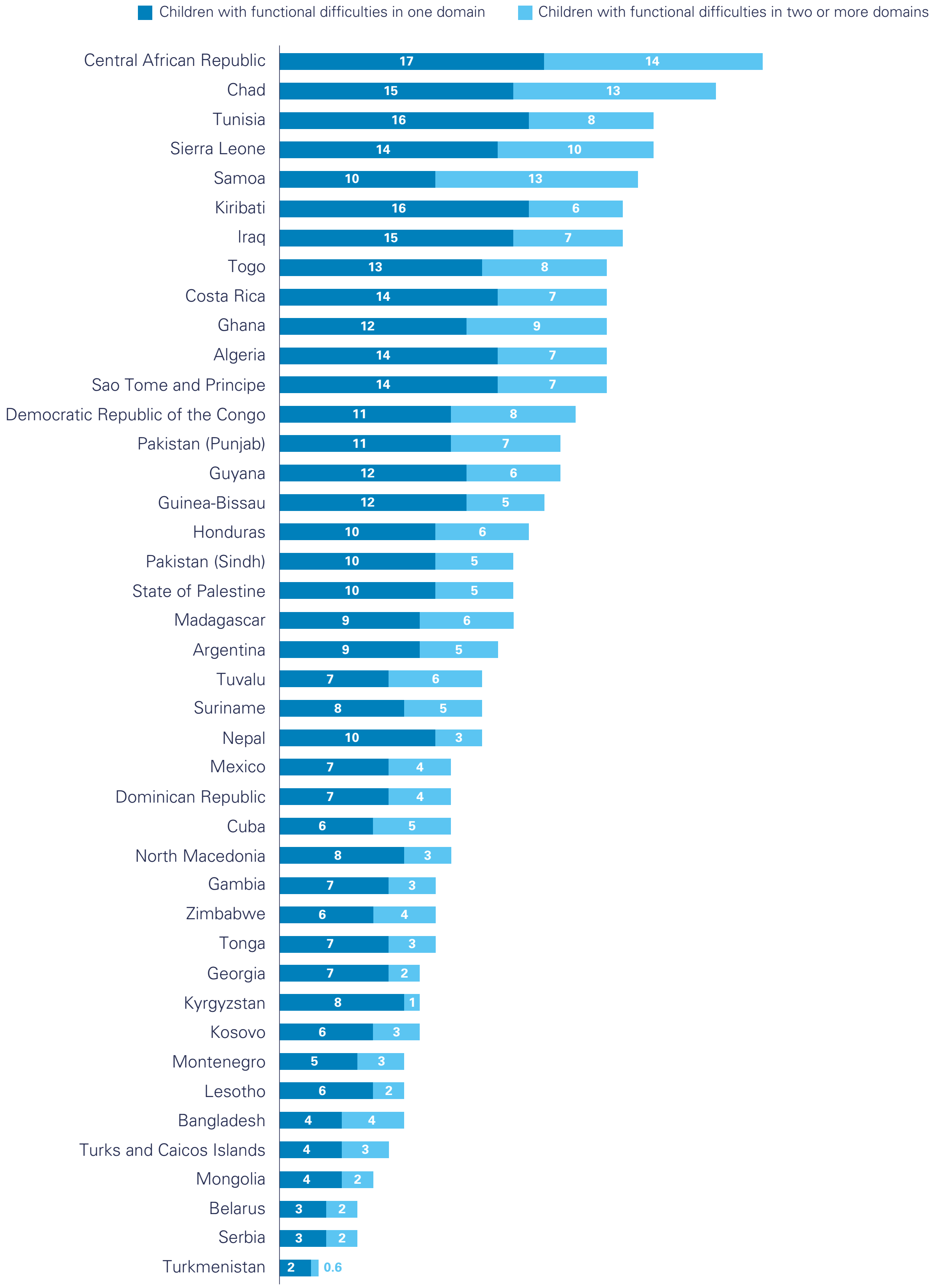
Most children with disabilities have functional difficulties in only one domain

FIGURE 1.8 Percentage of children aged 2 to 4 years with one or more functional difficulties



Notes: Data for the Democratic People's Republic of Korea are not included in this chart since access to the dataset was restricted at the time of analysis, and therefore values could not be calculated. Some of the values presented here do not match those in Figure 1.4 due to rounding.

FIGURE 1.9 Percentage of children aged 5 to 17 years with one or more functional difficulties



Notes: Data for the Democratic People's Republic of Korea are not included in this chart since access to the dataset was restricted at the time of analysis, and therefore values could not be calculated. Some of the values presented here do not match those in Figure 1.5 due to rounding.

The proportion of children with functional difficulties varies significantly by domain; however, psychosocial difficulties consistently affect the largest share of children

FIGURE 1.10 Percentage of children aged 2 to 4 years with one or more functional difficulties

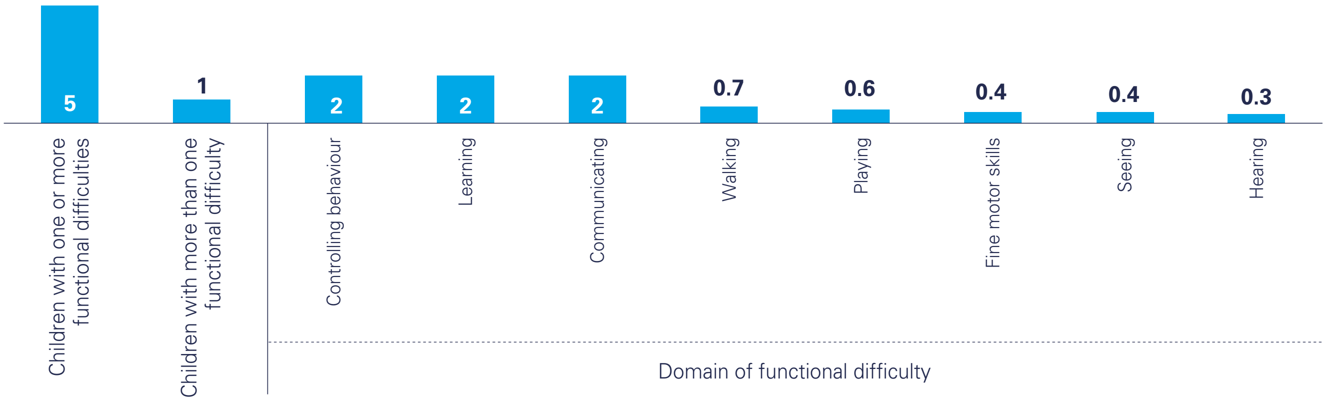
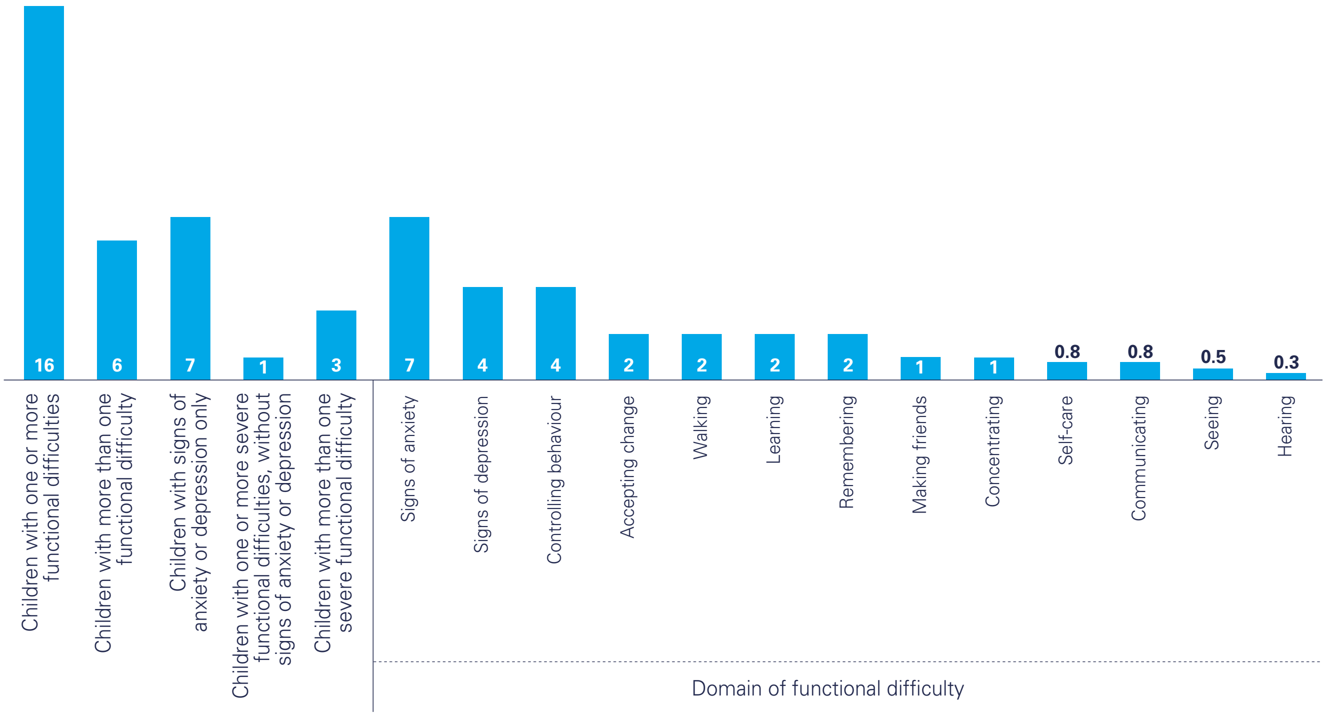
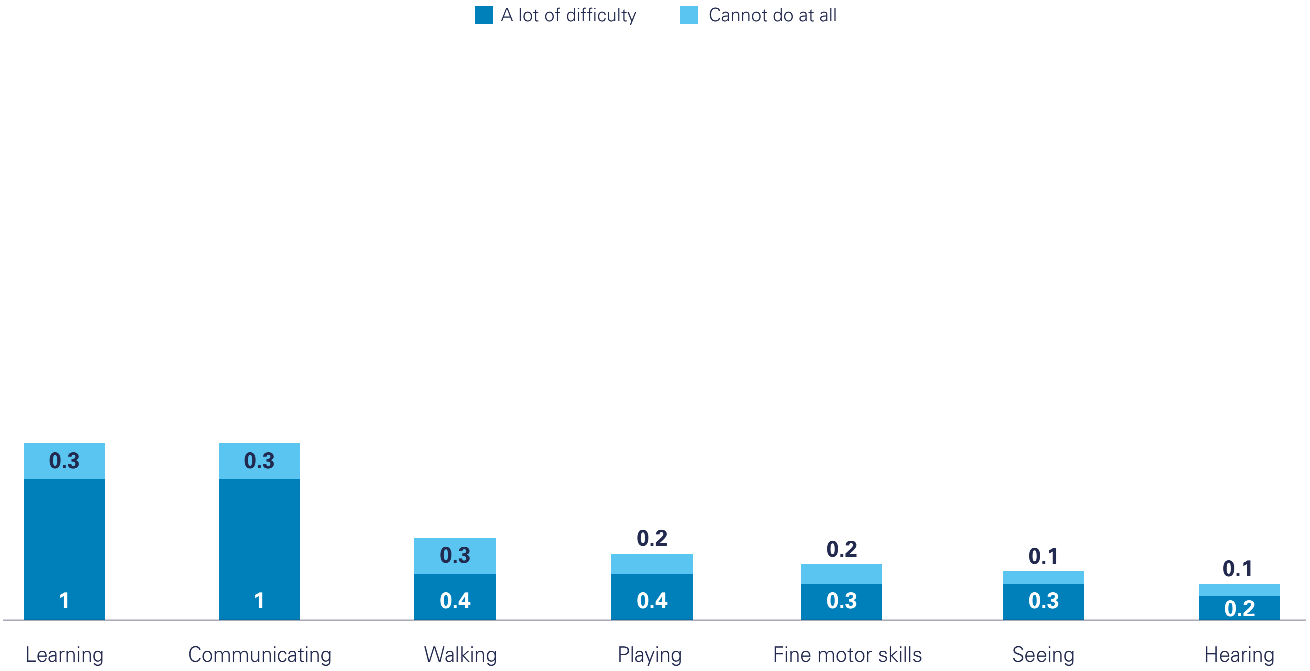


FIGURE 1.11 Percentage of children aged 5 to 17 years with one or more functional difficulties



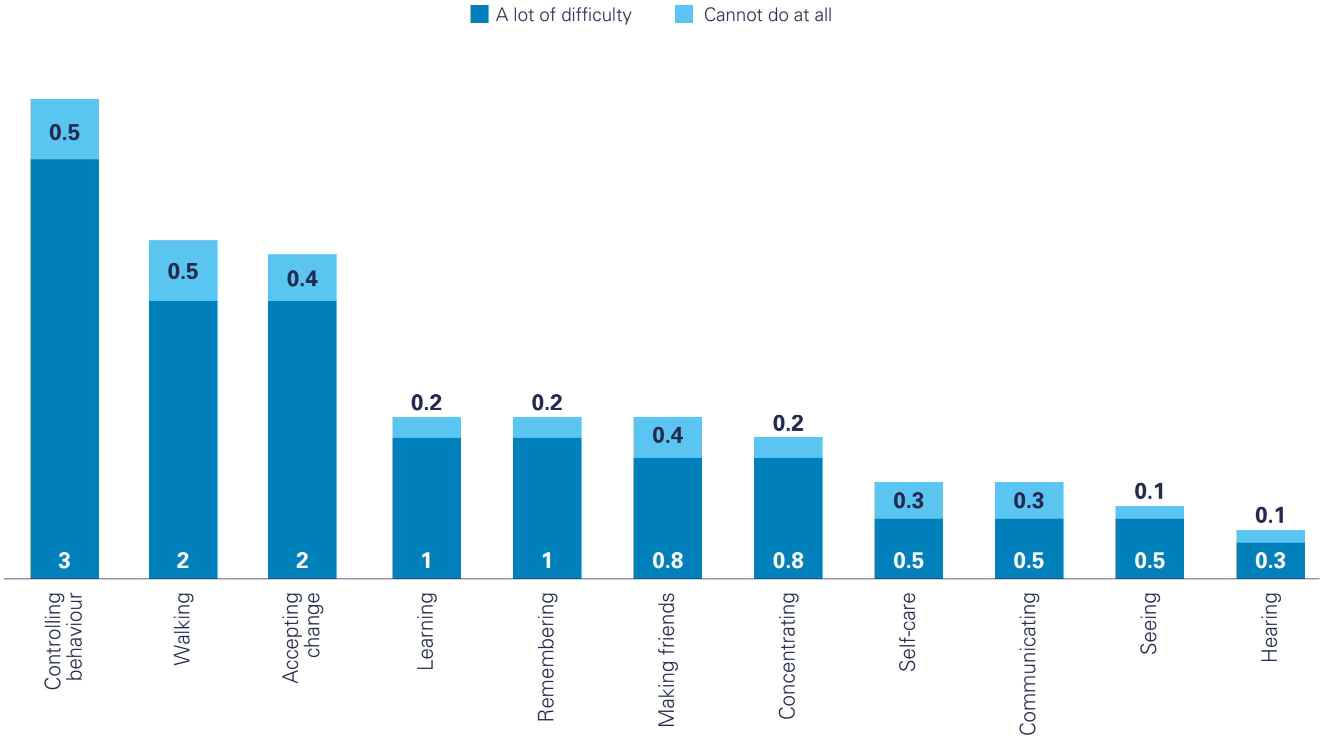
More children experience moderate rather than severe levels of functional difficulties in all domains

FIGURE 1.12 Percentage of children aged 2 to 4 years with one or more functional difficulties



Notes: Some of the values presented in this chart do not match those in Figure 1.10 due to rounding. Values for children with difficulties controlling their behaviour are not displayed here as the indicator only captures the most severe cases.

FIGURE 1.13 Percentage of children aged 5 to 17 years with one or more functional difficulties



Notes: Some of the values presented in this chart do not match those in Figure 1.11 due to rounding. Values for children with signs of anxiety or depression are not displayed here as the indicators only capture the most severe cases.

The most frequently occurring functional difficulties vary according to the age of the child; however, psychosocial difficulties predominate across all ages

FIGURE 1.14 Percentage distribution of children aged 2 to 4 years with functional difficulties

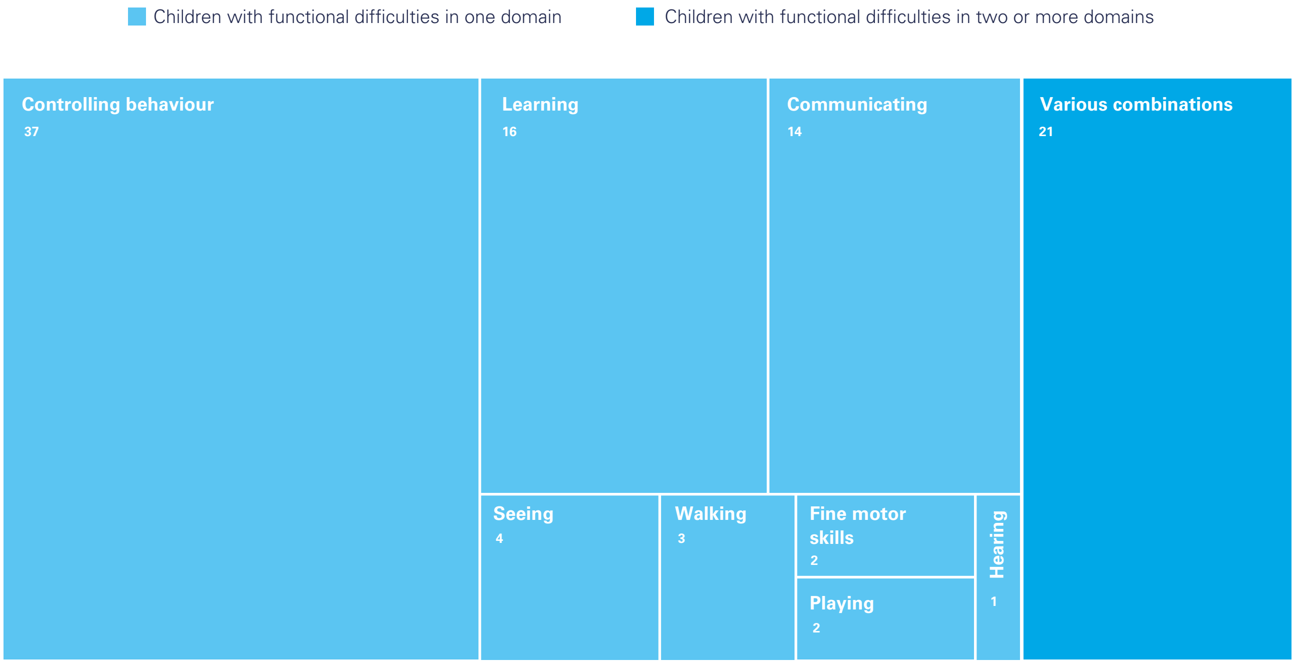
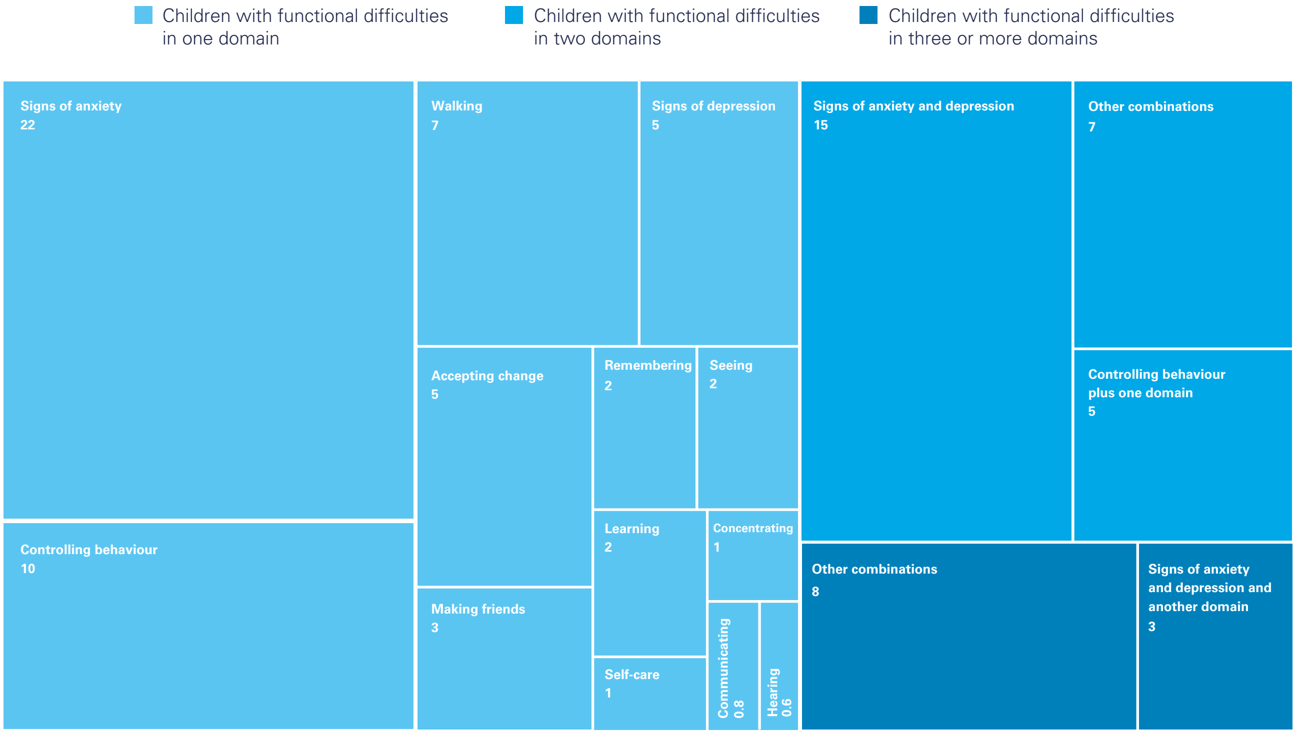


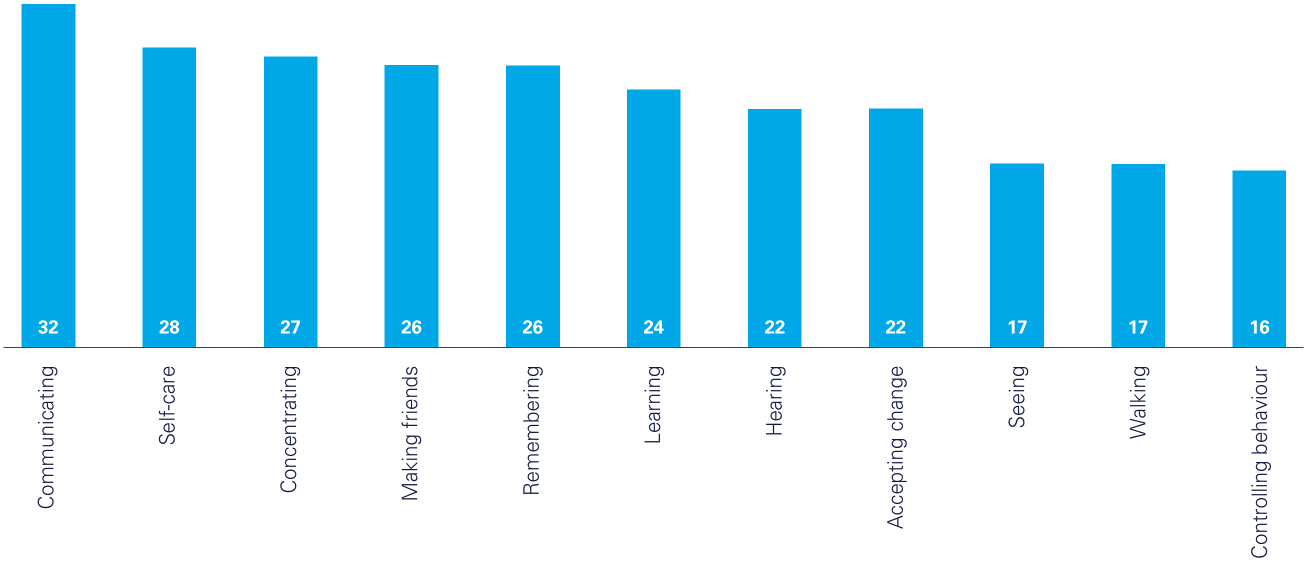
FIGURE 1.15 Percentage distribution of children aged 5 to 17 years with functional difficulties



Note: Due to rounding, values do not add up to 100 per cent.

Large proportions of children with various functional difficulties also have signs of anxiety or depression

FIGURE 1.16 Percentage of children aged 5 to 17 years with signs of anxiety or depression, among those with various functional difficulties




© UNICEF/UNI235456/Willocq

How to read the charts

The statistical charts on the following pages show results for more than 60 indicators organized into seven thematic chapters. Every chart includes a takeaway message and a technical title. Technical titles describe the indicator being measured and the age group of children represented. The report's main goal is to illustrate inequities experienced by children with disabilities. Therefore, most of the analyses aim to quantify the differences between children with and without disabilities in relation to key indicators. Throughout the report, results are presented at the country level as well as for a pooled sample of children from all countries and areas for which data are available (referred to in the charts as a 'weighted average'). The total number of countries and areas with available data may change depending on the indicator.

The thematic chapters present two main types of charts. Sample Chart 1 (below) focuses on pooled sample analyses from all countries with available data. It describes the overall difference between children with and without disabilities in a particular age group for a specific indicator (see Tip 1); it also provides a closer look at results for children with difficulties in various functional domains (see Tip 2). Sample Chart 2 (right) includes pooled sample analyses based on all countries with available data. This type of chart focuses on differences between children with and without disabilities of different socioeconomic backgrounds; it also presents country-level data (see Tip 3).

TIP 1: Throughout the report, grey bars are used to show results for children without disabilities and coloured bars for children with disabilities

Chart 1 describes the proportion of children who read books or are read to at home, based on results from 31 countries. The grey bar indicates that among children without functional difficulties, 58 per cent read books or are read to at home. Among children with one or more functional difficulties, the proportion drops to 48 per cent, as indicated by the first blue bar. The remaining bars show the proportion of children who read books or are read to at home among other subgroups of children with disabilities (see Tip 2).

TIP 2: In Chart 1, the first coloured bar shows the overall result for children with disabilities. This is followed by coloured bars showing results for various subgroups, according to the domain or severity of the functional difficulty

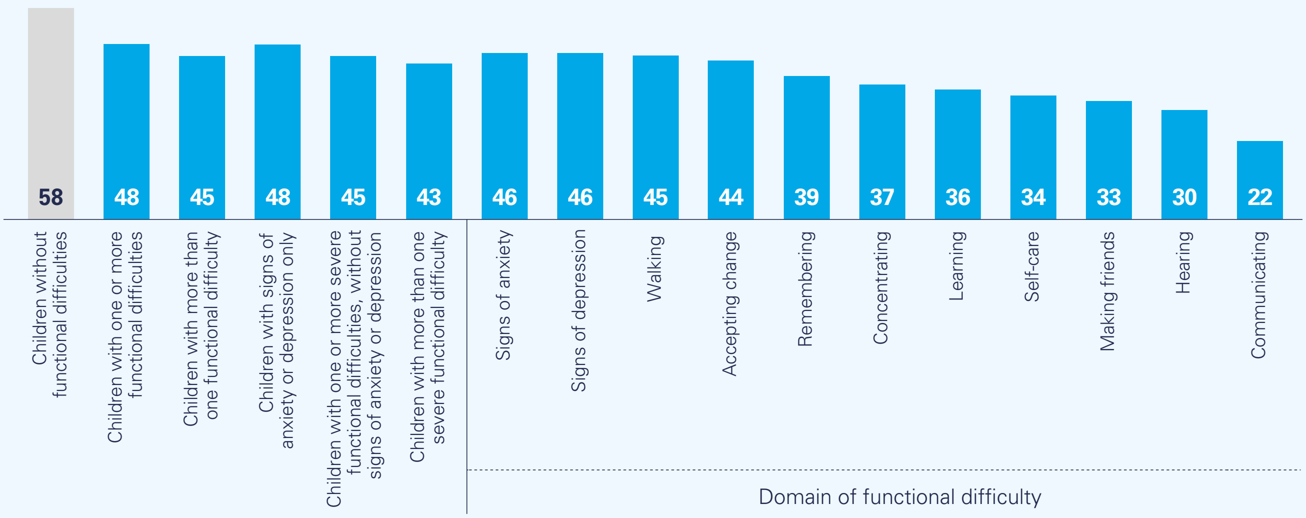
The left-hand side of this chart shows the results for children with one or more functional difficulties and those with more than one functional difficulty. In addition to these subgroups, charts on children aged 5 to 17 years (or a subset) present results for the three additional subgroups described on page 20.

The right-hand side of this chart shows results by domain of functional difficulty. Results are only shown for those domains with statistically significant differences in comparison to the overall result for children with one or more functional difficulties.

Chart 1

Children with disabilities, especially those with difficulties communicating, are least likely to read books or be read to at home

Percentage of children aged 7 to 14 years who read books or are read to at home



TIP 3: Chart 2 focuses on children with and without functional difficulties according to different background characteristics, such as the child's sex, mother's education, rural or urban location, household wealth and country of residence

The first two bars show pooled results (weighted average) for children based on data from 42 countries. 'Weighted' means that results take into account the population size of each country relative to its sample size. The weighted average is followed by disaggregated results that provide a more detailed comparison among population subgroups with different background characteristics.

For example, the weighted results for this indicator show that children with disabilities are, on average, less likely than children without disabilities to attend an early childhood education programme.

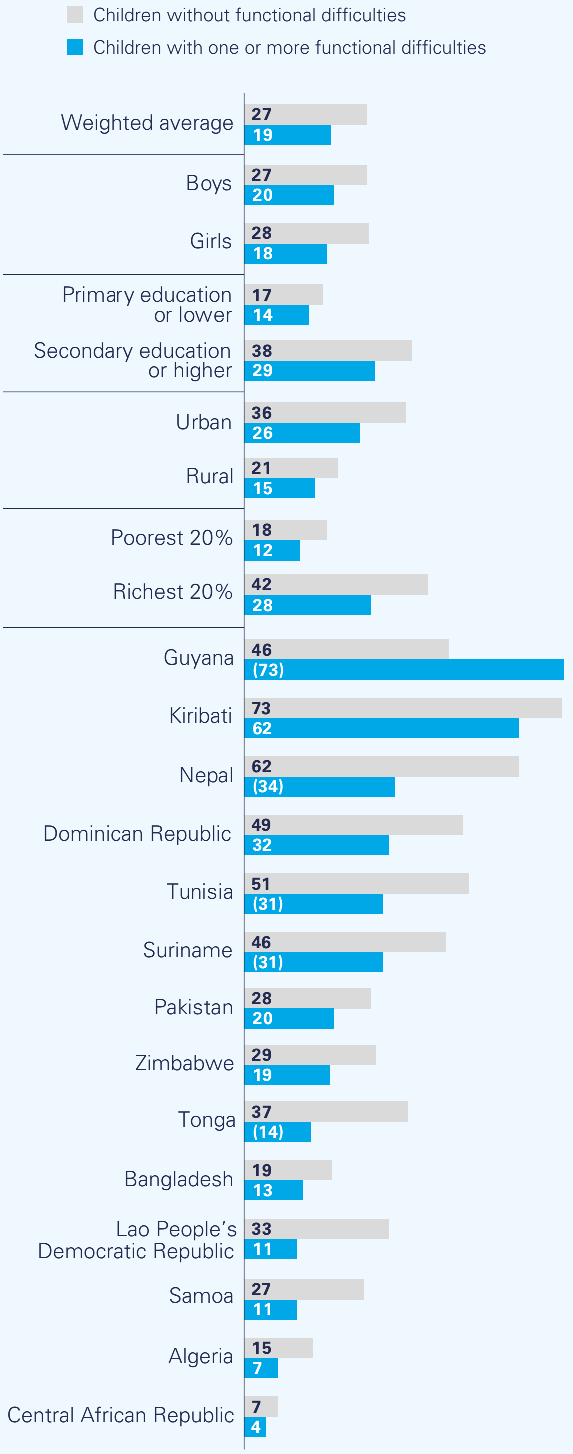
The bottom half of the chart shows results for children with and without disabilities at the country level. Results are only shown for those countries in which statistically significant differences were observed between children with and without disabilities.

© UNICEF/UNI136064/Dean

Chart 2

A lower percentage of children with disabilities attend early childhood education than their peers without disabilities, and this disparity is more pronounced among girls

Percentage of children aged 36 to 59 months who are attending an early childhood education programme



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

CHAPTER 2

Every child has the right to survive and thrive

All children have the right to survive and develop, and to live a life free from disease, illness or other conditions that affect their well-being and future prospects.[1] Access to adequate nutrition and quality health care, including immunization, is paramount in making this right a reality for every child.

The SDGs include specific targets to ensure that children have the best start in life and can achieve their potential. Target 2.2 calls for an end to all forms of malnutrition by 2030, including achieving the internationally agreed targets on stunting and wasting in children under 5 years of age by 2025. Various targets under Goal 3 seek to ensure healthy lives and promote well-being at all ages, including the expansion of health and vaccination coverage and an end to preventable deaths in children under 5. Although progress is being made, the lives of too many children continue to be lost, including children with disabilities who are those most likely to be left behind.

This chapter examines the current state of child health and nutrition and seeks to deepen understanding of specific vulnerabilities faced by children with disabilities. It provides important insights into areas that require the most urgent attention and response by governments, families and other stakeholders.

© UNICEF/UNI136064/Dean

Indicators used in this chapter

Immunization coverage for all basic vaccinations: Percentage of children aged 24 to 35 months who received all basic vaccinations at any time before the survey. Basic immunizations include one dose of BCG (the Bacillus Calmette–Guérin vaccine, primarily used against tuberculosis), three doses of vaccine for polio, three doses of vaccine for DTP (diphtheria, tetanus and pertussis, or whooping cough) and one dose of vaccine for measles.

Prevalence of acute respiratory infection (ARI) symptoms: Percentage of children aged 24 to 59 months for whom the mother or other caregiver reported symptoms of ARI in the last two weeks.

Prevalence of diarrhoea: Percentage of children aged 24 to 59 months for whom the mother or other caregiver reported an episode of diarrhoea in the last two weeks.

Prevalence of fever: Percentage of children aged 24 to 59 months for whom the mother or other caregiver reported an episode of fever in the last two weeks.

Care-seeking for ARI: Percentage of children aged 24 to 59 months who have had ARI symptoms in the last two weeks for whom advice or treatment was sought from a health facility or provider.

Care-seeking for diarrhoea: Percentage of children aged 24 to 59 months who have had diarrhoea in the last two weeks for whom advice or treatment was sought from a health facility or provider.

Underweight prevalence (moderate and severe): Percentage of children aged 24 to 59 months who fall below minus two standard deviations of the median weight-for-age of the WHO Child Growth Standards.

Stunting prevalence (moderate and severe): Percentage of children aged 24 to 59 months who fall below minus two standard deviations of the median height-for-age of the WHO Child Growth Standards.

Wasting prevalence (moderate and severe): Percentage of children aged 24 to 59 months who fall below minus two standard deviations of the median weight-for-height of the WHO Child Growth Standards.

Overweight prevalence (moderate and severe): Percentage of children aged 24 to 59 months who fall above two standard deviations of the median weight-for-height of the WHO Child Growth Standards.

Definitions and data interpretation issues

Some of the findings in this chapter present limitations. Since the Child Functioning Module only captures information on children 2 years of age and older, some health and nutrition outcomes that may affect children with disabilities before this age are not reflected in the data. This is significant since it is before age 2 that many immunizations are administered, vulnerability to infection remains high and challenges may arise in providing early nutrition (such as difficulties in breastfeeding).

Findings on disease symptoms and reported disease episodes also present limitations. Symptoms of ARI are collected to capture symptoms related to pneumonia, a leading cause of death in children under the age of 5. In the data analysed, a child was considered to have had symptoms of ARI if the mother or caregiver reported that the child had, over the specified period, an illness with a cough and rapid or difficult breathing and whose symptoms were perceived to be due to a problem in the chest, or both a problem in the chest and a blocked or runny nose. While this approach is reasonable in the context of a multi-topic household survey, these simple case definitions must be kept in mind when interpreting the results and the potential for reporting and recall biases. Furthermore, diarrhoea, fever and ARI can be seasonal and characterized by the often rapid spread of localized disease outbreaks from one area to another at different points in time. The timing of the survey and the location of the teams, therefore, might affect the results considerably. Thus, these data must be interpreted with caution. They should not be used to draw comparisons of disease prevalence across countries nor to assess the epidemiological characteristics of the underlying diseases; rather, they provide an indication of the prevalence of illnesses over a short period of time.

Findings on nutritional status should also be interpreted with caution. Anthropometric measurements are carried out by trained measurers and under uniform conditions, which include the use of standardized digital scales and measurement boards.[2] Nevertheless, collecting data on the growth of children with disabilities presents additional challenges. Children with certain types of impairments may not grow in the same way as children who develop more typically. This may mean that their health and development cannot be properly measured by standard tools used in the context of household surveys.[3] Moreover, measuring and weighing children with specific types of impairments may lead to larger measurement errors.[4] Finally, it should be noted that the WHO Child Growth Standards were calculated based on children without physical impairments. Therefore, even when a child's height and weight can be collected, standard nutrition indicators (used to measure stunting, wasting and overweight) may be inappropriate to assess growth for certain children with disabilities,[5] making findings more difficult to interpret.

Table 2.1 shows that children with disabilities are overrepresented in the number of children with missing anthropometric data. The two main reasons given for missing data are that the child was not measured or that the data were collected but were implausible within the WHO growth standards reference z-scores. While the findings presented in this chapter do not specify the reason for missing data, they do provide some insights into the challenges around height and weight measurement of children with disabilities. These include: (1) difficulty measuring a child with an impairment (for example, if limbs are shortened due to polio and proper use of the measurement equipment is not possible), which may mean the measurement was not carried out at all; (2) the quality of the measurement may be poor due to the child's inability to stand upright, leading to inaccuracies; and (3) the growth standard used to generate the z-score for each child may yield an implausible value. This may be due either to the way in which children with certain impairments grow or to errors in measurement exacerbated by the child's condition, meaning that these children would not be included in the estimates at all. For all these reasons, the results presented may not accurately describe the nutritional status of all children with disabilities.

Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Pooled results for indicators measuring immunization (Figure 2.1) do not include data from Bangladesh, Belarus, Georgia, Mexico, Montenegro, Nepal, Sierra Leone, Suriname and Turkmenistan since these were not available.

Pooled results for indicators measuring disease prevalence and care-seeking behaviour (Figures 2.2 through 2.5) do not include data from Kosovo, Montenegro, North Macedonia, Serbia and Turkmenistan since these were not available.

Pooled results for indicators measuring prevalence of underweight, stunting, wasting and overweight (Figures 2.6 through 2.11 and Table 2.2) do not include data from Belarus since these were not available.

TABLE 2.1. Percentage of children aged 24 to 59 months with missing data on height and weight

		Missing data on height	Missing data on weight
Children without functional difficulties		4	3
Children with one or more functional difficulties		6	4
Children with more than one functional difficulty		15	11
Domain of functional difficulty	Controlling behaviour	4	3
	Learning	9	7
	Communicating	9	7
	Hearing	14	9
	Seeing	16	11
	Playing	21	17
	Walking	24	17
	Fine motor skills	25	19

Immunization

Immunization is key to protecting children from vaccine-preventable diseases. It remains one of the most successful and cost-effective interventions in the field of public health, leading to dramatic declines in the incidence of some of the world's most deadly and debilitating diseases and contributing to sharp increases in life expectancy at birth and improved health outcomes. Immunization prevents diseases in children both with and without disabilities, enabling them to live fuller and healthier lives and resulting in social and economic gains.[6]

Children with disabilities are at greater risk of missing out on vaccinations than their peers without disabilities.[7] This is due, in part, to the fact that they tend to be more exposed to certain factors known to be associated with lower immunization rates, such as reduced access to mainstream health services.[8]

Children with certain conditions or impairments experience a significantly higher incidence of diarrhoea, ARI and fever.[9] They are also more vulnerable to the health effects of diseases and face compounding risks by not being immunized.[10]

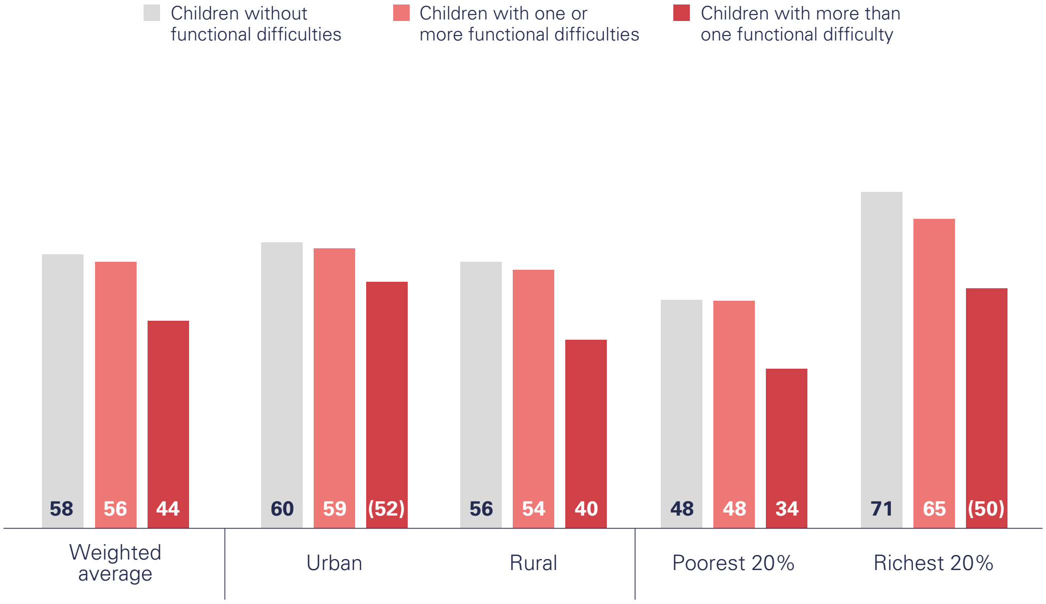
Reported disease episodes and care-seeking

Despite a sustained decline in the incidence of childhood diseases over the last several decades, diarrhoea and ARI remain the leading causes of death and disease among children in low- and middle-income countries, responsible for around one third of deaths in children under 5 at the global level.[11] Though these deaths are mostly preventable, diarrhoea and ARI remain potent public health threats. They are deadliest for the most underserved population groups, including the poorest children and those with disabilities. Children with disabilities who develop an illness or infection, including an ARI, are more susceptible to severe illness, poorer health outcomes and hospitalization than children without disabilities.[12]

This increased vulnerability stems from a combination of biological and social determinants of health. That said, having an impairment can be both a cause and a consequence of certain diseases. For example, children with neurological impairments are more likely to have compromised immune systems, making them more susceptible to ARIs.[13] On the other hand, severe

Coverage of basic immunization against vaccine-preventable childhood diseases is significantly lower for children with multiple disabilities

FIGURE 2.1 Percentage of children aged 24 to 35 months who received all basic vaccinations at any time prior to the survey



Differences in immunization coverage across different population subgroups can be due to both supply and demand factors and often reflect long-standing health and social disparities.

Disparities in immunization coverage exacerbate the risks for poor health in children in the most vulnerable and underserved groups, such as children with disabilities living in rural areas and the poorest households.

Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

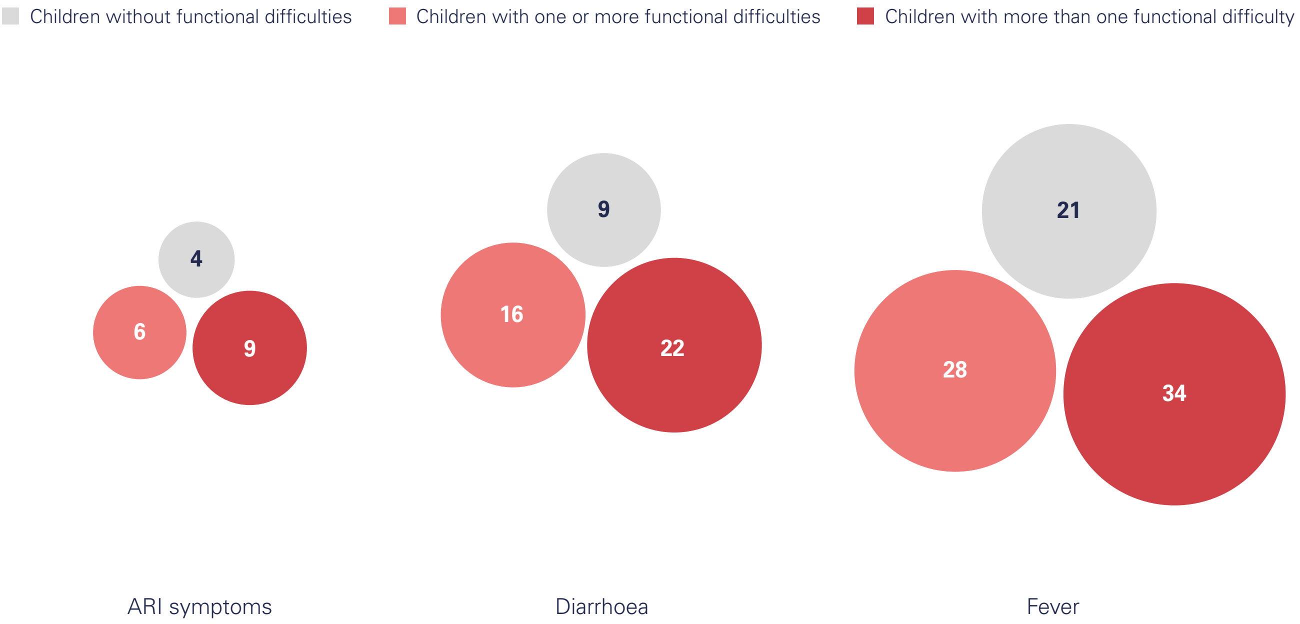
episodes of diarrhoea in early childhood can lead to malnutrition and impaired cognitive development.[14]

Timely recognition of ARI symptoms (which could indicate pneumonia), along with rapid care-seeking, can ensure appropriate treatment. Delays in care-seeking for children who might be sick due to diarrhoea or ARI can lead to further illness and even death. Limited evidence suggests that exclusion of children with disabilities from prompt and adequate care can be due to certain biological characteristics that can lead to delayed recognition of disease episodes.[15] However, this exclusion mostly results from failures to accommodate the needs of children with disabilities. These children face significant barriers in accessing care, including stigma, lack of financial resources, inaccessible facilities, lack of transportation, an absence of privacy at care facilities and inadequately trained health-care staff.[16] Moreover, some research findings suggest that parents of children with intellectual and developmental disorders are more likely to delay seeking medical care.[17] Challenges surrounding communication and behavioural difficulties can lead to both a delay in the recognition of respiratory problems by caregivers and difficulty in establishing a precise diagnosis by health-care providers. Delays in care-seeking by parents of children with intellectual and developmental disabilities have been found to be associated with challenges in controlling the child's behaviour in public as well as accessing health facilities that are trusted by parents.[18]


© UNICEF/UN0498044/Carrión

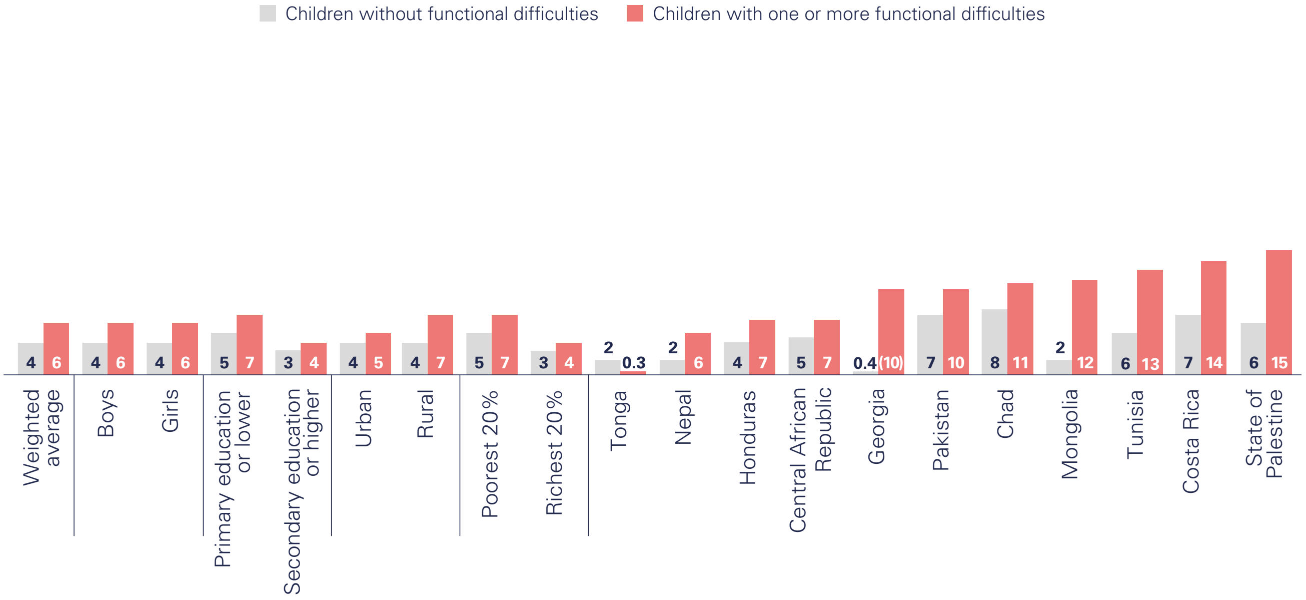
Children with disabilities are more likely to have reported symptoms of ARI, episodes of diarrhoea and fever than children without disabilities

FIGURE 2.2 Percentage of children aged 24 to 59 months with reported symptoms of acute respiratory infection, a reported episode of diarrhoea or a reported episode of fever in the last two weeks



In some countries, children with disabilities are far more likely to have ARI symptoms than their peers without disabilities

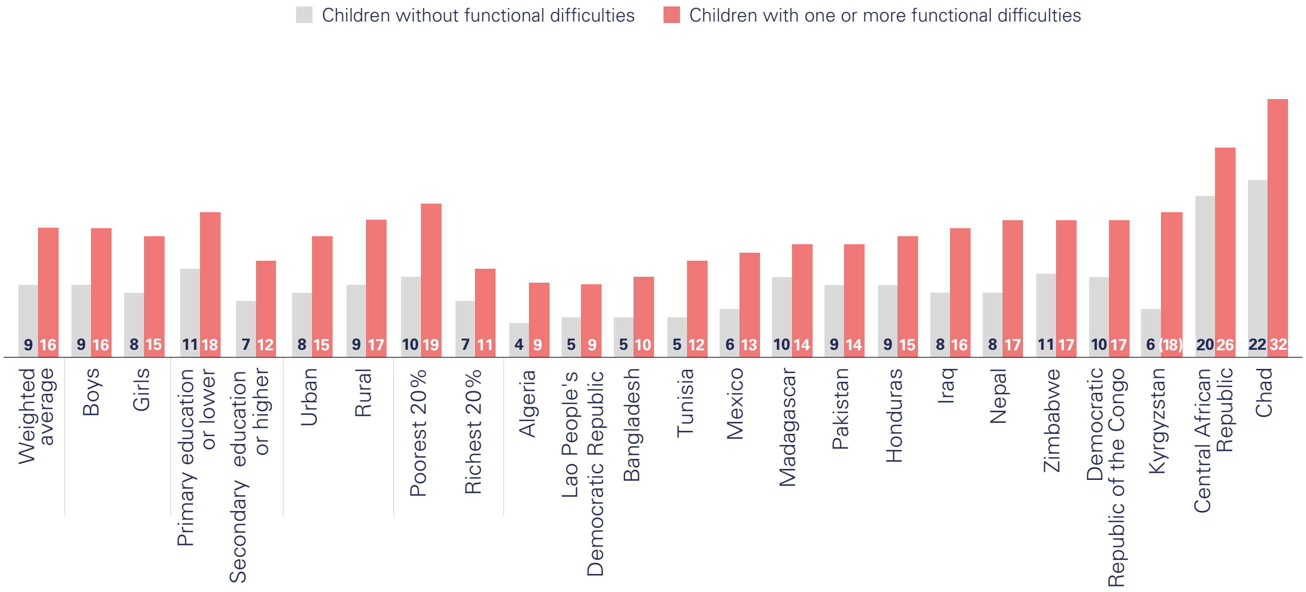
FIGURE 2.3 Percentage of children aged 24 to 59 months with reported symptoms of acute respiratory infection in the last two weeks



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

Children with disabilities are also far more likely to have diarrhoea than their peers without disabilities in some countries. Disparities are largest among children with disabilities whose mothers have little education or who live in the poorest households

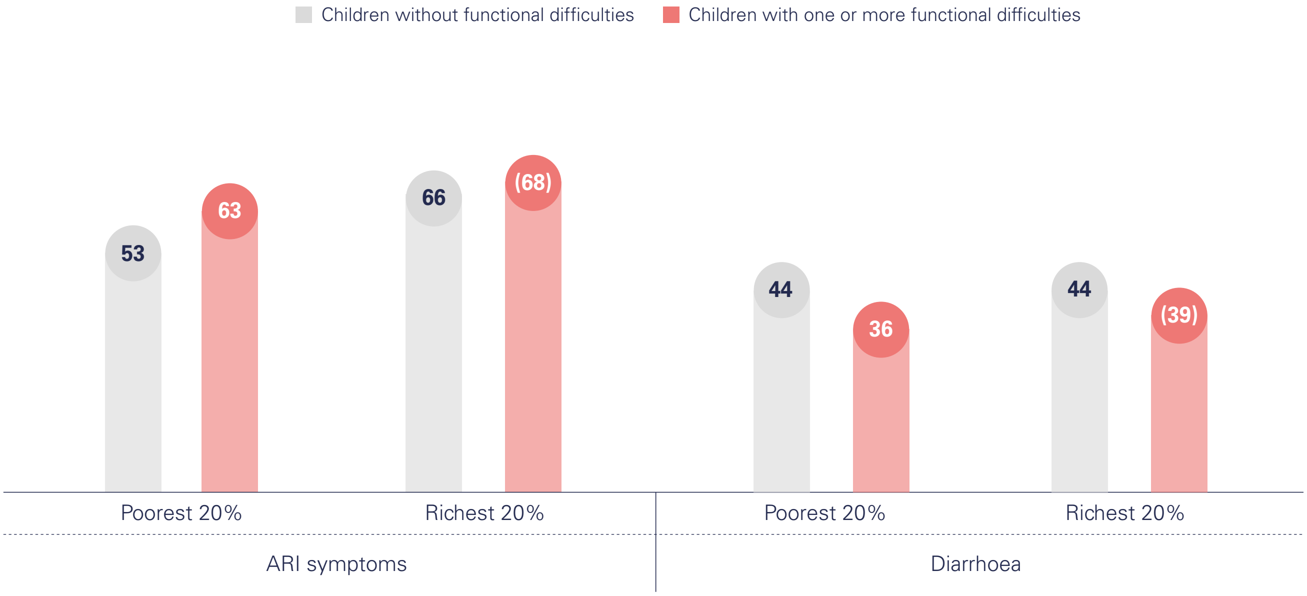
FIGURE 2.4 Percentage of children aged 24 to 59 months with a reported episode of diarrhoea in the last two weeks



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

In the poorest households, caregivers are more likely to seek care for children with disabilities who have symptoms of ARI, but are less likely to seek care when these children have diarrhoea

FIGURE 2.5 Percentage of children aged 24 to 59 months with reported symptoms of acute respiratory infection or a reported episode of diarrhoea in the last two weeks, for whom advice or treatment was sought from a health facility or provider



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

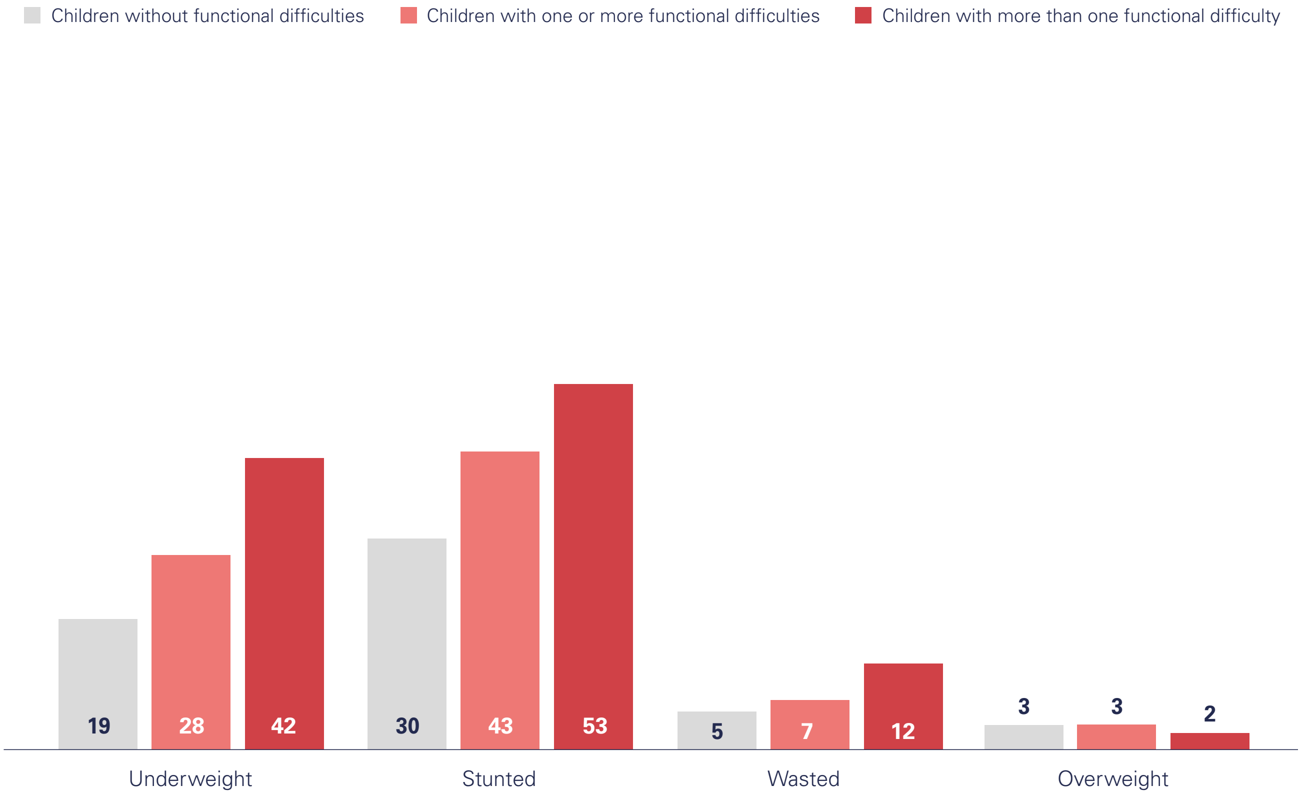
Nutritional status

Access to food is a fundamental human right with profound implications for all children, including those with disabilities. Inadequate nutrition can have lifelong effects on physical growth and brain development and can hold children back from achieving a productive and fulfilling life. The interlinkages between nutrition and disability are complex and tend to be addressed in terms of the role of adequate nutrition in preventing certain impairments. Knowledge about the nutritional status of children with disabilities is limited, however, and subject to methodological challenges.

Malnutrition in children with disabilities can be attributed to many factors. These include physical problems in feeding, suboptimal feeding practices due to lack of knowledge or specific skills among caregivers, and attitudinal, social or cultural causes (such as the exclusion or neglect of children with disabilities in feeding practices, socially or in the home).[19] The availability of food in the home is also a factor. In the United States, households that include children with disabilities are significantly more likely to report food insecurity of any kind.[20] When these children live in residential care or other institutions, their nutrition tends to suffer due to inadequate staffing and discriminatory practices.[21] Children with disabilities represent a disproportionate share of children in such facilities and are less likely to benefit from nutritional programmes, which are often not extended to institutions.[22] In humanitarian situations, children with disabilities are at risk of malnutrition because their particular needs are not usually taken into account. Moreover, they are less likely to be included in education in emergencies and to benefit from the nutrition programmes that operate through such channels.[23]

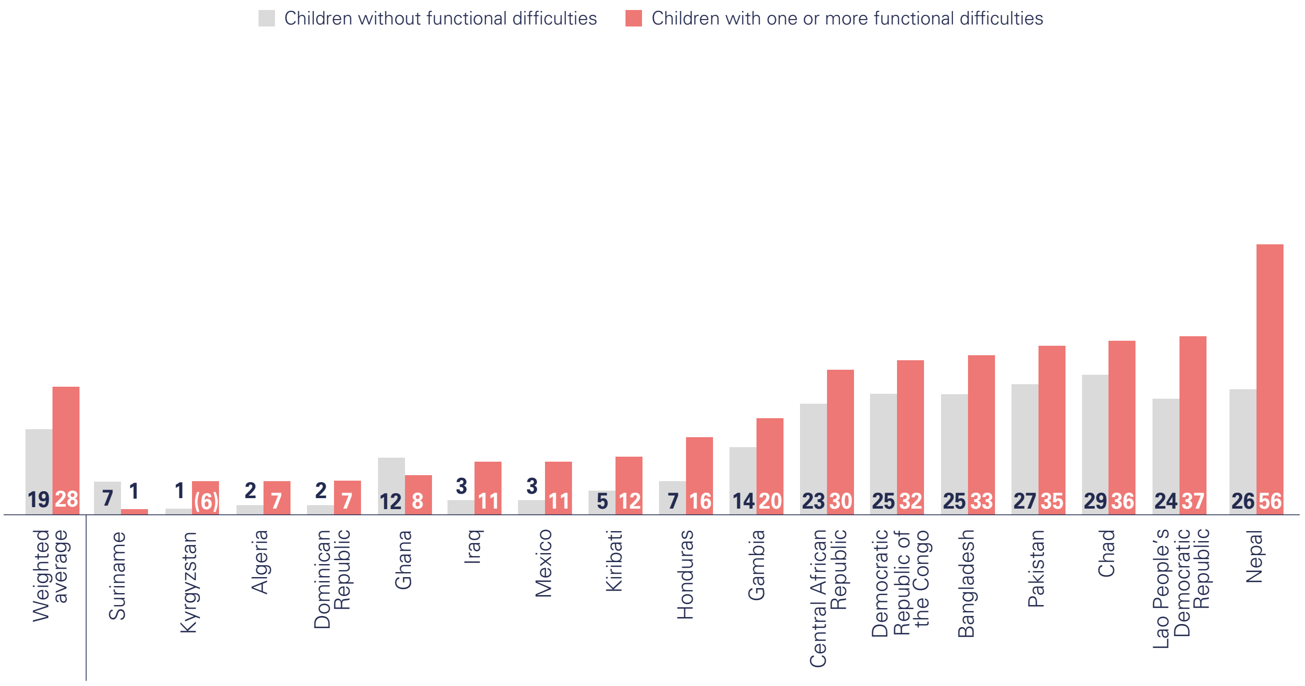
Children with disabilities suffer disproportionately higher rates of malnutrition

FIGURE 2.6 Percentage of children aged 24 to 59 months who are underweight, stunted, wasted or overweight



Across many countries, children with disabilities have a higher prevalence of underweight

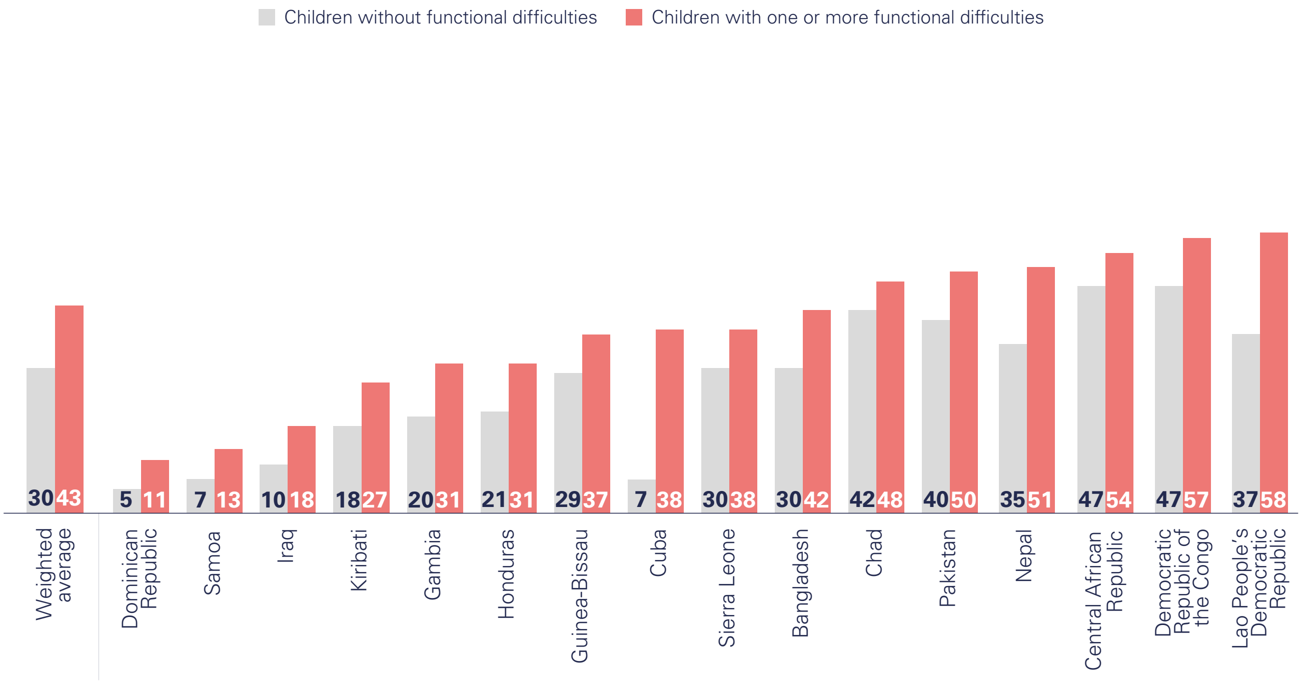
FIGURE 2.7 Percentage of children aged 24 to 59 months who are underweight



Note: Numbers in parentheses are based on 25 to 49 unweighted observations.

Children with disabilities also have a higher prevalence of stunting in many countries

FIGURE 2.8 Percentage of children aged 24 to 59 months who are stunted



Across the various domains of functioning, malnutrition is more common among children with difficulties walking and playing

FIGURE 2.9 Percentage of children aged 24 to 59 months who are underweight

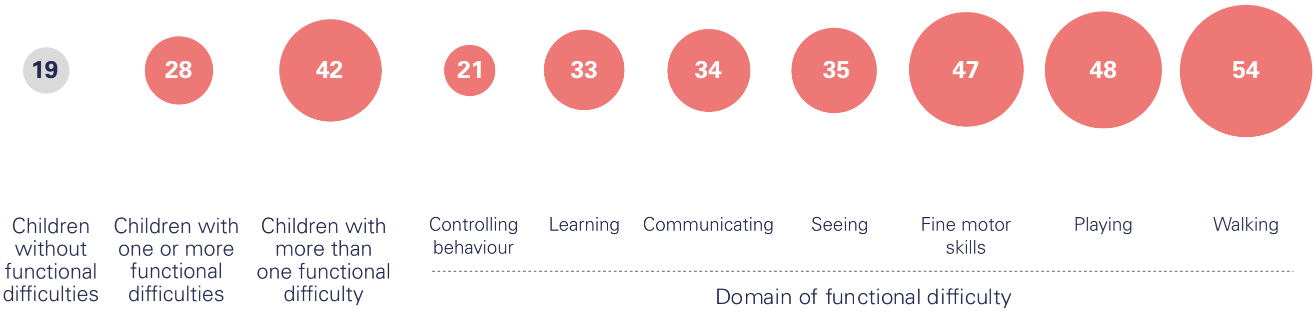


FIGURE 2.10 Percentage of children aged 24 to 59 months who are stunted

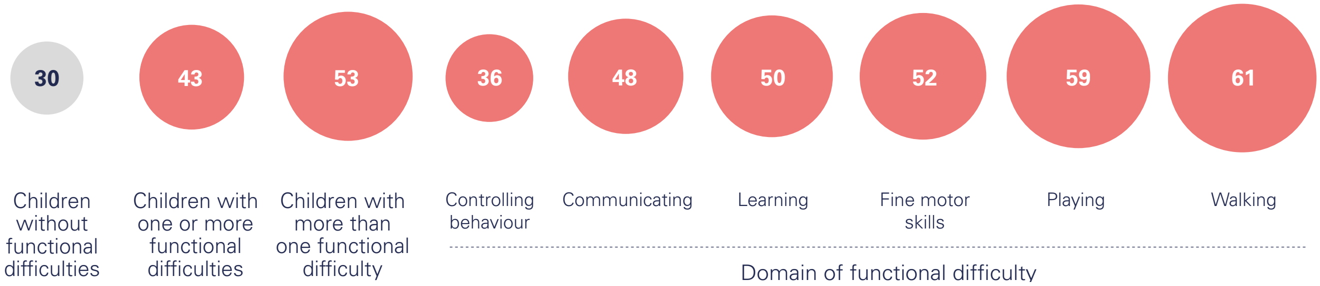
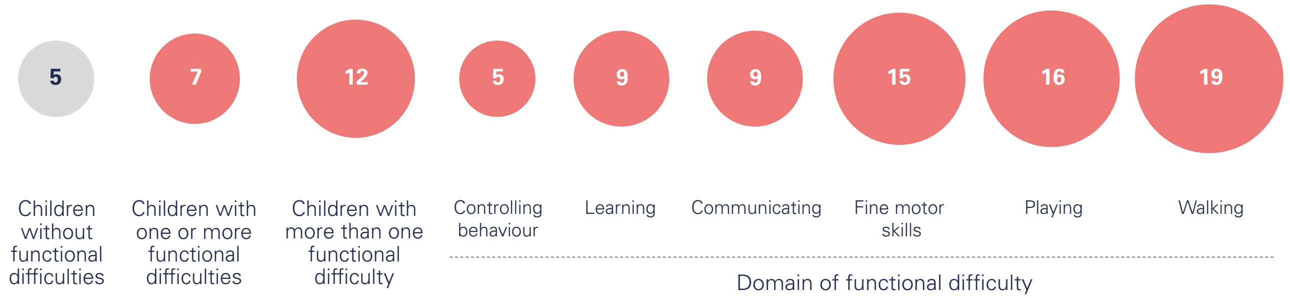


FIGURE 2.11 Percentage of children aged 24 to 59 months who are wasted




© UNICEF/UNI231131/Estey

Underweight and stunting are more prevalent among children with disabilities living in the poorest and rural households

TABLE 2.2 Percentage of children aged 24 to 59 months who are underweight or stunted

UNDERWEIGHT	**Children without functional difficulties**		**Children with one or more functional difficulties**	
	Urban	Rural	Urban	Rural
Richest	10	12	15	(14)
Middle	13	21	25	26
Poorest	17	28	28	37
STUNTED	**Children without functional difficulties**		**Children with one or more functional difficulties**	
	Urban	Rural	Urban	Rural
Richest	17	18	25	(21)
Middle	24	35	38	43
Poorest	31	43	40	54

Notes: Numbers in parentheses are based on 50 to 249 unweighted observations. Lighter shades of red indicate lower levels of underweight and stunting, while darker shades indicate higher levels.

Takeaways and programmatic implications

This chapter documents the diverse experiences of children with disabilities in realizing their right to a healthy start in life. It also lays out the clear and urgent need for interventions that address prevailing inequities and barriers that contribute to such disparities.

The Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities clearly mandate that all children – with or without disabilities – have the right to accessible and affordable treatment for any disease, illness or health condition that infringes on their life and well-being. Children with disabilities, especially those in the poorest and rural households, are at elevated risk of experiencing diarrhoea, fever and symptoms of ARI. However, care-seeking to address episodes of diarrhoea is less commonly reported by caregivers of children with disabilities who live in the poorest households. Interventions should address the inequities within society that contribute to increased risks of illness and infection and exacerbate disparities in access to health services. This includes training and other support for caregivers of children with disabilities and the creation of more inclusive health-care facilities. Similarly, steps should be taken to reduce disparities in immunization coverage among the most vulnerable children, including those in rural areas and the poorest households. Strong national immunization campaigns, along with positive attitudes in the community towards the inclusion of children with disabilities, can contribute to reducing gaps in vaccination coverage.[24]

In terms of nutrition, the extent of disparities varies by country. However, children with disabilities frequently experience higher rates of underweight, stunting and wasting than their peers without disabilities. This is especially true among children with difficulties walking as well as those from the poorest households. A possible approach to addressing these disadvantages is making nutrition programmes accessible to children with disabilities and their families.[25] Such programmes should not only address the absence of nutritious food in households but also provide caregivers with the knowledge and skills to ensure that children with different impairments are able to consume food easily.

Awareness and knowledge of the interlinkages between health, nutrition, development and disability are urgently required. Twin-track approaches are needed that promote coverage of mainstream interventions to address poor outcomes in all children, including those with disabilities, along with tailored and differentiated strategies to meet the needs of children with specific impairments. Across relevant sectors, capacity development is required for appropriate care and support. All stakeholders, from families to educators and health-care workers, should have the knowledge, attitudes and skills to address the needs of all children, including those with disabilities, and deliver inclusive care. Given countries' divergent realities, interventions and programmes should be tailored to the specific context.

Likewise, children with certain impairments have specific health needs and experience different barriers in accessing health care and other services. These challenges are not normally captured by standard health indicators. While current indicators may provide insights into overall coverage of key health interventions, they do not factor in quality aspects. From a monitoring point of view, metrics of coverage should provide a more nuanced picture of how well health systems are delivering services that effectively address the needs of children with disabilities. Effective coverage[26] indicators need to be generated in such a way that they account for the quality of services to produce health gains for all children, including those with disabilities.

Some cross-cutting approaches to make health-care services more inclusive hold the potential to improve health outcomes. These include, for example, increasing the availability of accessible health promotion information and facilitating communication during medical visits through adaptations that may include the use of sign language or explanations that can be understood by children with intellectual disabilities. These programmatic interventions can be facilitated by promoting public awareness of the challenges that children with disabilities can face in realizing their rights to health and adequate nutrition and by effective advocacy around the urgent need for inclusivity in all policies, programmes and day-to-day activities.

© UNICEF/UNI102936/Noorani

CHAPTER 3

Every child has the right to a nurturing family environment

All children have the right to grow up in a family environment that provides them with the love, nutrition, protection, opportunities for early learning and responsive care they require to survive, grow and thrive.[1] Both the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities mandate children's right to a good start in life and to adequate care and development.[2] A central aspect of this care is the engagement and stimulation provided by caregivers. This right is further cemented as a global priority in the SDGs. Target 4.2 explicitly outlines the importance of quality early childhood development and care, in addition to pre-primary education.

Starting even before children are born, their development is heavily influenced by biological and environmental factors. Early childhood provides a window of opportunity to invest in actions that can enhance development and prevent or mitigate vulnerabilities that can seriously compromise long-term outcomes.[3] It is well known, for example, that adverse experiences during childhood can affect not only a child's mental and physical health and educational achievements but also his or her life prospects.

Children with disabilities risk missing out on the care and stimulation they need in the early years due to increased exposure to factors that make them more vulnerable. These include poverty, stigma and discrimination, exclusion from early learning opportunities, institutionalization, violence, abuse and neglect.[4] Moreover, children with disabilities may face high barriers in accessing mainstream programmes and services that support early childhood development,[5] and even if they do obtain access, their specific needs are often overlooked.

Stimulating home environments and nurturing relationships are key to fostering growth, learning and development in all children, and their lack can have worrisome effects. More frequent exclusion from such environments, for example, means that children with disabilities are at higher risk of struggling to acquire the skills associated with literacy.[6]

© UNICEF/UN0261208/Pancic

The knowledge, attitudes, expectations and skills of caregivers are key in determining the amount and quality of stimulation experienced by children. Parents of children with intellectual disabilities have been found to have lower expectations of their child's reading and writing abilities, which can contribute to lower exposure to early reading activities in the home.[7] Additionally, children with disabilities often require individualized approaches to make play accessible and engaging.[8]

Finally, the well-being and mental health of caregivers themselves also play a role in their ability to provide nurturing care. This is even more relevant for parents of children with disabilities, who often face multiple sources of stress (see Box 3.1 on page 59). As a result, children with disabilities may be more likely to be neglected by a caregiver than their peers without disabilities.[9]


© UNICEF/UN0482107

Indicators used in this chapter

Early stimulation and responsive care: Percentage of children aged 24 to 59 months who engaged in four or more activities to provide early stimulation and responsive care in the last three days with any adult household member. Activities include reading books or looking at picture books with the child; telling stories; singing songs to or with the child; taking the child outside the home; playing with the child; naming, counting or drawing things for or with the child.

Availability of children's books: Percentage of children aged 24 to 59 months who have three or more children's books.

Availability of playthings: Percentage of children aged 24 to 59 months who play with two or more types of playthings. Playthings include homemade toys, such as dolls, cars or other toys made at home; toys from a shop or manufactured toys; household objects, such as bowls or pots; or objects found outside, such as sticks, rocks, animal shells or leaves.

Inadequate supervision: Percentage of children aged 24 to 59 months who were left alone or under the supervision of another child younger than 10 years of age for more than one hour in the last week.

Definitions and data interpretation issues

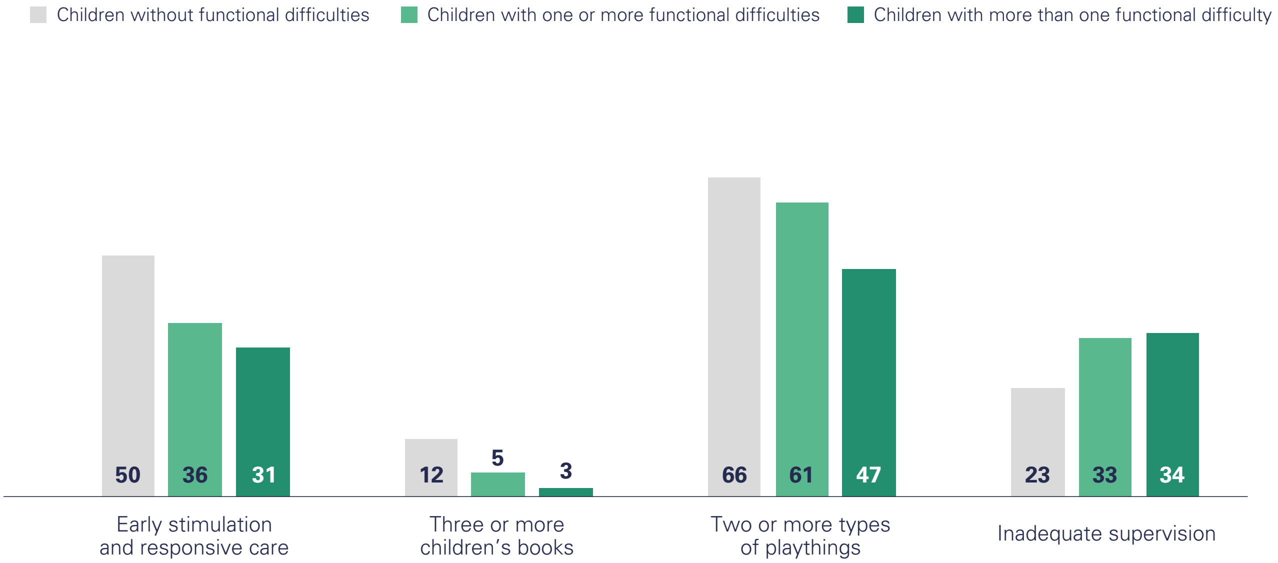
An overarching limitation that runs through several of the indicators regards the age of children measured. Early childhood development indicators that address the availability of children's books and playthings, along with inadequate supervision, all measure responses for children under the age of 5 years. However, since the Child Functioning Module only covers children who are at least 2 years old, children under age 2 are not represented in the data. The findings, therefore, do not reflect outcomes among younger children, for whom a lack of supervision or playthings is crucial.

Sources of data

The pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Children with disabilities are less likely to receive early stimulation and responsive care and less likely to be exposed to children's books and playthings than children without disabilities; they are also more likely to experience inadequate supervision

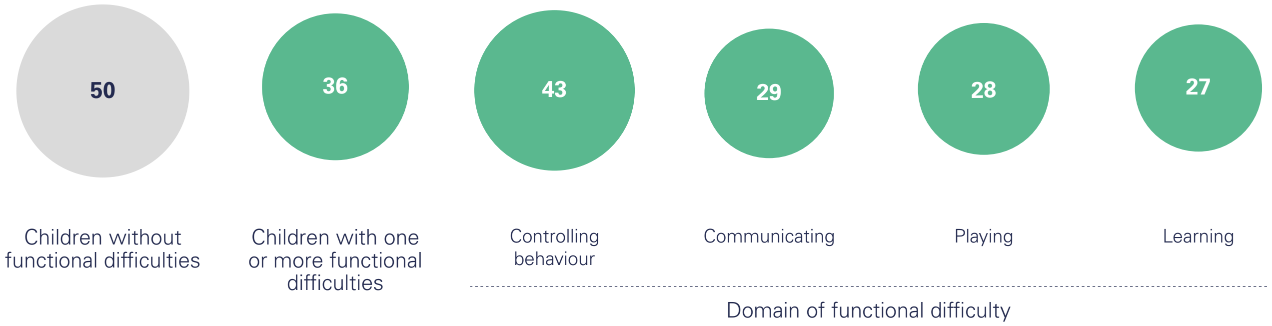
FIGURE 3.1 Percentage of children aged 24 to 59 months who engaged in four or more activities to provide early stimulation and responsive care in the last three days with any adult household member; who have three or more children's books; who play with two or more types of playthings; or who were left alone or under the supervision of another child younger than 10 years of age for more than one hour in the last week



Early stimulation and responsive care

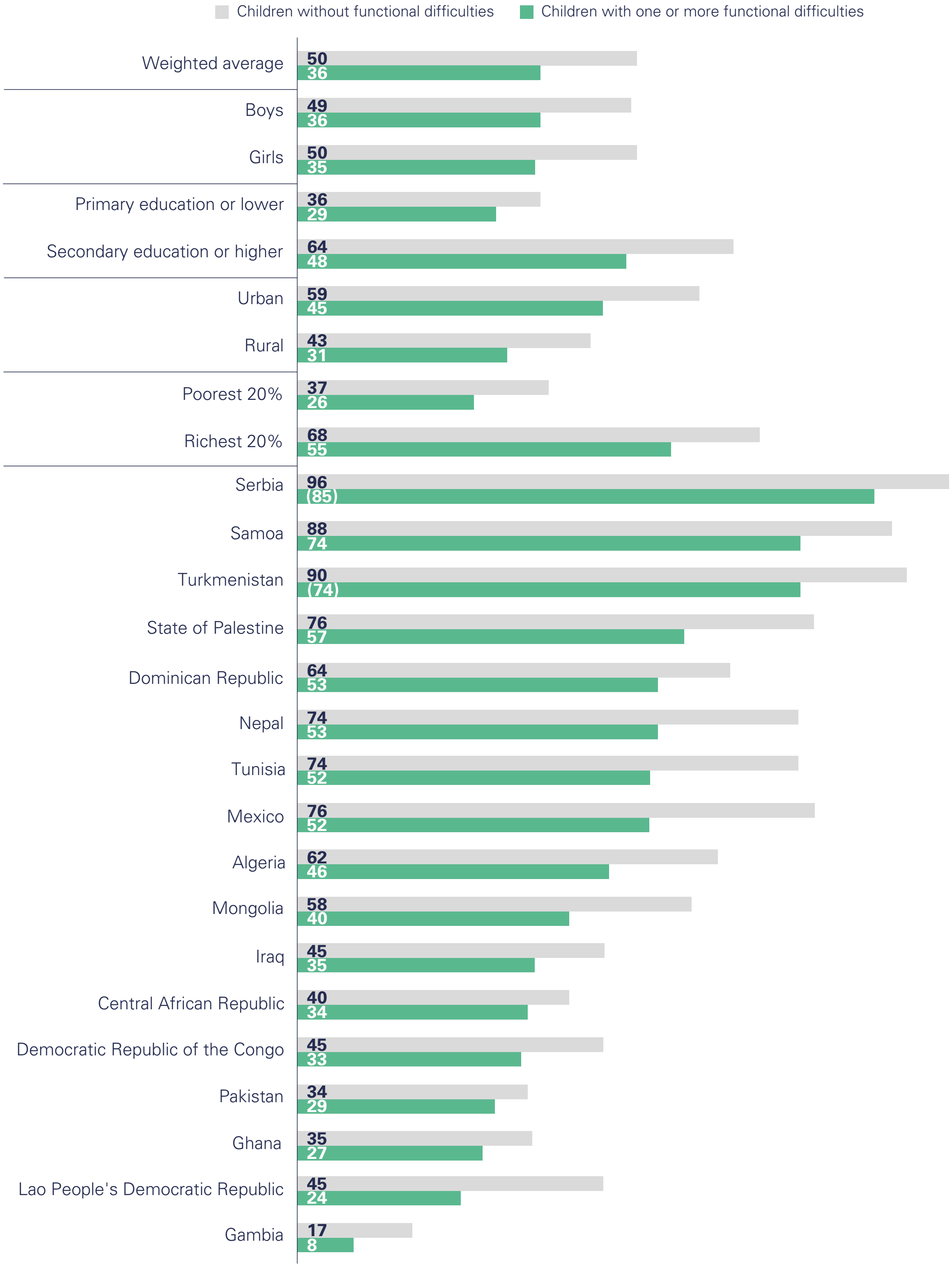
Children with difficulties learning, playing and communicating have the least exposure to early stimulation and responsive care

FIGURE 3.2 Percentage of children aged 24 to 59 months who engaged in four or more activities to provide early stimulation and responsive care in the last three days with any adult household member



Children with disabilities of diverse socioeconomic backgrounds, and in many countries, are significantly less likely to receive early stimulation and responsive care than children without disabilities

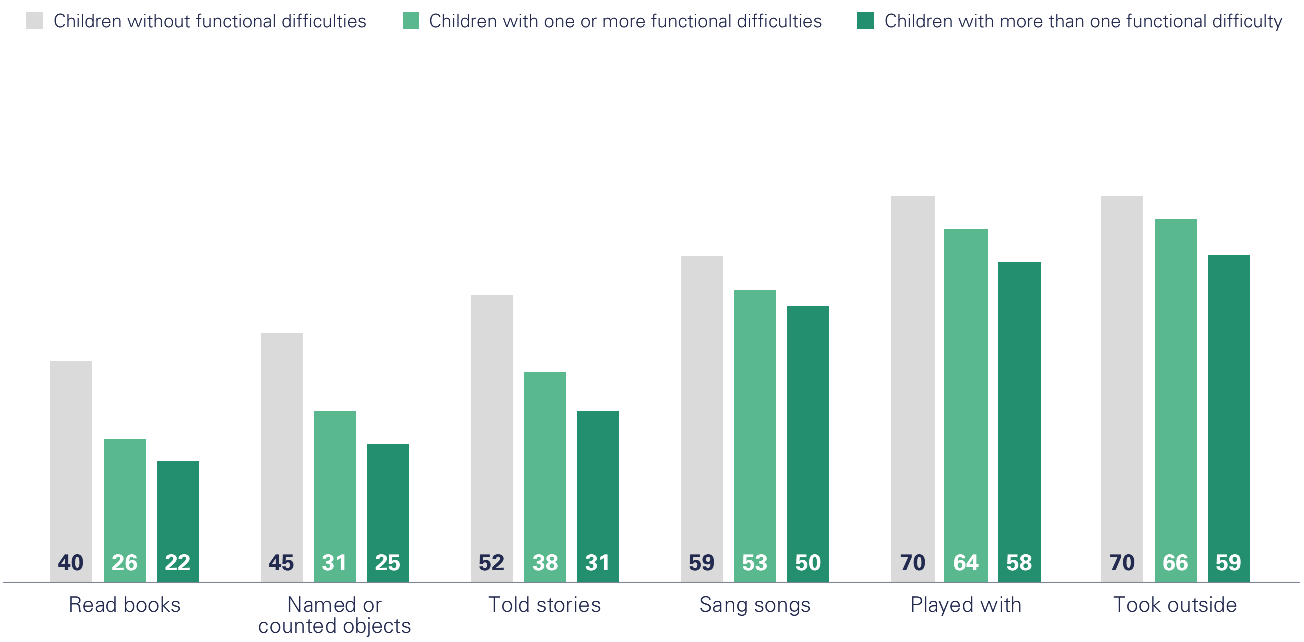
FIGURE 3.3 Percentage of children aged 24 to 59 months who engaged in four or more activities to provide early stimulation and responsive care in the last three days with any adult household member



Notes: Results for the Central African Republic, Lao People's Democratic Republic and Mexico refer to children aged 36 to 59 months. Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

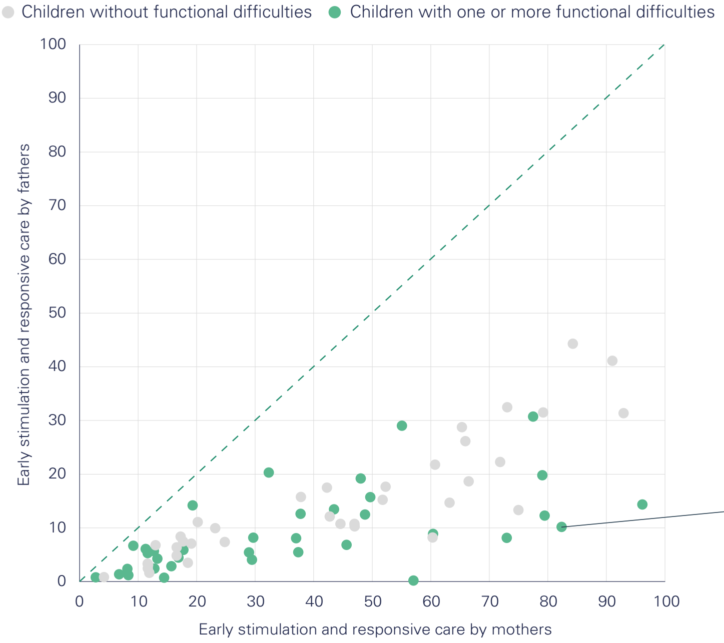
For all children, being taken outside the home and engaged in play are the most common types of early stimulation activities; the largest disparities between children with and without disabilities are found in the proportion who are read to and engaged in naming or counting objects

FIGURE 3.4 Percentage of children aged 24 to 59 months engaged in specific activities to provide early stimulation and responsive care in the last three days with any adult household member



Fathers generally engage less in early stimulation activities than mothers, but this disparity is more pronounced among parents of children with disabilities

FIGURE 3.5 Percentage of children aged 24 to 59 months engaged in four or more activities to provide early stimulation and responsive care in the last three days with mothers (x axis) and fathers (y axis)



Dots in this graph represent countries. Each country has two dots: a grey dot, showing the country-level proportion of children *without* functional difficulties who engage in early stimulation activities with mothers versus fathers, and a green dot showing the proportion of children *with* functional difficulties who engage in early stimulation activities with mothers versus fathers.

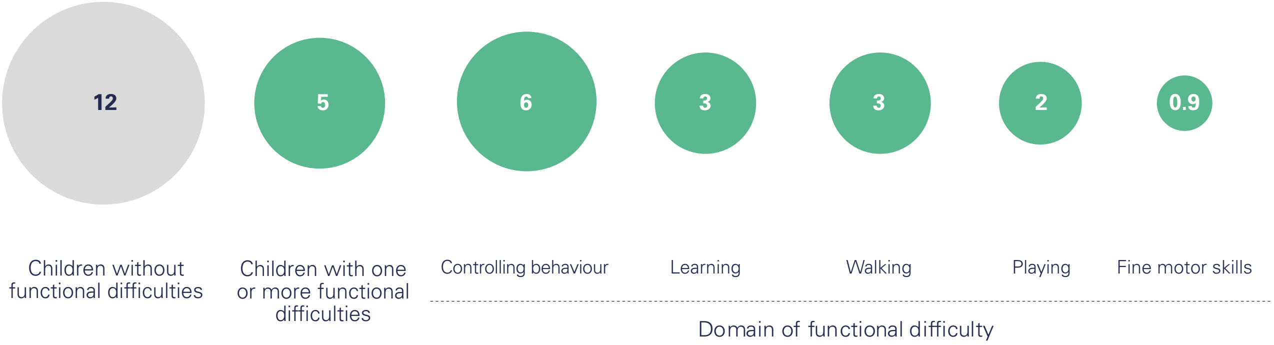
Dots falling close to the diagonal line represent countries where engagement with mothers is very similar to that with fathers.

How to read this graph: In this country, around 80 per cent of children with functional difficulties engage in early stimulation activities with their mothers, while only 10 per cent engage in such activities with their fathers.

Availability of books and playthings

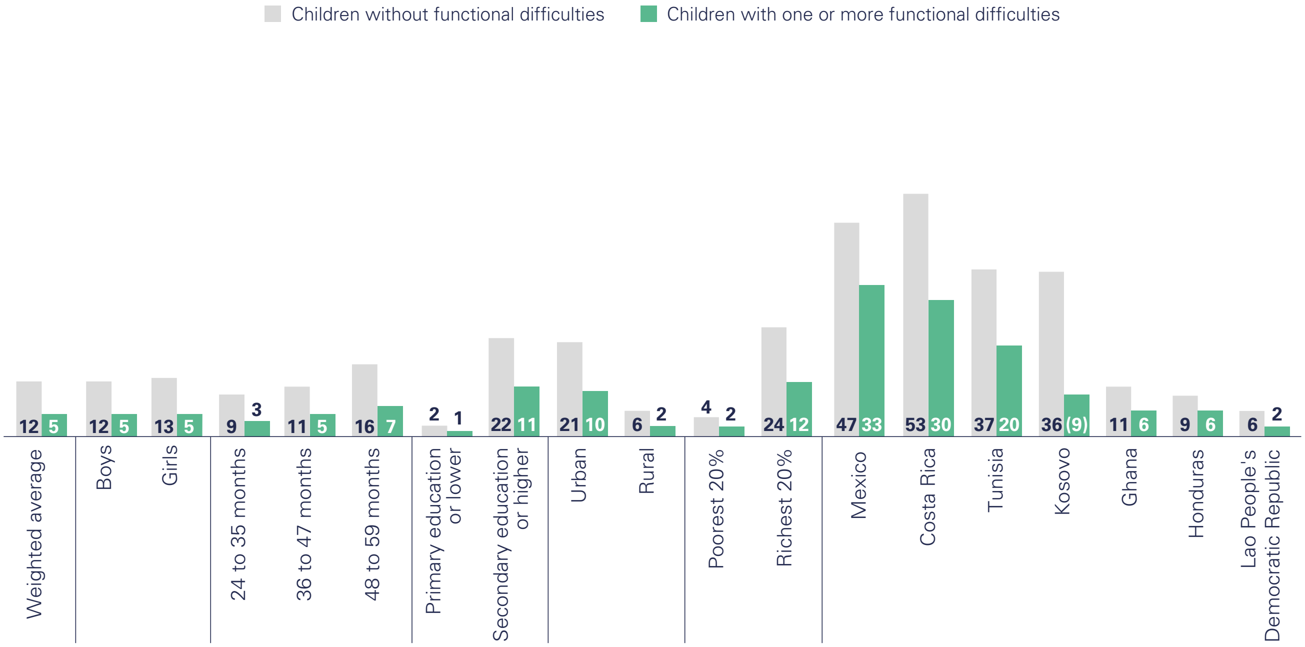
Children with difficulties using fine motor skills are least likely to have three or more children's books

FIGURE 3.6 Percentage of children aged 24 to 59 months who have three or more children's books



Children with disabilities, especially those whose mothers have little education, have significantly lower access to children's books

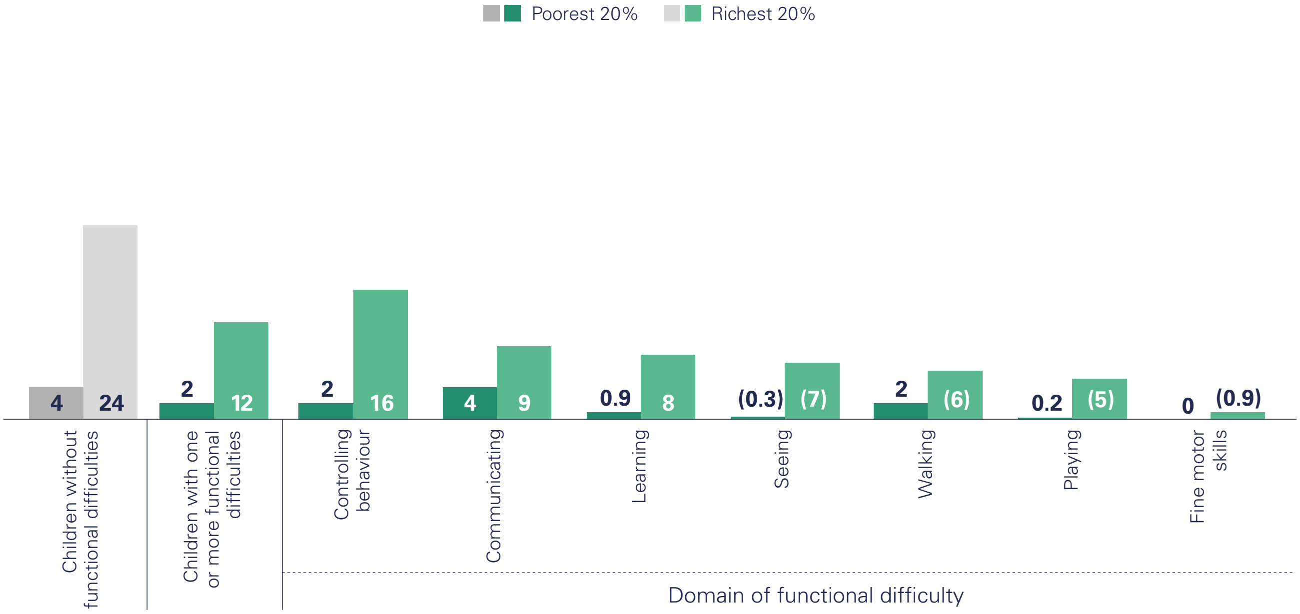
FIGURE 3.7 Percentage of children aged 24 to 59 months who have three or more children's books



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

Access to children's books is strongly associated with household wealth; among children with the same level of wealth, however, access to books is lower for children with disabilities, especially among those with fine motor difficulties

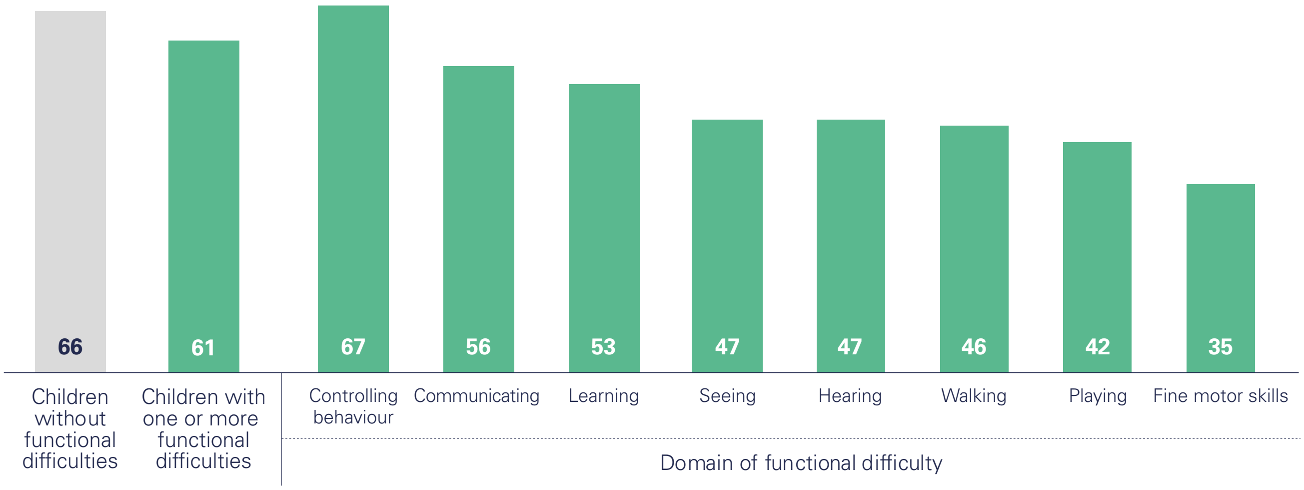
FIGURE 3.8 Percentage of children aged 24 to 59 months who have three or more children's books



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

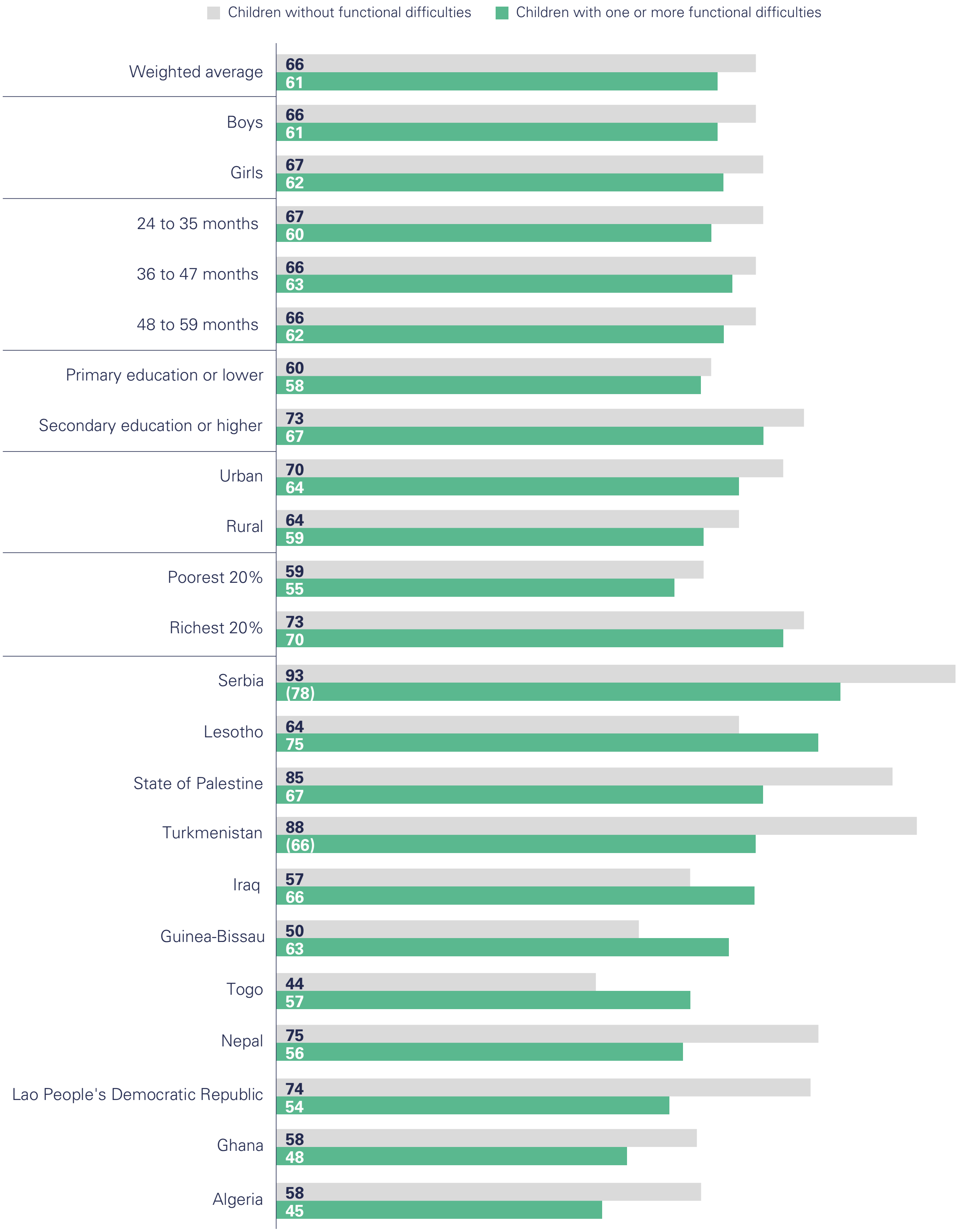
Children with difficulties using fine motor skills are less likely to have two or more playthings in their households

FIGURE 3.9 Percentage of children aged 24 to 59 months who play with two or more types of playthings



Children with disabilities generally have less access to playthings than children without disabilities; this disparity is widest among younger children

FIGURE 3.10 Percentage of children aged 24 to 59 months who play with two or more types of playthings



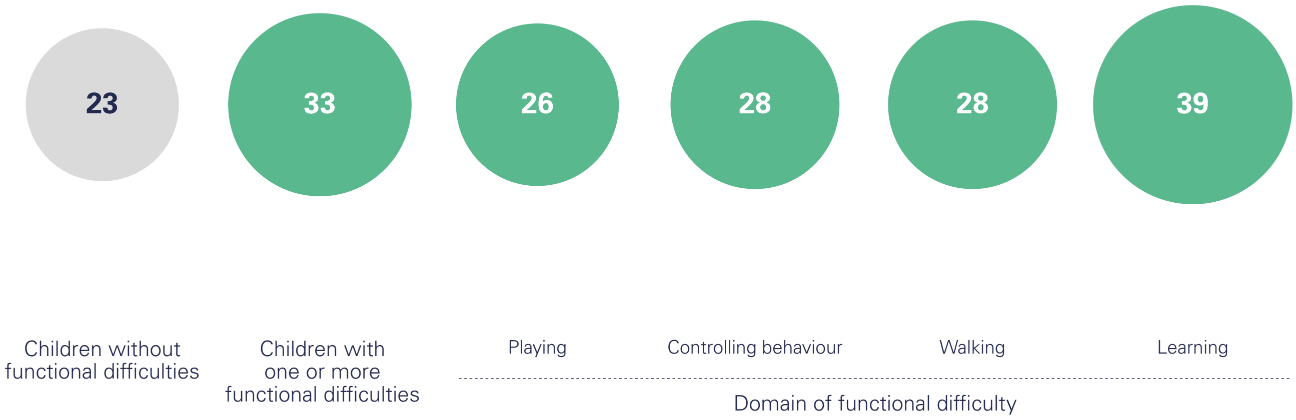
Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

© UNICEF/UN0396341/Khakimova

Inadequate supervision

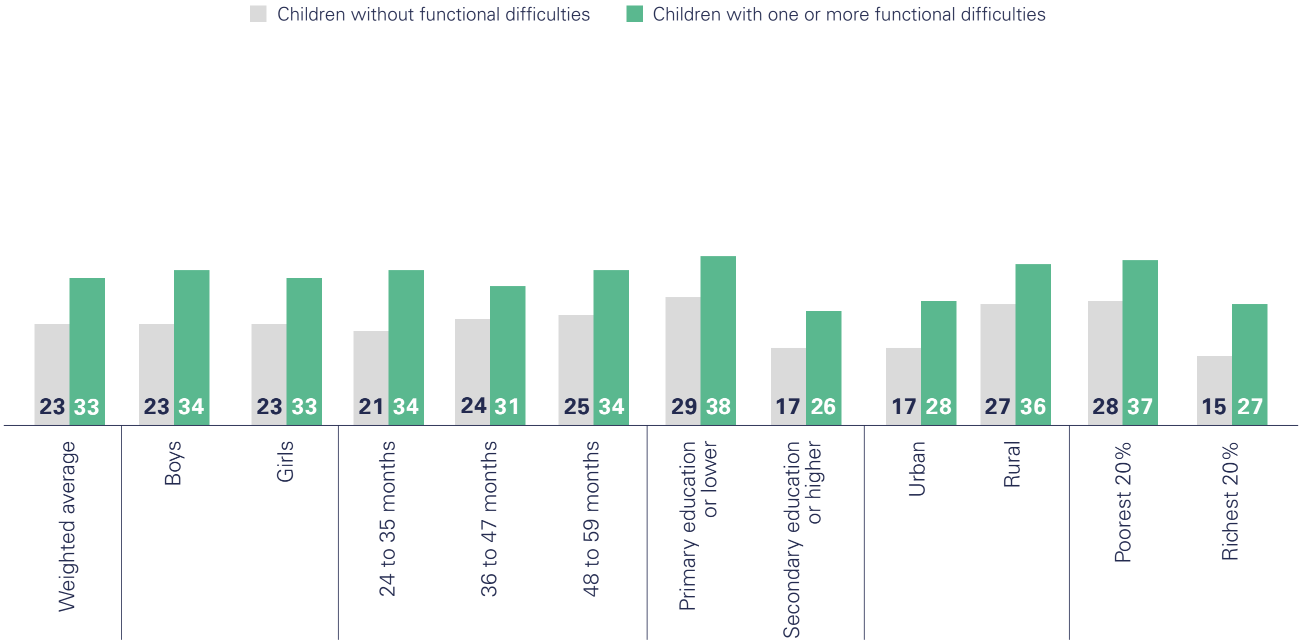
Children with difficulties learning are the most likely to experience inadequate supervision

FIGURE 3.11 Percentage of children aged 24 to 59 months who were left alone or under the supervision of another child younger than 10 years of age for more than one hour in the last week



Children with disabilities of all backgrounds are more likely to lack adequate supervision

FIGURE 3.12 Percentage of children aged 24 to 59 months who were left alone or under the supervision of another child younger than 10 years of age for more than one hour in the last week



Note: Education refers to the education level of mothers.

BOX 3.1 Caring for the caregivers of children with disabilities

Expecting a baby with a disability: Every family expecting a baby hopes for a healthy child. The prospect of giving birth to a child with a condition or impairment often raises a host of negative feelings, fuelled by personal and familial expectations, societal norms, stigma and discriminatory attitudes, and the absence of inclusive mainstream services.

Caring for small children: Babies and other small children are heavily dependent on their caregivers to meet their basic needs, uphold their rights and provide them with the environment and care they need to grow and develop. Since parents and other caregivers play such a central role in this regard, their own mental well-being is also important and can affect children directly in a variety of ways. Caring for a baby or small child is a demanding task that can be stressful and exhausting for all caregivers, but particularly for those looking after children with disabilities in contexts where they lack adequate support.

Mental health of caregivers: Caregivers who struggle with exhaustion and/or stress during the first months of a child's life are more likely to be unable to fully meet their own or their child's needs. Excessive stress and fatigue, along with other psychobiological factors during the first weeks or months after birth, can lead to depression, anxiety and other – often severe – mental health issues. When this occurs in the context of social vulnerabilities, the impact on a child's health and well-being can be devastating. This is especially true in situations where caregivers are experiencing added stressors, such as financial hardship, in addition to common childcare stressors.[10] These added sources of stress may also derive from uncertainty about a child's condition or diagnosis. When caregivers are overburdened and find themselves without the resources, skills or support they need to care for their child, it can result in abuse or neglect. These risks are particularly prevalent for children with difficulties related to mental health, behaviour or communication and who may struggle to respond to parental cues, placing further strain on caregivers and increasing the risk of violence.[11]

Short-term impacts of perinatal mental health problems include poor nutrition for both mother and baby and a higher prevalence of disease. At times, the tremendous psychological vulnerability and burden faced by women in the post-partum period can have shattering consequences, including a higher risk of death by maternal suicide or infanticide. Caregivers struggling with mental health issues often face interpersonal challenges that can disrupt the quality of early interactions with the child, increasing the risk of impaired social-emotional and cognitive development. Children of caregivers struggling with mental health issues are also at greater risk of abuse,[12] neglect and accidents,[13] and the risks are heightened for children with disabilities.

How parents cope: Even for the most prepared families, caring for a child with disabilities entails well-documented challenges. Some caregivers may become emotionally disconnected as a way of coping[14] or engage in neglectful or violent practices. As this report shows, children with disabilities experience far higher rates of neglect and violence than children without disabilities and are less likely to receive early stimulation and responsive care. Caregivers who find themselves overwhelmed by the time and energy required to care for a child with disabilities are less likely to engage the child in play or other stimulating activities.

Institutionalization: The challenges experienced by some caregivers in meeting the needs of their child may be overwhelming. Too often, the result can be institutionalization – usually to ensure that children have access to services and supports that are unavailable in their communities.[15] Sadly, however, this can leave children vulnerable to further violence and neglect within an institutional setting.

The gender divide and the parenting of children with disabilities: The gap between the time and energy that women, compared with men, spend in caring for children is well-documented.[16] Despite recent shifts in social norms among younger generations and those with higher education, the burden of childcare still falls heavily on women. In addition, even when the fathers invest the same amount of time in parenting as mothers do, they often dedicate themselves to the more pleasurable aspects of parenting, such as play, rather than less enjoyable or intensive activities, such as teaching or care.[17] This disparity in time and energy has significant implications for the health and well-being of mothers or female caregivers of children with and without disabilities. The burden associated with inequity in parental care can result in poorer mental health[18] and tends to be heavier among caregivers of children with disabilities.[19]

Takeaways and programmatic implications

Children with disabilities often face major challenges in realizing their right to optimal development. For every indicator and across every background characteristic measured in this chapter, such children experience worse overall outcomes than children without disabilities. However, nuances emerge. The data vary significantly among countries and by the domain of functional difficulty experienced by children. Children with difficulties learning, playing and communicating are much less likely to receive early stimulation and responsive care than children with difficulties in other domains. Similarly, children with difficulties in fine motor skills, playing and walking are far less likely to have access to playthings than children with other challenges.

Children's backgrounds can also provide insights into the level of risk they are likely to experience. While children with disabilities of all backgrounds show worse outcomes for all indicators, the extent of the difference is closely linked to other characteristics that are risk factors for all children. For example, access to books is closely tied to wealth for all children; however, children with disabilities in the poorest households still face greater deprivation than children without disabilities. A similar result is found among children left with inadequate supervision. All children who live in rural areas or are from the poorest households experience a high likelihood of being inadequately supervised. But children with disabilities with these same background characteristics face a higher risk. These findings illustrate how existing inequalities can intersect with disability and compound risk.

Governments and organizations can take concrete steps to address the inequality in early care received by children with disabilities. Family-centred support, including family-friendly policies and services for children and parents with disabilities, can make a substantial difference in keeping families together and fostering emotional well-being in both caregivers and children. This includes appropriate policies on parental leave and breastfeeding support, services such as affordable, accessible, high-quality and inclusive childcare, and resources such as child benefits, which can help to create supportive environments for families.[20] Additionally, parents and other caregivers of children with disabilities need services that promote their own well-being and mental health.

Programmes that help parents provide the best possible care to their children, while mitigating potential sources of emotional stress, have had demonstrable success.[21] For instance, research has shown that training programmes for parents are effective in increasing self-efficacy in those who have children with certain disabilities.[22] However, such programmes need to be tailored to the child's specific impairments. Support for families of children with disabilities can be facilitated through the promotion of public awareness of the risks faced by these children as well as advocacy at all levels of society to prioritize their needs and those of their families.[23] Finally, capacity must be built across different sectors to identify and support parents of children with disabilities and refer them to specialized services as needed.

© UNICEF/UN0503535/Willocq

CHAPTER 4

Every child has the right to learn

Education provides children with the knowledge and skills they need to grow and prosper, creating well-being, pathways to future opportunities and healthier lives. Ensuring opportunities for all children to succeed in school requires equity and inclusion that guarantees access, participation, progress and achievement of key learning outcomes. This means addressing all aspects of a child's educational path and eliminating the disparities and barriers that begin early in life, accumulate during childhood and generate further disadvantages for the most marginalized children, including children with disabilities.

Education has long been recognized as a global priority. For years, governments and other national and international stakeholders have focused their attention on making sure that all children can attend school, and they have backed up that commitment with funding. The SDGs have built on this foundation through Goal 4, which calls for inclusive and equitable quality education for all. Targets within the Goal call for universal completion of primary and secondary school (target 4.1), increasing the number of youths with relevant skills for life and employment (target 4.4), and ensuring their literacy and numeracy skills (target 4.6), among others. Target 4.5 calls for eliminating gender disparities and inequities in education, specifically highlighting the need to ensure access to education for persons with disabilities. Target 4.a calls for the upgrading of educational facilities so that they are child- and disability-sensitive and promote inclusive learning environments.

Despite widespread agreement on the importance of education, children with disabilities are still falling behind.[1] They are more likely to never attend school or to drop out due to multiple barriers, including stigma, lack of trained teachers, inadequate learning materials and inaccessible facilities.[2] A lack of inclusive policies by governments can contribute to these barriers. Only 68 per cent of countries in 2020 had definitions of inclusive education in their policies, leaving many schools and children without a national framework to facilitate this type of education.[3]

The impact of excluding children with disabilities from education goes far beyond diminished educational outcomes. They are also more likely to miss out on school-based health and nutrition programmes, such as school meals and immunization campaigns,[4] and face increased vulnerability to violence and exploitation while not at school.[5]

© UNICEF/UN0441182/Shing

Indicators used in this chapter

Attendance of early childhood education: Percentage of children aged 36 to 59 months who are attending an early childhood education programme.

School readiness: Percentage of children attending the first grade of primary school who attended an early childhood education programme during the previous school year.

Out-of-school rate: Percentage of children of:

- Primary-school age who are not attending early childhood education, primary school or higher
- Lower-secondary-school age who are not attending primary school, lower- or upper-secondary school or higher
- Upper-secondary-school age who are not attending primary school, lower- or upper-secondary school or higher.

Adjusted net attendance rate (ANAR): Percentage of:

- Children of pre-primary-school age currently attending pre-primary or primary school
- Children of primary-school age currently attending primary or secondary school
- Children of lower-secondary-school age currently attending lower-secondary school or higher
- Children of upper-secondary-school age currently attending upper-secondary school or higher.

Children who never attended school: Percentage of children aged 10 to 17 years who have never attended school.

Overage for grade: Percentage of students attending each grade who are two or more years older than the official age for that grade.

Repetition rate in primary education: Percentage of students who attended any given grade in primary school in the previous year and are attending the same grade in the current year.

Dropout rate in primary education: Percentage of students who in the previous school year were enrolled in any grade in primary education (excluding the last grade), and who are no longer attending primary school in the current year.

Books and reading:

- Percentage of children aged 7 to 14 years who have three or more books to read at home
- Percentage of children aged 7 to 14 years who read books or are read to at home.

Parental involvement with school:

- Discussion with teachers regarding progress: Percentage of children aged 7 to 14 years attending school for whom an adult household member discussed progress with teachers in the last year
- Report cards: Percentage of children aged 7 to 14 years attending schools that provided student report cards to parents in the last year
- Support with homework: Percentage of children aged 7 to 14 years attending school who have homework and received help with homework.

Learning outcomes:

- Foundational reading skills: Percentage of children aged 7 to 14 years who demonstrate foundational reading skills by successfully completing three foundational reading tasks:
    - Word recognition (correctly reading 90 per cent of words in a story)
    - Literal questions (correctly answering three literal questions)
    - Inferential questions (correctly answering two inferential questions).

Only by correctly reading 90 per cent of words in a story and correctly answering the questions in all three categories of the module is a child considered to have foundational reading skills.

- Foundational numeracy skills: Percentage of children aged 7 to 14 years who demonstrate foundational numeracy skills by successfully completing four foundational numeracy tasks:
    - Number reading
    - Number discrimination
    - Addition
    - Pattern recognition.

Each category has several questions, and the child must answer every question in every category correctly to be considered to have foundational numeracy skills.

Use of Internet, computers and communication technologies:

- Use of a computer: Percentage of children aged 15 to 17 years who used a computer in the last three months

- Use of a mobile phone: Percentage of children aged 15 to 17 years who used a mobile phone in the last three months
- Use of the Internet: Percentage of children aged 15 to 17 years who used the Internet in the last three months.

School-related support: Percentage of children aged 5 to 17 years attending school who received any type of school-related support, either in the form of tuition or other support (such as provision of textbooks, supplies, uniforms, etc.) in the current or most recent academic year.

Definitions and data interpretation issues

Several methodological issues need to be addressed to accurately interpret the findings in this chapter.

A relevant consideration is the limitation of the data in providing a comprehensive account of all factors affecting a child's learning experience. While the indicators used here measure education uptake and outcomes, they fall short in fully capturing the experiences of children with disabilities in obtaining an education and the barriers they face. Additional information and data sources are needed to gain such understanding. The extent and implications of this limitation and how data gaps can be addressed are discussed in Box 4.1 on page 95.

Another data limitation is the inability to distinguish between children who are in mainstream education and those who are in disability-specific educational settings. This is significant since many countries have highly segregated school systems for children with disabilities. For example, what is considered progression in a special education school may be significantly different from that in a mainstream school, fundamentally altering responses to what is considered 'at level' for the child. If this distinction could be captured, then the reported inequities between children with and without disabilities would likely be even greater.

Another constraint involves the indicator assessing educational support to students. While it measures whether a child receives such support, it does not provide any insights into whether that support is adequate in meeting a child's needs. This is particularly relevant in the case of children with disabilities for whom the support, especially non-monetary assistance in the form of supplies, uniforms, textbooks, etc., may not be adequate and therefore may have little or no bearing on their ability to benefit from it. While this indicator does provide information on access to support for children with and without disabilities, it should nevertheless be viewed with this limitation in mind.

Results related to upper-secondary-school attendance are based on children who were less than 18 years old at the time of the survey. These results should thus be interpreted carefully given that they do not include persons above the age of 18 who may still have been attending upper-secondary school.

A final consideration is the fact that the denominators used for some indicators do not capture the entire population of children represented by the sample. For example, school progression indicators only represent the situation of children who have ever attended school. It is well known that the most marginalized children in society, including those with disabilities, tend to be overrepresented among those who are out of school, either because they have never attended school or because they have dropped out. Therefore, the results that show disaggregated information on school progression for children with and without disabilities reflect the experiences of a subgroup of children that, in all likelihood, face lower barriers to education than those who have never been able to attend school.

A similar consideration applies to the results on foundational learning. In this case, the indicators for foundational reading and numeracy skills are only generated for children who can complete three reading tasks and four numeracy tasks. Non-completion observations include children who started but were unable to finish the assessment tasks, who refused to take the assessment (or whose mothers did not permit them to take the assessment) or who could not participate in the assessment due to illness or an impairment. Inaccessibility could thus be a barrier to participation for some children (for example, if a child is blind or requires assistive technology or reasonable accommodations to participate and these could not be provided). Therefore, the results that show differences in foundational learning skills for children with and without disabilities should be interpreted with the understanding that children with certain difficulties are less likely to have been part of such an assessment, as shown in Table 4.1.

TABLE 4.1 Percentage of children aged 7 to 14 years who did not complete the reading and numeracy tasks

Children without functional difficulties		2
Children with one or more functional difficulties		5
Domain of functional difficulty	Signs of anxiety	4
	Signs of depression	5
	Controlling behaviour	9
	Walking	10
	Accepting change	10
	Seeing	14
	Learning	16
	Remembering	17
	Concentrating	23
	Making friends	23
	Self-care	28
	Hearing	33
	Communicating	41

Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lao People's Democratic Republic (for children aged 2 to 4 years only), Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Pooled results for all indicators that refer to children aged 5 years or above do not include data from the Lao People's Democratic Republic since that survey only captured information on children aged 2 to 4 years.

Pooled results for indicators measuring the number of books in a child's home (Figure 4.20) do not include data from Mexico since these were not available.

Pooled results for indicators measuring whether a child is reading or being read to at home (Figures 4.21 and 4.22) do not include data from Algeria, Costa Rica, Cuba, Georgia, Iraq, Mexico, Montenegro and Serbia.

Pooled results for indicators measuring foundational reading and numeracy skills (Figures 4.25 through 4.29) do not include data from Algeria, Costa Rica, Cuba, Georgia, Iraq, Mexico, Montenegro, Serbia, Sierra Leone and Tonga since these were not available.

Pooled results for indicators measuring use of information and communication technology (ICT) (Figure 4.30) do not include data from Belarus, Costa Rica, Georgia, Kosovo, Mexico, Montenegro, North Macedonia and Serbia.

Pooled results for indicators measuring education support (Figures 4.31 and 4.32) do not include data from Cuba, Democratic Republic of the Congo, Gambia, Ghana, Guinea-Bissau, Kosovo, Lesotho, Mexico, Montenegro, Togo and Turkmenistan since these were not available.

School participation

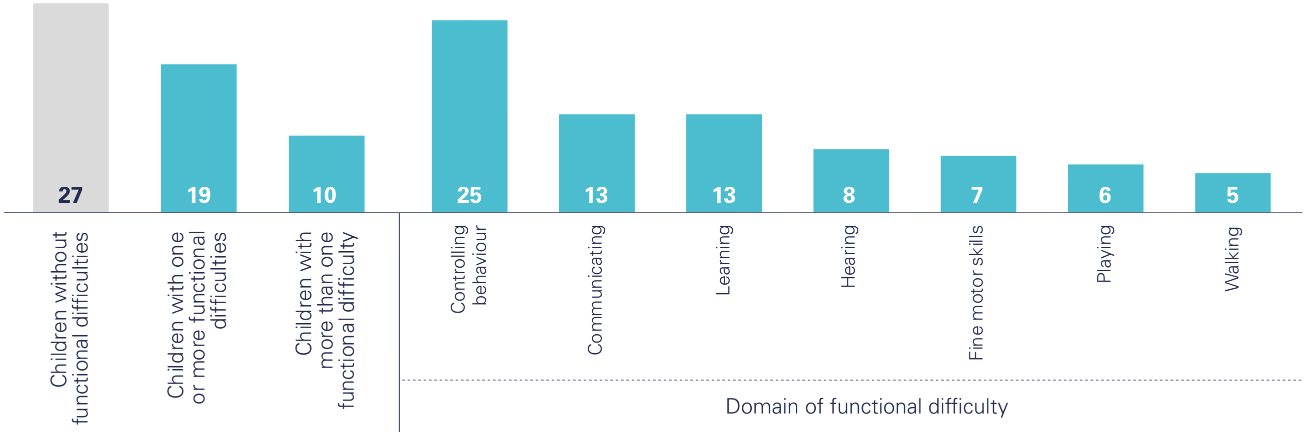
All children have the right to inclusive, accessible and high-quality education. Children with certain impairments may be more likely to experience exclusion because schools may not be able to accommodate their needs. For many children with disabilities, education is only available in segregated settings, denying them the multiple benefits of inclusive education in a general environment.[6]

Other barriers to education can also increase disparities in school participation.[7] The impact of poverty on the educational trajectories of children with disabilities tends to be magnified as families struggle to meet the additional costs of keeping their children in school.[8] This can be compounded by negative beliefs about the capabilities of children with disabilities. Families of such children may refrain from enrolling them in school in the belief that there is limited benefit to doing so.[9]


© UNICEF/UNI180622/Brake

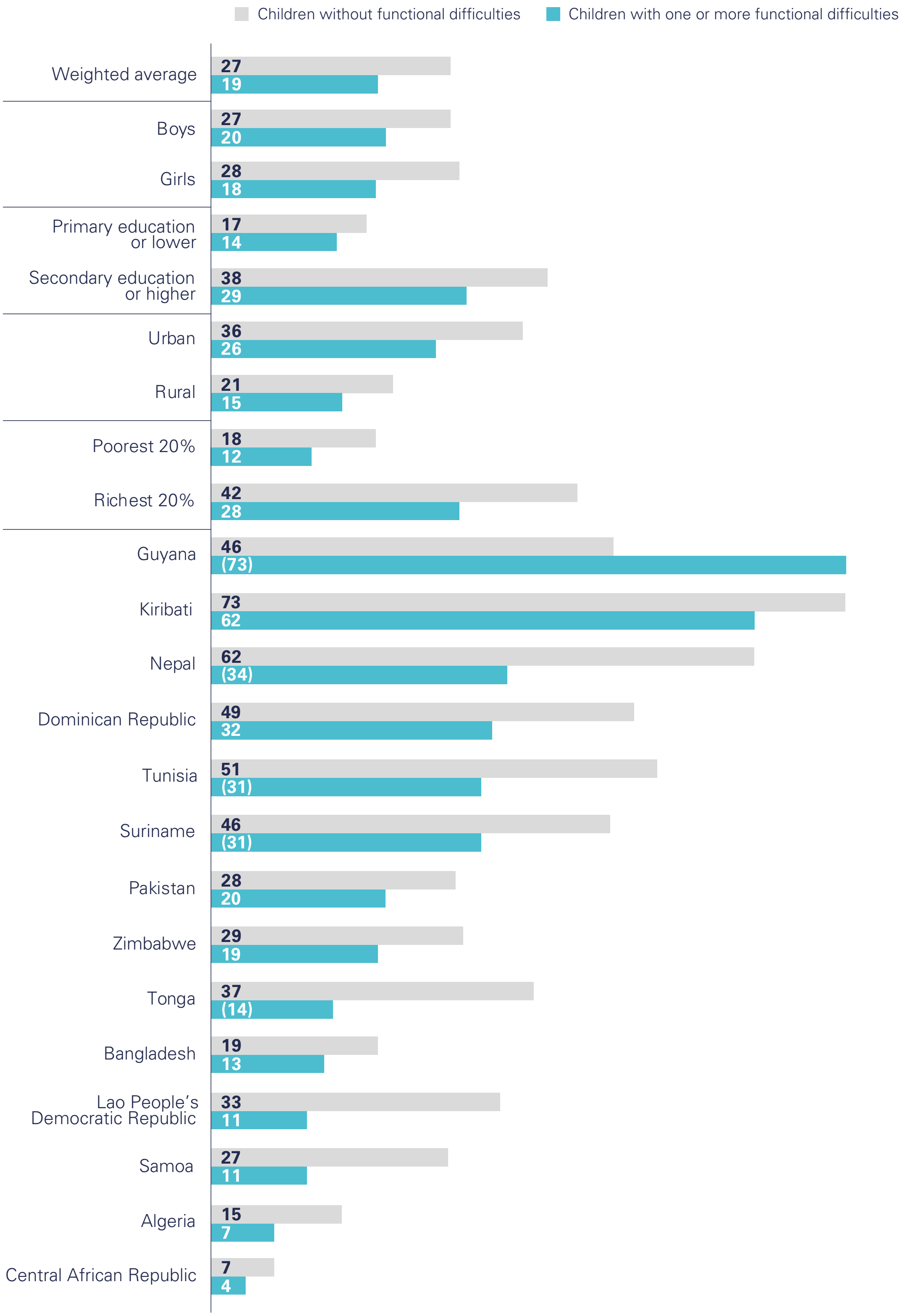
Children with difficulties walking, playing or using fine motor skills are less likely to attend early childhood education programmes

FIGURE 4.1 Percentage of children aged 36 to 59 months who are attending an early childhood education programme



A lower percentage of children with disabilities attend early childhood education than their peers without disabilities, and this disparity is more pronounced among girls

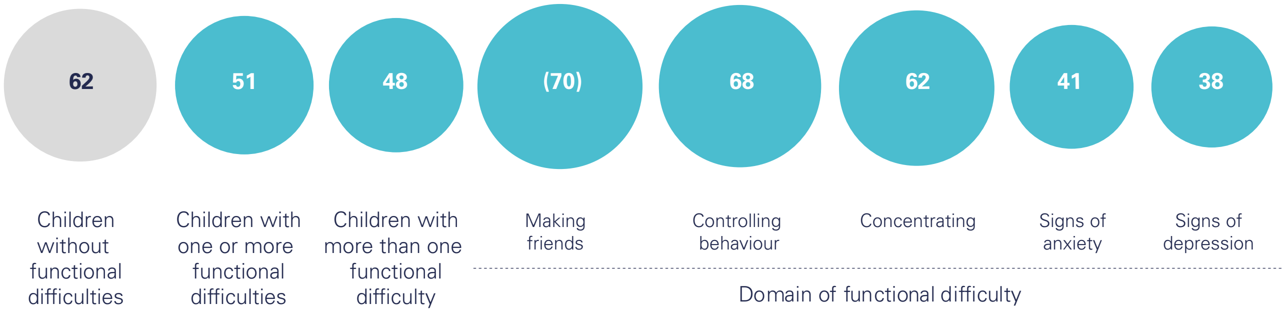
FIGURE 4.2 Percentage of children aged 36 to 59 months who are attending an early childhood education programme



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

Among children in the first grade of primary school, those with signs of depression are less likely to have attended early childhood education in the previous year

FIGURE 4.3 Percentage of children attending the first grade of primary school who attended an early childhood education programme during the previous school year

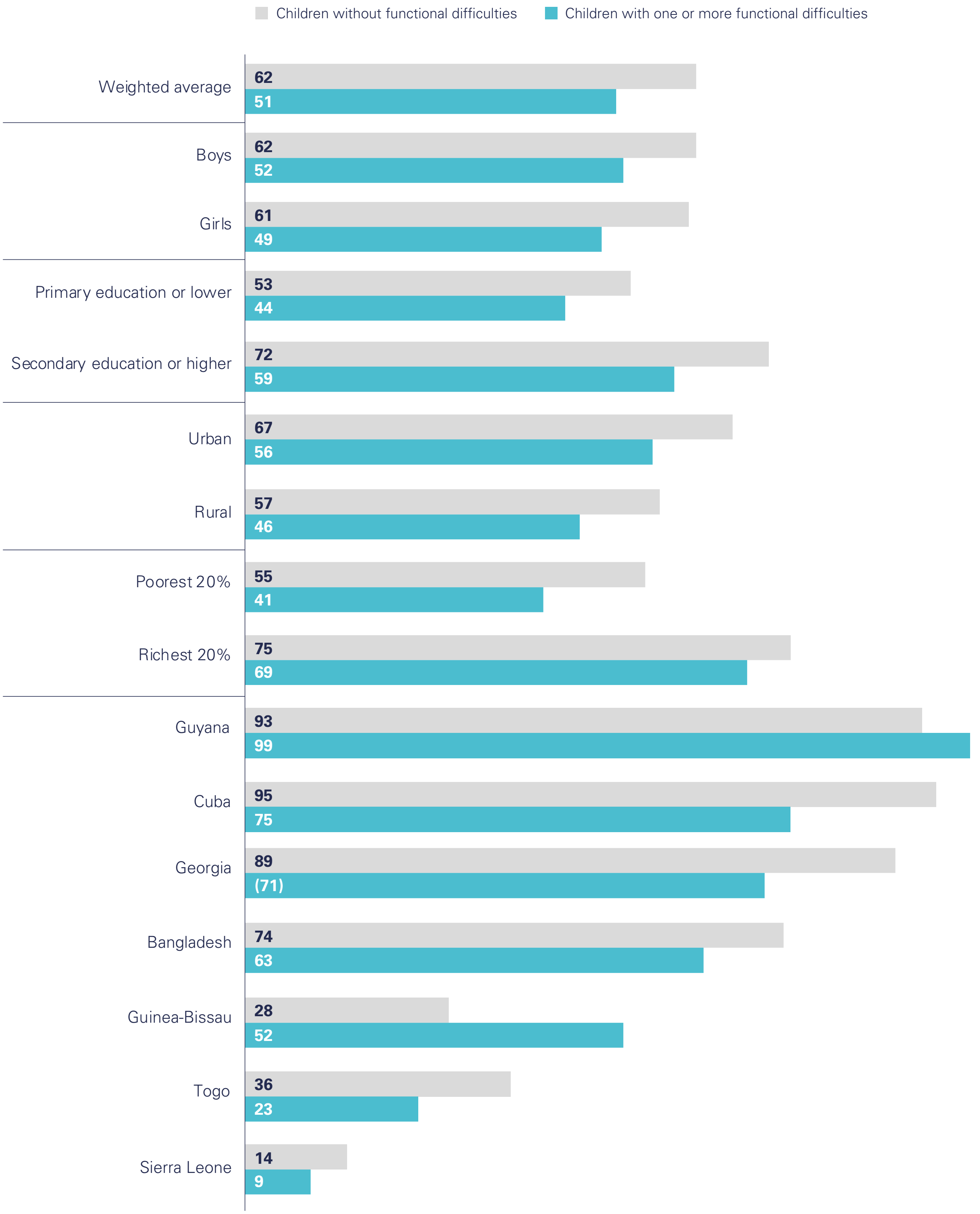


Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

© UNICEF/UNI303920/Younis

Children with disabilities of almost every background have lower rates of primary-school readiness than children without disabilities. Disparities are largest among children in the poorest households

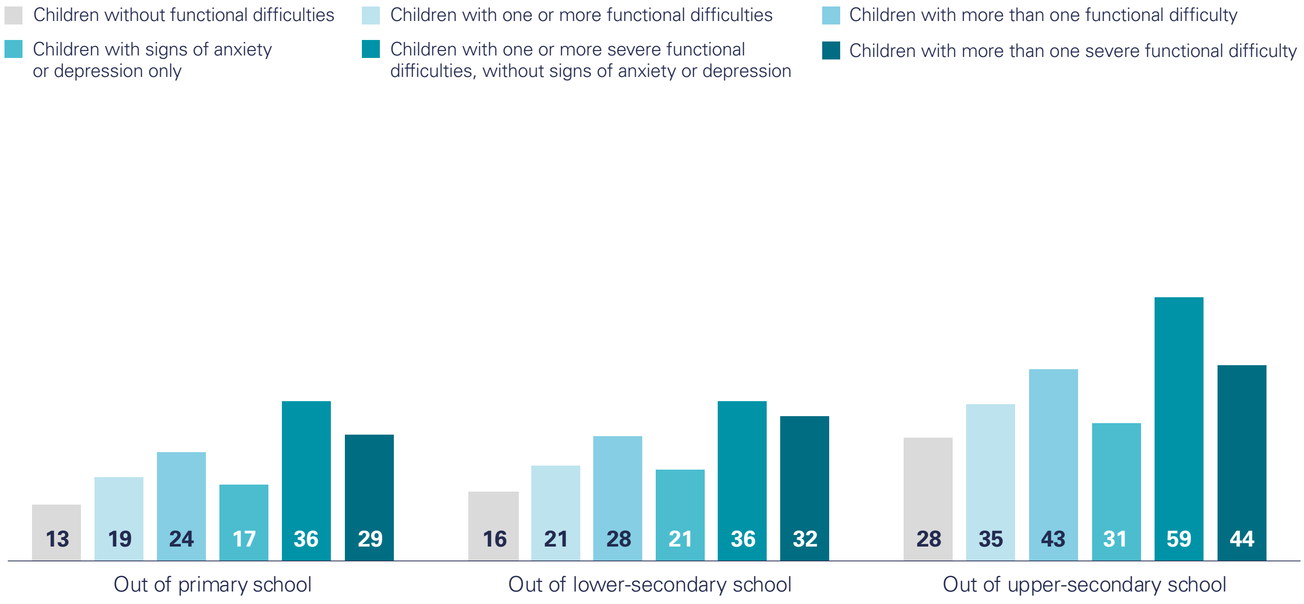
FIGURE 4.4 Percentage of children attending the first grade of primary school who attended an early childhood education programme during the previous school year



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

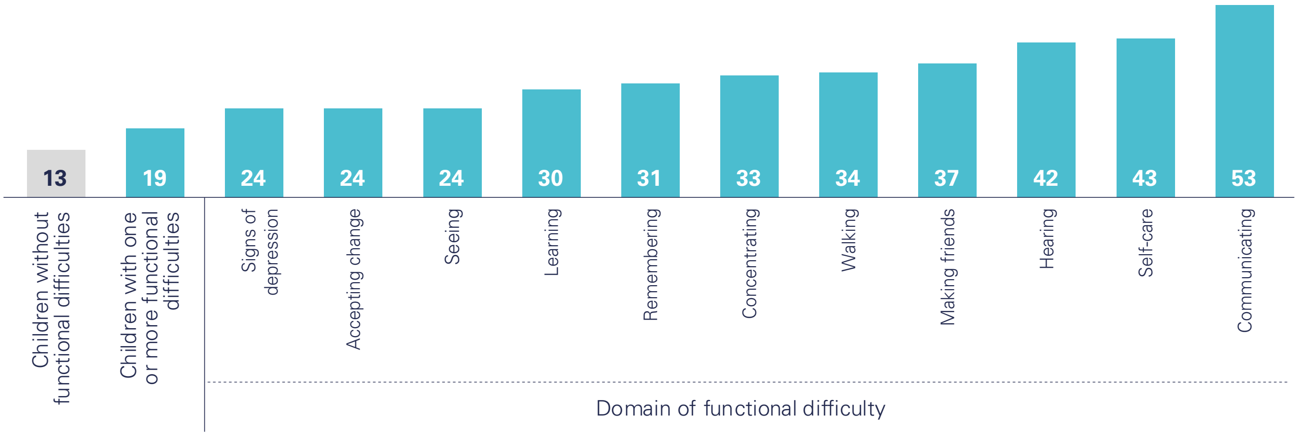
Regardless of education level, children with disabilities are more likely to be out of school than children without disabilities. Out-of-school rates increase during secondary school and are higher among children with multiple disabilities; rates are highest among children with severe disabilities

FIGURE 4.5 Percentage of primary-, lower-secondary- and upper-secondary-school-aged children who are not attending school



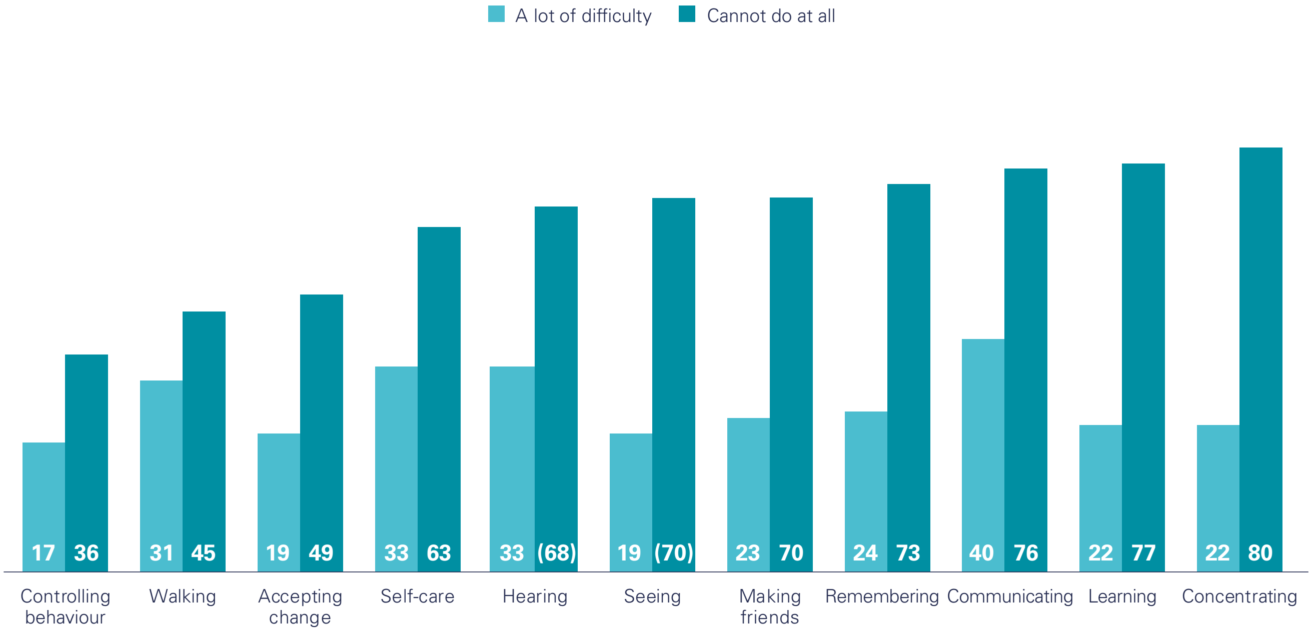
Children of primary-school age with disabilities in most domains are disproportionately more likely to be out of school than children without disabilities

FIGURE 4.6 Percentage of children of primary-school age who are not attending primary school or higher



Disparities in school participation become even greater when the severity of functional difficulties is taken into account

FIGURE 4.7 Percentage of children of primary-school age who are not attending primary school or higher

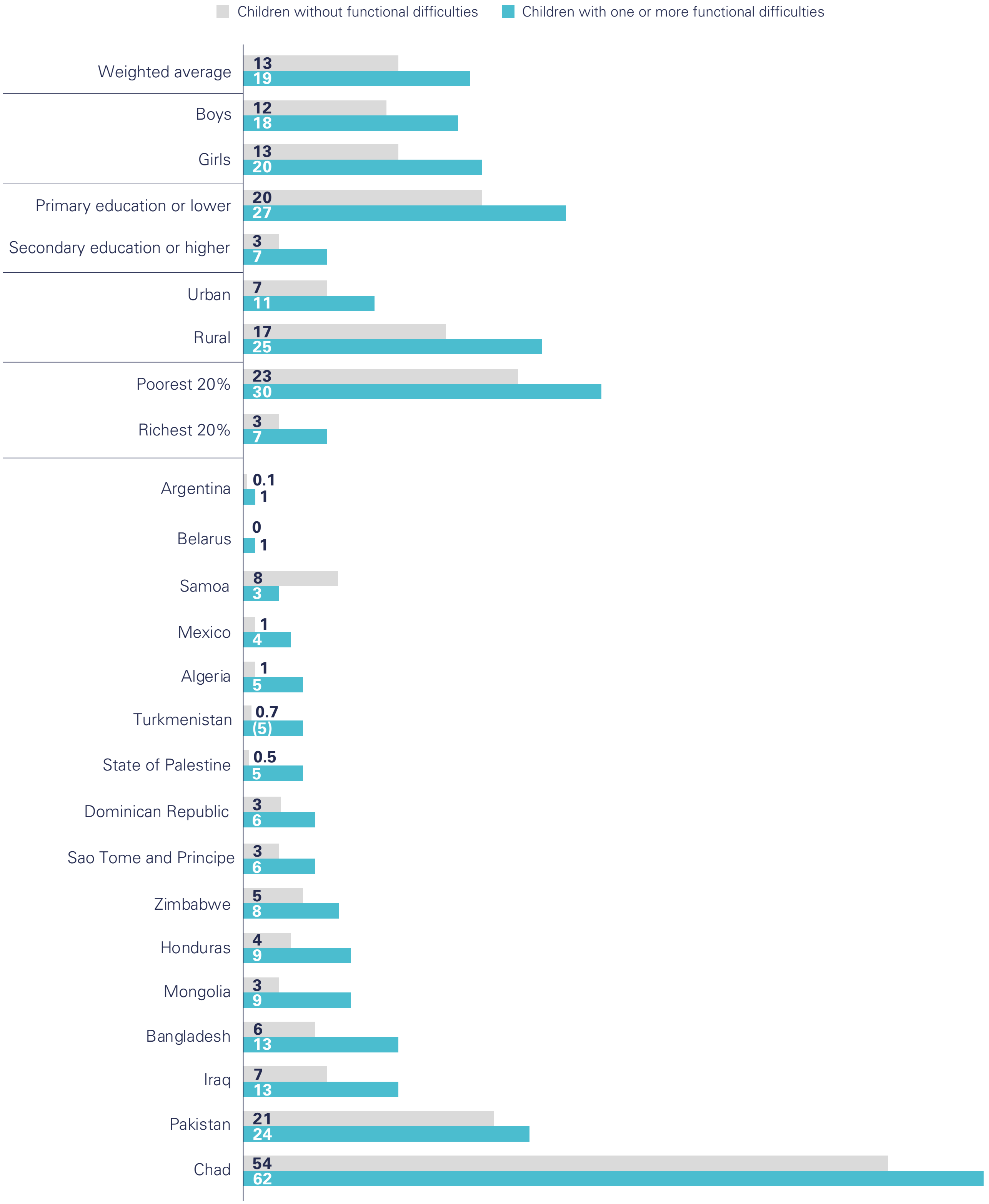


Notes: Numbers in parentheses are based on 50 to 249 unweighted observations. Values for children with signs of anxiety or depression are not displayed in this chart as the indicators only capture the most severe cases.

© UNICEF/UN0425719/Sokol

In some countries, children of primary-school age with disabilities are more likely to be out of school than children without disabilities. Lower maternal education and living in rural areas or in the poorest households are strongly associated with being out of school for children with and without disabilities

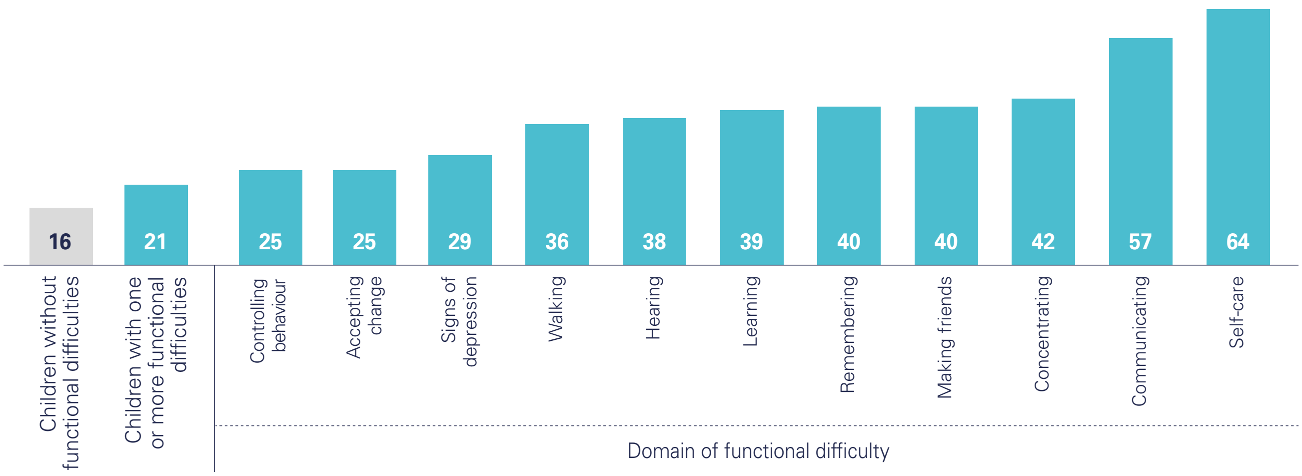
FIGURE 4.8 Percentage of children of primary-school age who are not attending primary school or higher



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

Children of lower-secondary-school age with difficulties caring for themselves, communicating and concentrating are up to four times more likely to be out of school than children without disabilities

FIGURE 4.9 Percentage of children of lower-secondary-school age who are not attending primary, lower- or upper-secondary school or higher



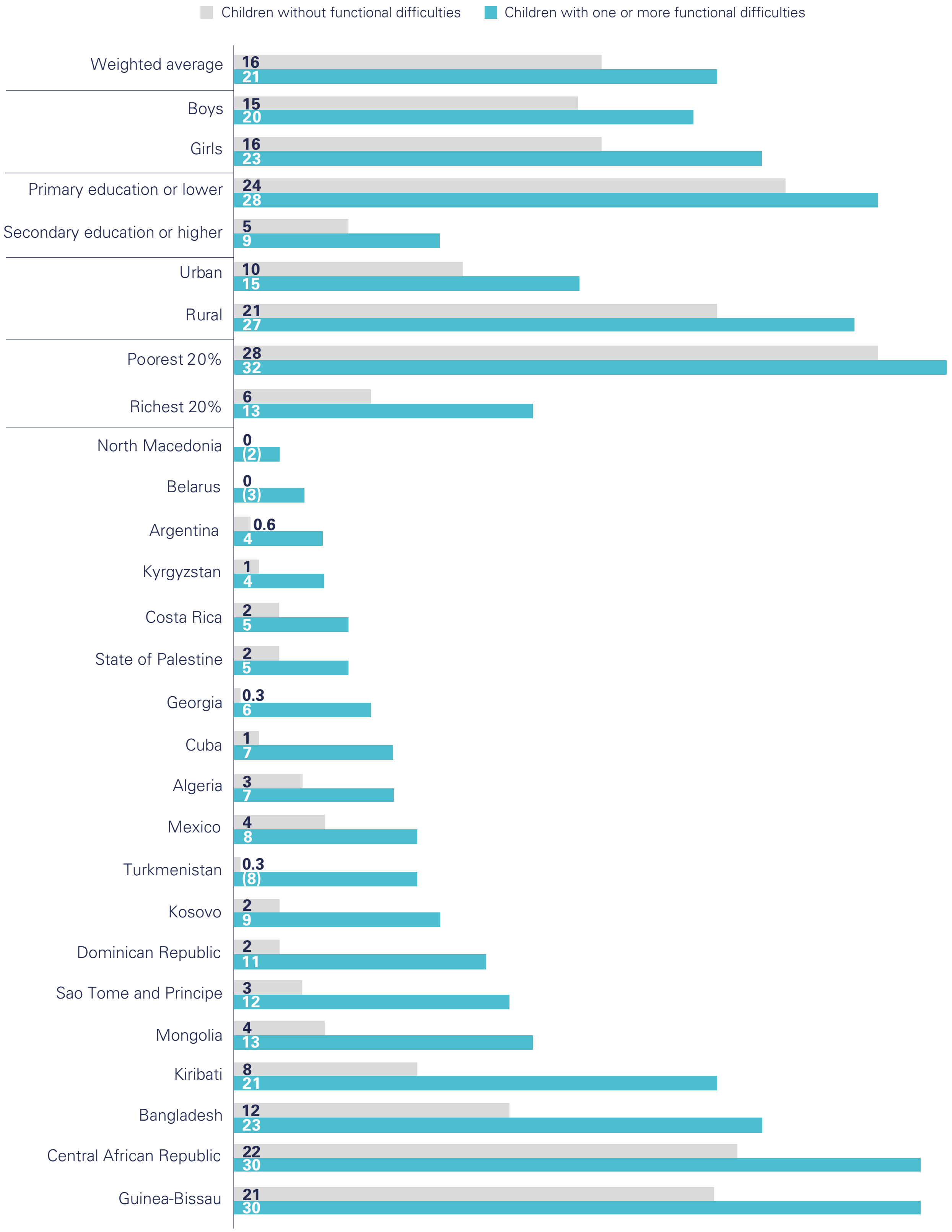
Across nearly all functional domains, the majority of children of lower-secondary-school age with the most severe disabilities are out of school

FIGURE 4.10 Percentage of children of lower-secondary-school age who are not attending primary, lower- or upper-secondary school or higher

Notes: Numbers in parentheses are based on 50 to 249 observations. Values for 'seeing' are not shown because they are based on fewer than 50 unweighted observations. Values for children with signs of anxiety or depression are not displayed in this chart as the indicators only capture the most severe cases.

In many countries and areas and across all background characteristics, children of lower-secondary-school age with disabilities are more likely to be out of school than children without disabilities

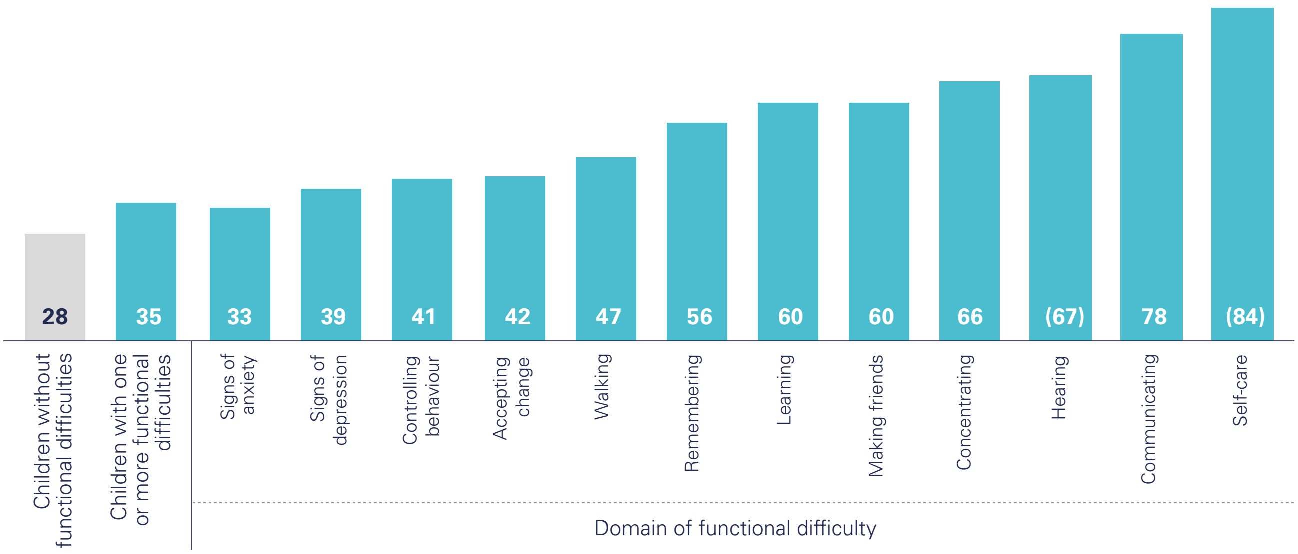
FIGURE 4.11 Percentage of children of lower-secondary-school age who are not attending primary, lower- or upper-secondary school or higher



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

Eight out of 10 children of upper-secondary-school age with difficulties communicating or caring for themselves are out of school

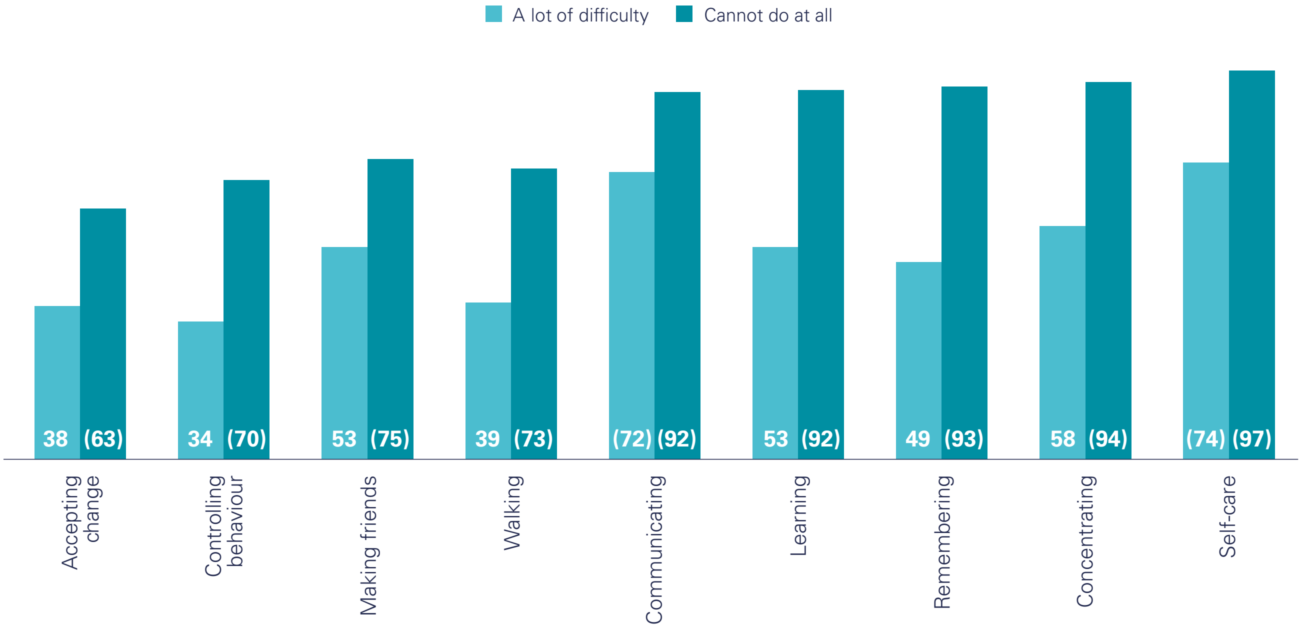
FIGURE 4.12 Percentage of children of upper-secondary-school age who are not attending primary, lower- or upper-secondary school or higher



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

By the time they reach upper-secondary-school age, nearly all children with the most severe disabilities, across most functional domains, are out of school

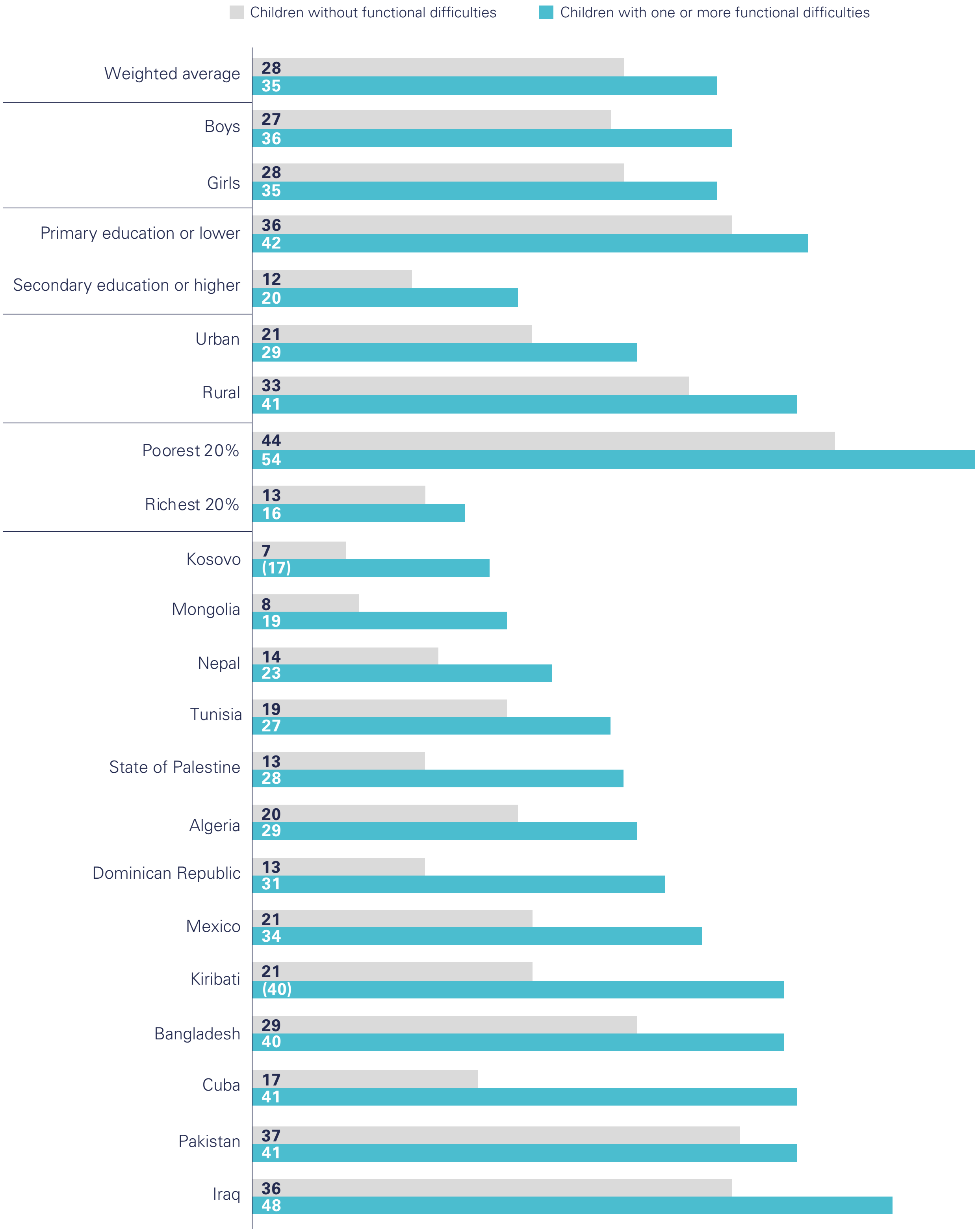
FIGURE 4.13 Percentage of children of upper-secondary-school age who are not attending primary, lower- or upper-secondary school or higher



Notes: Numbers in parentheses are based on 50 to 249 unweighted observations. Values for ‘seeing’ and ‘hearing’ are not shown because they are based on fewer than 50 unweighted observations. Values for children with signs of anxiety or depression are not displayed in this chart as the indicators only capture the most severe cases.

In many countries and areas, and across all background characteristics, children of upper-secondary-school age with disabilities are more likely to be out of school than their peers without disabilities

FIGURE 4.14 Percentage of children of upper-secondary-school age who are not attending primary, lower- or upper-secondary school or higher



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.


© UNICEF/UN0425632/Sokol

Disparities affecting school attendance of children with and without disabilities tend to increase as children move into higher levels of education.

TABLE 4.2 Adjusted net attendance rate (ANAR) for children with functional difficulties divided by the ANAR for children without functional difficulties

Domain of functional difficulty	Pre-primary school	Primary school	Lower-secondary school	Upper-secondary school
Children with one or more functional difficulties	0.9	0.9	0.8	0.7
Signs of anxiety	0.8	1.0	0.9	0.8
Seeing	(0.6)	0.9	1.0	0.9
Signs of depression	0.7	0.9	0.8	0.7
Controlling behaviour	1.0	0.9	0.7	0.7
Walking	0.8	0.6	0.6	0.5
Making friends	0.7	0.7	0.7	0.4
Hearing	(0.5)	0.6	0.6	(0.4)
Remembering	0.8	0.8	0.4	0.3
Concentrating	0.7	0.8	0.5	0.3
Learning	0.7	0.8	0.4	0.2
Communicating	(0.6)	0.5	0.4	0.2
Self-care	0.8	0.6	0.3	(0.1)

Notes: Numbers in parentheses are based on 50 to 249 unweighted observations. The numbers reflect the proportion of children with functional difficulties who attend a specific school level divided by the proportion of children without functional difficulties at the same level. A value of 1.0 (displayed in white cells) indicates equity between children with and without functional difficulties. Values below 1.0 (displayed in blue cells) indicate lower attendance for children with functional difficulties, with darker shades of blue representing greater inequities. For example: The upper-secondary attendance rate for children with self-care difficulties is 10 times lower than the upper-secondary attendance rate of children without self-care difficulties. In other words, children with self-care difficulties are 10 times less likely to attend upper-secondary school compared with children without self-care difficulties.

In most countries and areas, children with disabilities experience lower rates of school attendance at some point during their education

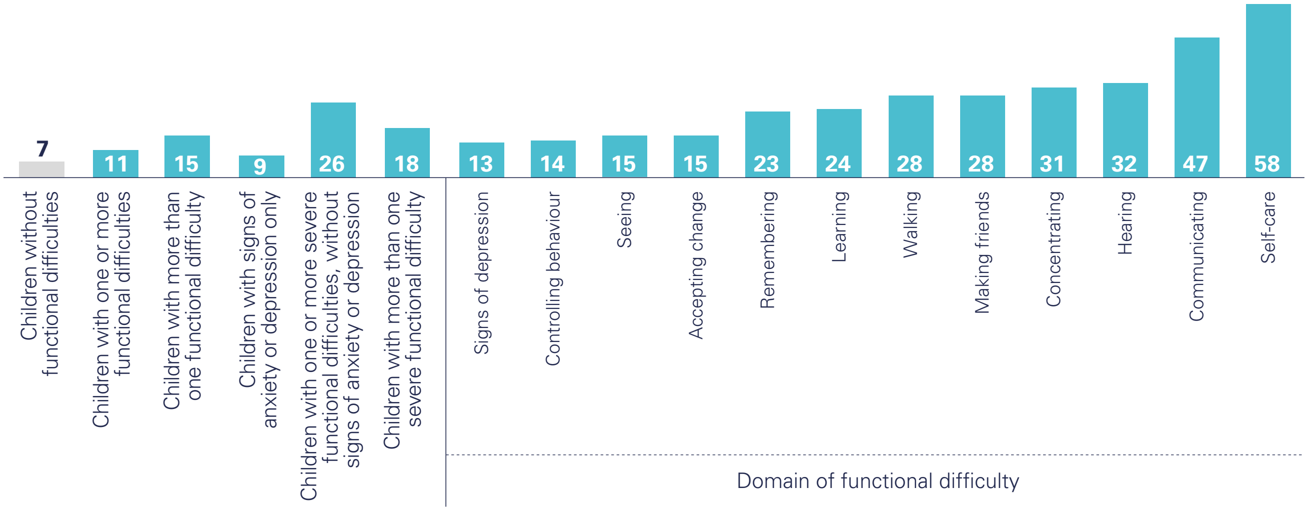
TABLE 4.3 Adjusted net attendance rate (ANAR) for children with functional difficulties divided by the ANAR for children without functional difficulties

Countries and areas	Pre-primary school	Primary school	Lower-secondary school	Upper-secondary school
Algeria	1.0	1.0	0.9	0.9
Argentina	1.0	1.0	0.8	0.8
Bangladesh	1.0	0.9	0.9	0.8
Belarus	(*)	0.8	(1.0)	(*)
Central African Republic	0.9	1.0	0.7	(*)
Chad	(*)	0.8	0.9	0.5
Costa Rica	1.0	1.0	0.8	0.6
Cuba	(1.0)	1.0	0.9	0.6
Democratic Republic of the Congo	0.8	0.9	0.7	0.8
Dominican Republic	1.0	1.0	0.7	0.6
Gambia	0.9	1.0	0.7	(*)
Georgia	(1.0)	1.0	0.9	0.9
Ghana	1.0	1.0	0.8	0.7
Guinea-Bissau	0.7	0.9	1.1	1.0
Guyana	1.0	1.0	1.0	1.1
Honduras	1.0	0.9	0.8	0.7
Iraq	1.0	0.9	0.8	0.7
Kiribati	1.0	0.9	0.8	(0.6)
Kosovo	(*)	1.0	0.9	(0.9)
Kyrgyzstan	(1.0)	1.0	1.0	(*)
Lesotho	(0.9)	1.0	0.8	(1.3)
Madagascar	1.0	1.0	1.1	0.6
Mexico	1.0	1.0	0.9	0.7
Mongolia	0.8	0.9	0.9	0.9
Montenegro	(*)	(1.0)	(0.9)	(0.9)
Nepal	1.0	1.0	1.0	0.8
North Macedonia	(*)	1.0	(1.0)	(1.1)
Pakistan	0.9	0.9	0.9	0.9
Samoa	0.9	1.0	1.0	0.9
Sao Tome and Principe	(1.1)	0.9	0.6	0.7
Sierra Leone	1.0	1.0	0.8	0.8
State of Palestine	1.0	1.0	1.0	0.8
Suriname	0.9	1.0	0.8	(1.1)
Togo	1.1	1.0	1.0	0.7
Tonga	(*)	1.0	(1.0)	(0.8)
Tunisia	0.9	1.0	0.9	0.8
Turkmenistan	(1.0)	(1.0)	(0.9)	(*)
Tuvalu	(*)	(1.1)	(*)	(*)
Zimbabwe	0.9	1.0	0.9	(0.7)

Notes: A value of 1.0 indicates equity between children with and without functional difficulties; values above 1.0 indicate higher attendance for children with functional difficulties; values below 1.0 indicate lower attendance for children with functional difficulties. Numbers in parentheses are based on 25 to 49 unweighted observations. An asterisk in parentheses (*) indicates that the results are not shown because they are based on fewer than 25 unweighted observations. Data for Serbia and Turks and Caicos Islands are not shown because all the values are based on fewer than 25 unweighted observations.

Children with difficulties caring for themselves, communicating and hearing are most likely to have never attended school

FIGURE 4.15 Percentage of children aged 10 to 17 years who have never attended school



Note: The figure covers children at least 10 years old to avoid capturing late entries into primary school.

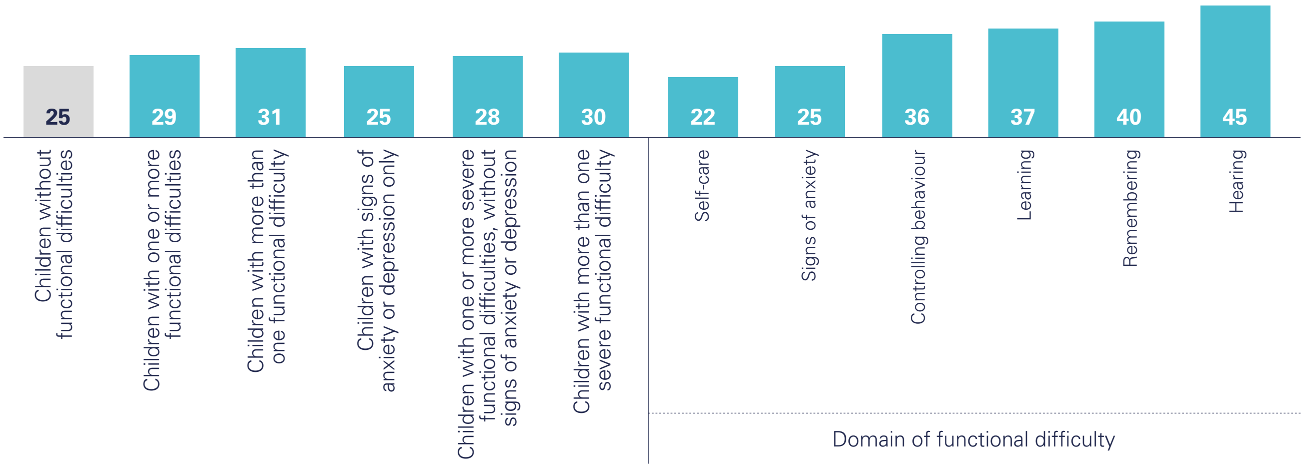
School progression

While children with disabilities have an equal right to education, they frequently face higher barriers in completing their schooling than children without disabilities. Schools and classrooms are often not accessible to children with disabilities, either physically or because they lack specialized teaching, contributing to lower academic achievement, including dropout and repetition of grades.[10] Dropping out of school limits the future educational and employment opportunities of these children, depriving them of the skills and knowledge they need to progress on their career paths.[11]


© UNICEF/UN0367651/Raab

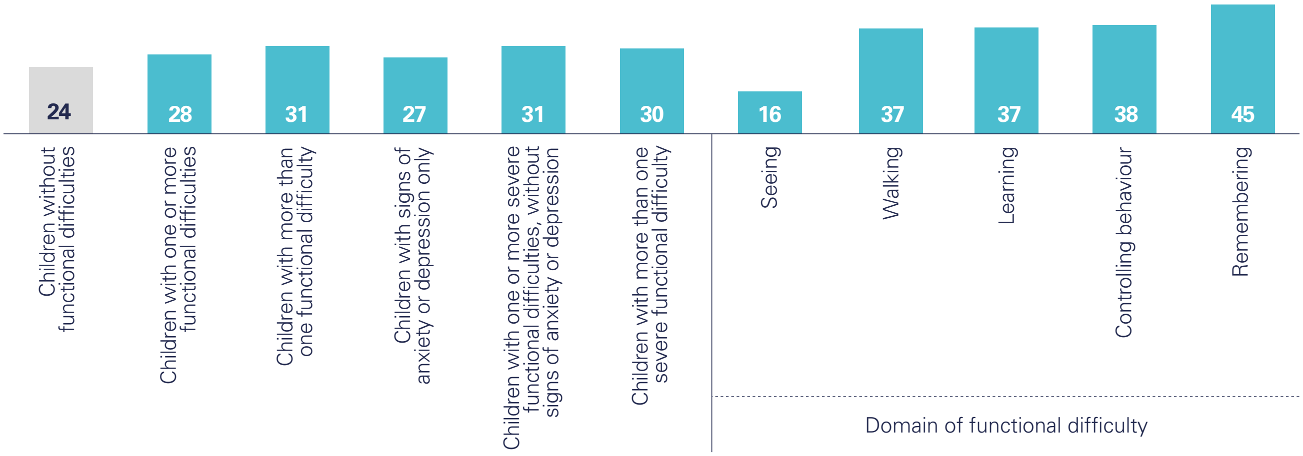
Children with difficulties hearing and remembering are most likely to be overage for their grade in primary school

FIGURE 4.16 Percentage of children who are two or more years older than the official school age for their grade in primary school



Children with difficulties remembering and controlling their behaviour are most likely to be overage for their grade in lower-secondary school

FIGURE 4.17 Percentage of children who are two or more years older than the official school age for their grade in lower-secondary school



Once in the education system, children with disabilities face a higher risk of repeating a grade or dropping out of primary school

FIGURE 4.18 Percentage of students who attended any given grade in primary school in the previous year and are attending the same grade in the current year

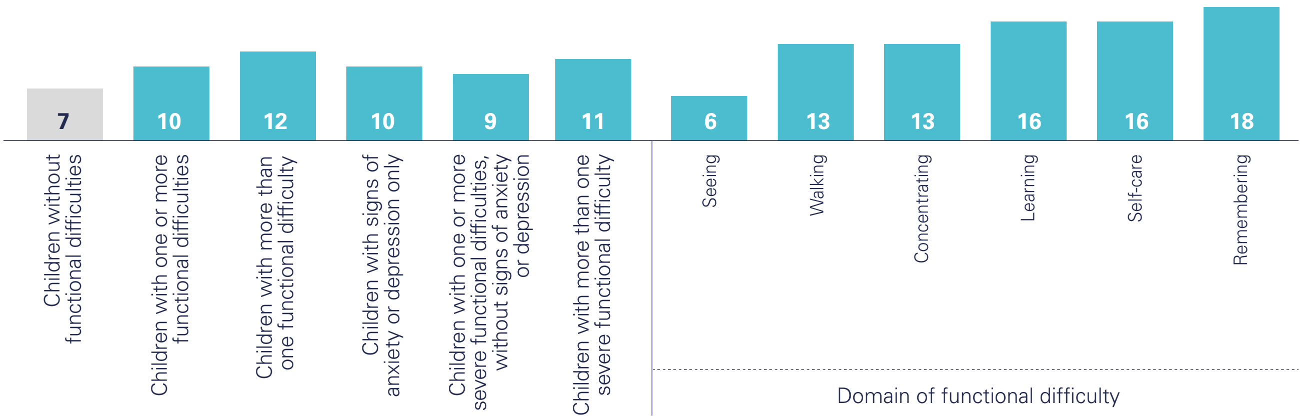
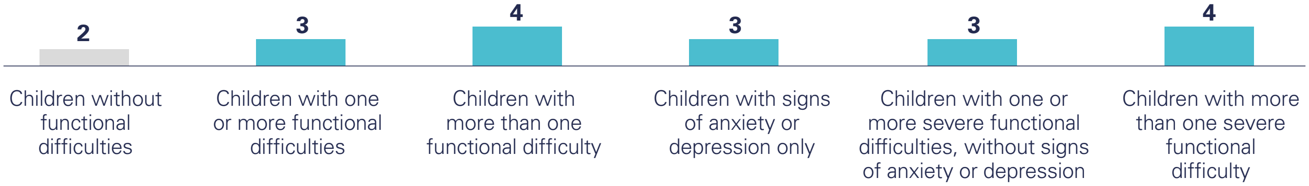


FIGURE 4.19 Percentage of students who in the previous school year were enrolled in any grade in primary education (excluding the last grade), and who are no longer attending primary school in the current year



Parental involvement in learning

Parents' involvement in their children's education and learning has been identified as a key and accurate predictor of academic achievement.[12] It not only improves children's confidence, interest and performance at school but can also offset social risks.[13] The benefits can be even greater for children with disabilities, who face significantly more obstacles in getting an education.

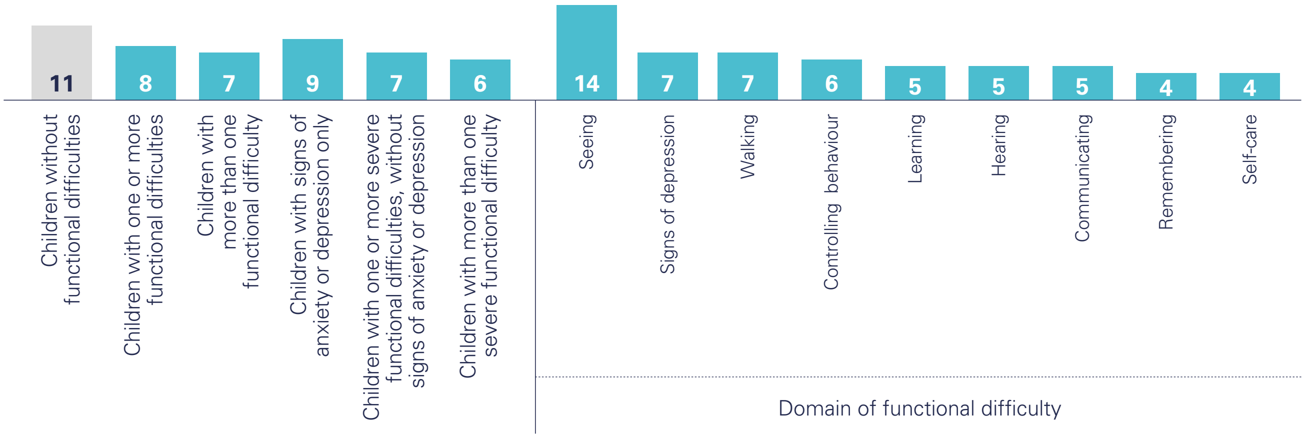
Despite the clear benefits of parental involvement, children with disabilities do not always obtain the same level of support for learning as children without disabilities. This can be due to lowered expectations on the part of parents of children with certain disabilities, which can cause them to be less invested in their children's learning.[14] Additionally, parents may struggle to adapt their communication and interaction style to accommodate the disability-specific needs of their child, resulting in feeling less able to engage in her or his education and even in withdrawing their support.[15]

Parental involvement can help facilitate more effective and specialized learning plans, including the provision of adequate support for their child's education.[16] Nevertheless, parents often have limited involvement with schools due to factors that include insufficient knowledge, misguided attitudes about the importance of being involved in their child's education as well as a lack of skills on how to effectively engage with the child's teachers.[17]

© UNICEF/UN0158317/Jean/Handicap International

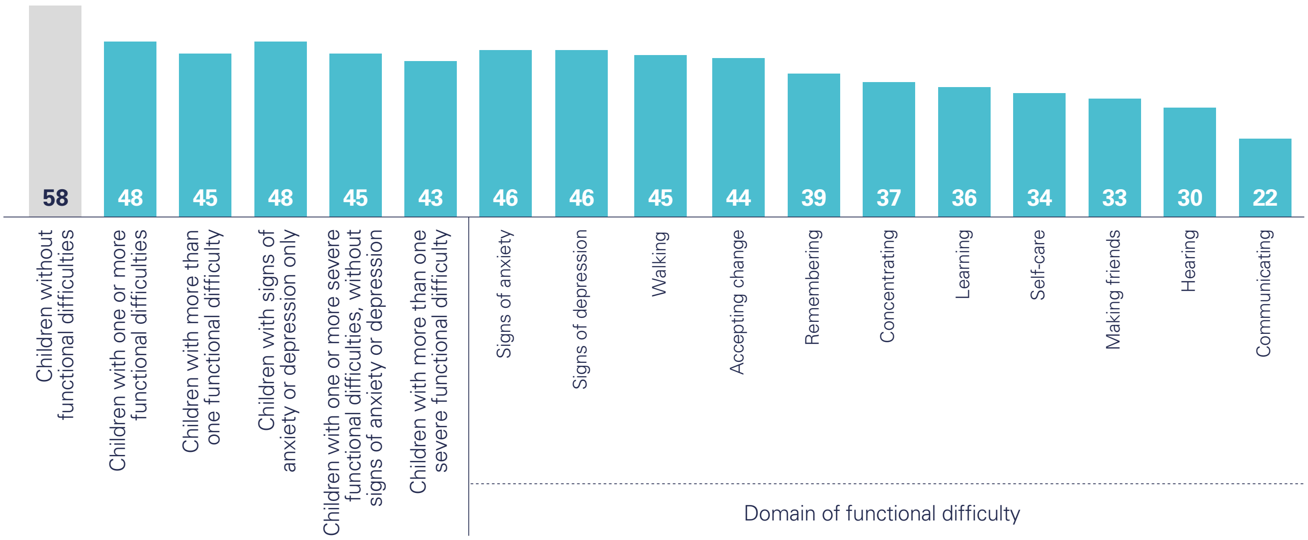
Children with multiple severe disabilities, and those with difficulties caring for themselves or remembering, are least likely to have books at home

FIGURE 4.20 Percentage of children aged 7 to 14 years who have three or more books to read at home



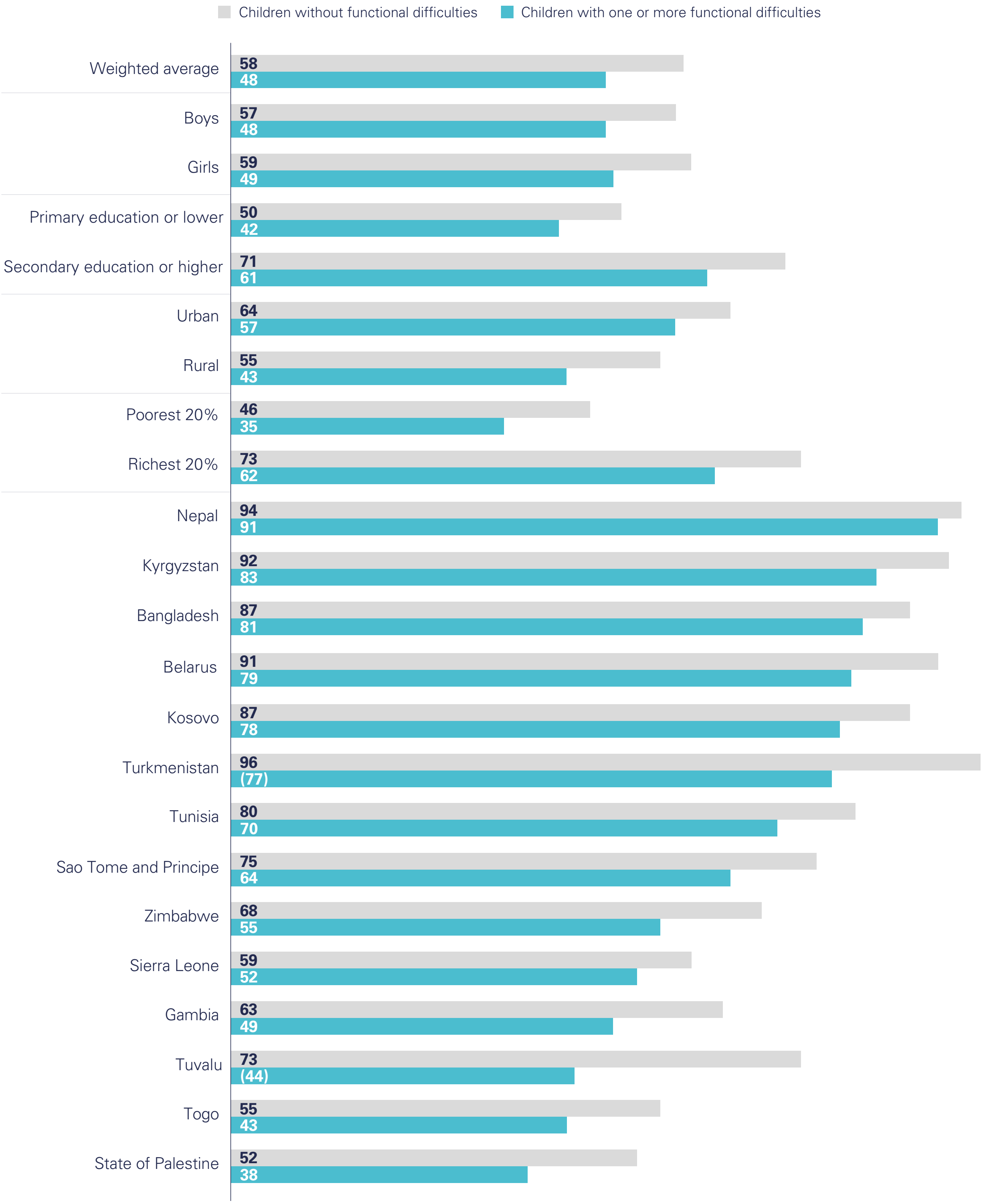
Children with disabilities, especially those with difficulties communicating, are least likely to read books or be read to at home

FIGURE 4.21 Percentage of children aged 7 to 14 years who read books or are read to at home



Children with disabilities, especially those who live in the poorest or rural households, are less likely to read or be read to at home

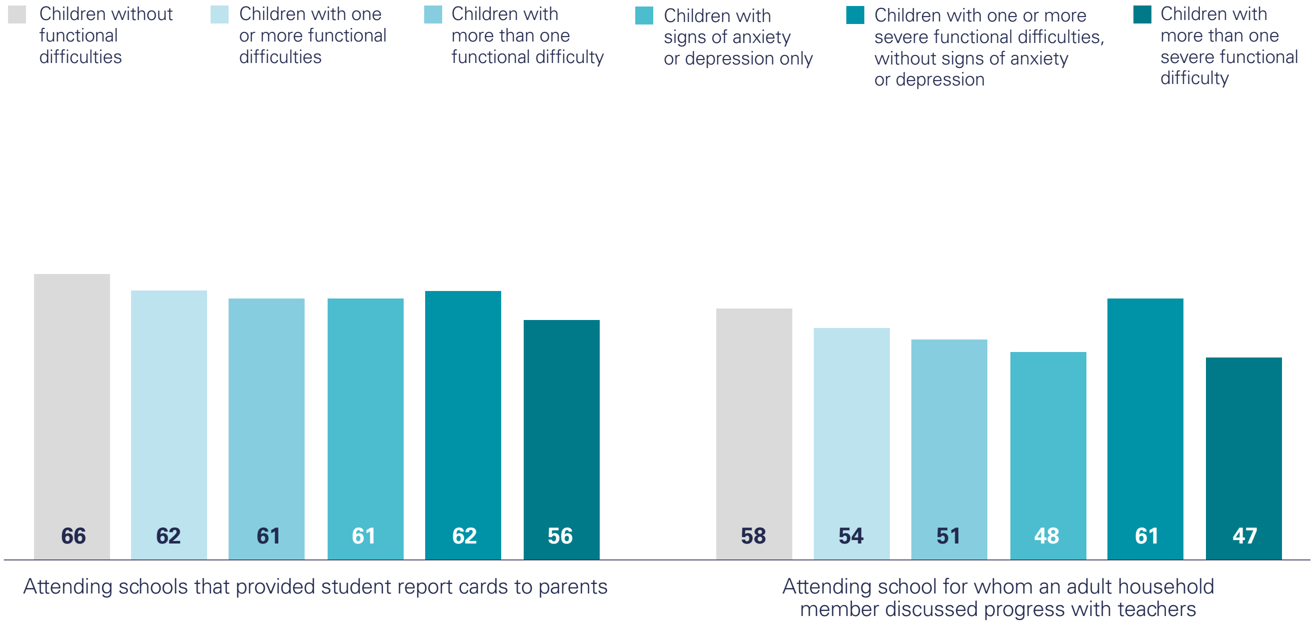
FIGURE 4.22 Percentage of children aged 7 to 14 years who read books or are read to at home



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

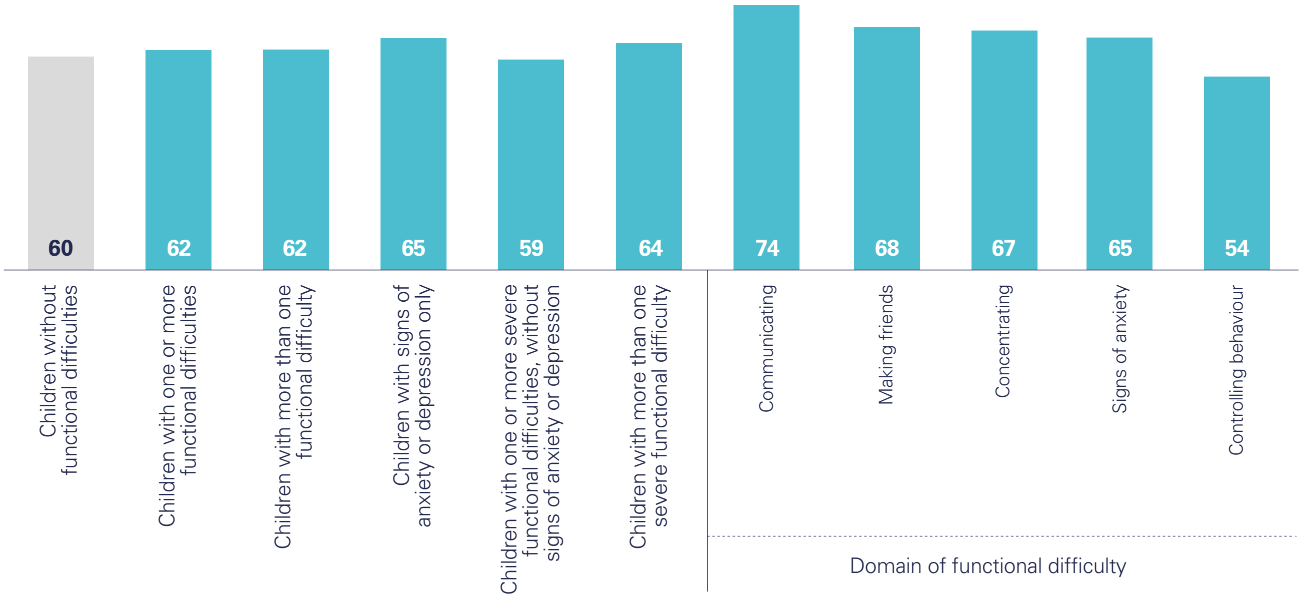
Parents and caregivers of children with disabilities are generally less likely to receive report cards from their child’s school and to discuss their child’s progress with teachers

FIGURE 4.23 Percentage of children aged 7 to 14 years attending schools that provided student report cards to parents in the last year and percentage of children aged 7 to 14 years attending school for whom an adult household member discussed progress with teachers in the last year



Children with difficulties controlling their behaviour are slightly less likely to receive help with homework, while those with difficulties communicating, making friends or concentrating, or who have signs of anxiety, tend to receive more homework support

FIGURE 4.24 Percentage of children aged 7 to 14 years attending school who have homework and have received help with homework



Learning outcomes

The acquisition of basic reading and numeracy skills is fundamental to helping children thrive and prosper.

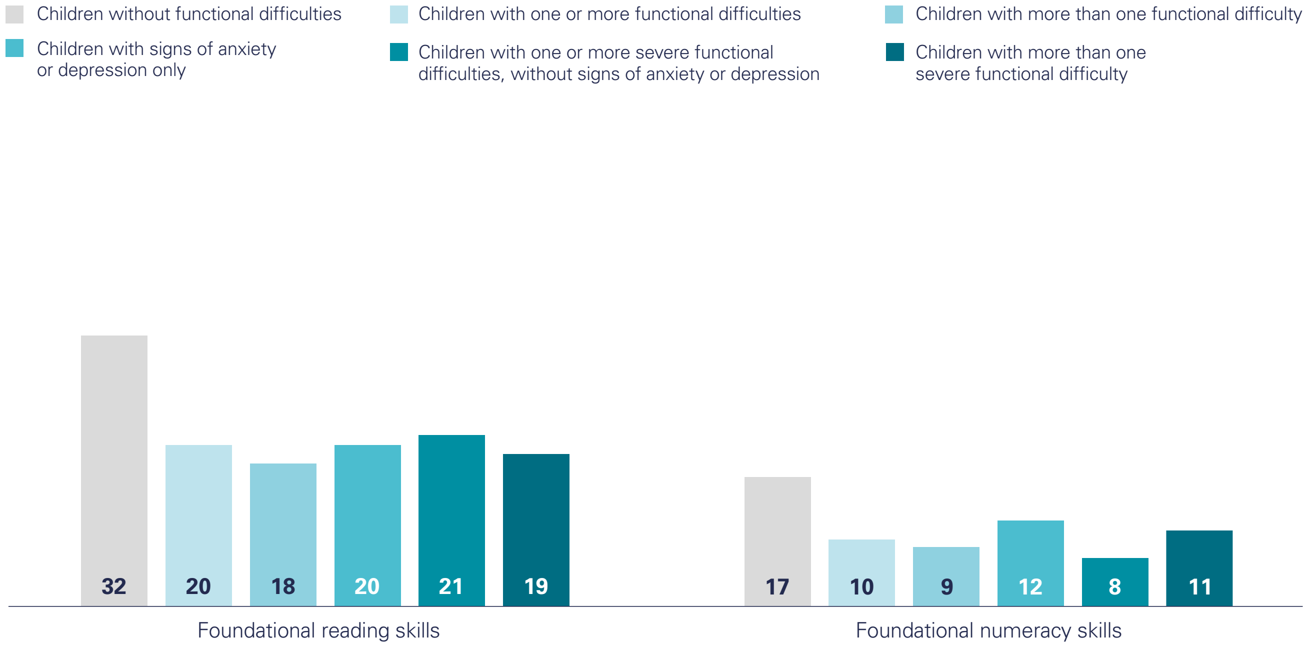
Poor learning outcomes stem from disadvantages that accumulate as children grow and that are common in children with and without disabilities. That said, children with disabilities typically face additional barriers that place them at higher risk of experiencing less than optimal educational trajectories. When families search for educational opportunities for their children, they often find schools and classrooms that are not accessible, either physically or due to the lack of appropriate learning materials.[18] The needs of children with mild, or less visible, disabilities often go unidentified, which can mean that these children miss out on individualized attention and support. In addition, many students with disabilities are taught by teachers who do not have the necessary knowledge or skills to include and support them.[19]

Just like all other children, children with disabilities are a heterogeneous group with individual needs and challenges. As a result, the barriers they face in acquiring literacy and numeracy skills are also varied. Children with physical disabilities may have trouble accessing classrooms and learning materials. In contrast, children with learning disabilities can struggle to keep up with the rest of the class if accommodations are not made for their specific impairment.

Poor learning outcomes, specifically in literacy and numeracy skills, can have lifelong implications. A lack of reading skills severely limits future educational and job opportunities, making it exceedingly difficult for impoverished children with disabilities to ever break out of poverty. Literacy has also been associated with more positive health and nutrition rates throughout one's life, and lack of such skills could lead to poorer health outcomes for children with disabilities.[20] Likewise, numeracy skills are essential in daily life, opening up a broad range of career options that would be closed to children who lack these skills.[21]

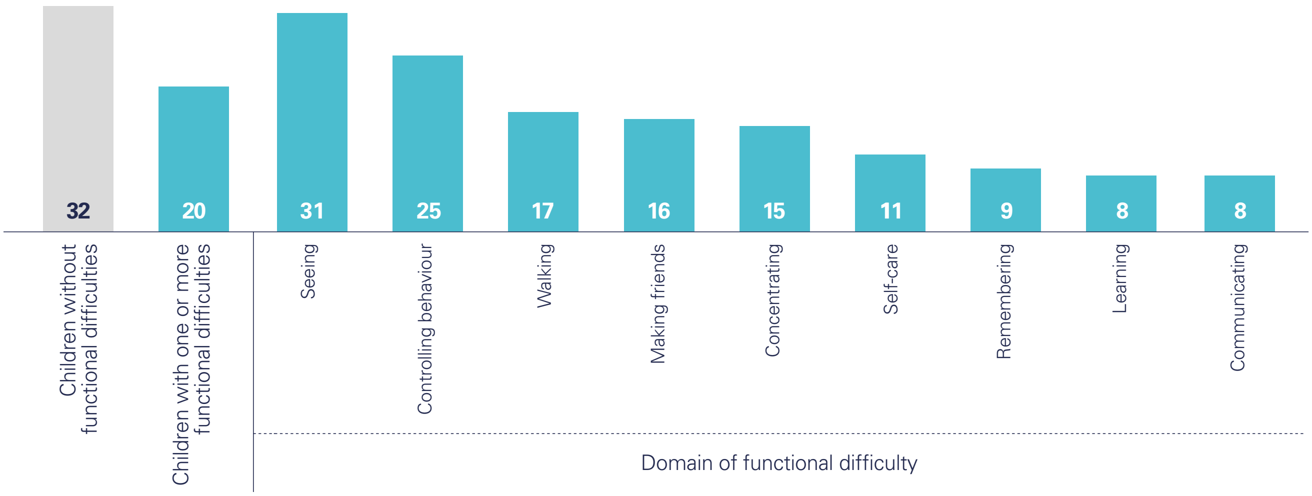
Children with disabilities are substantially less likely to have foundational reading and numeracy skills than children without disabilities

FIGURE 4.25 Percentage of children aged 7 to 14 years who demonstrate foundational reading skills and percentage of children aged 7 to 14 years who demonstrate foundational numeracy skills



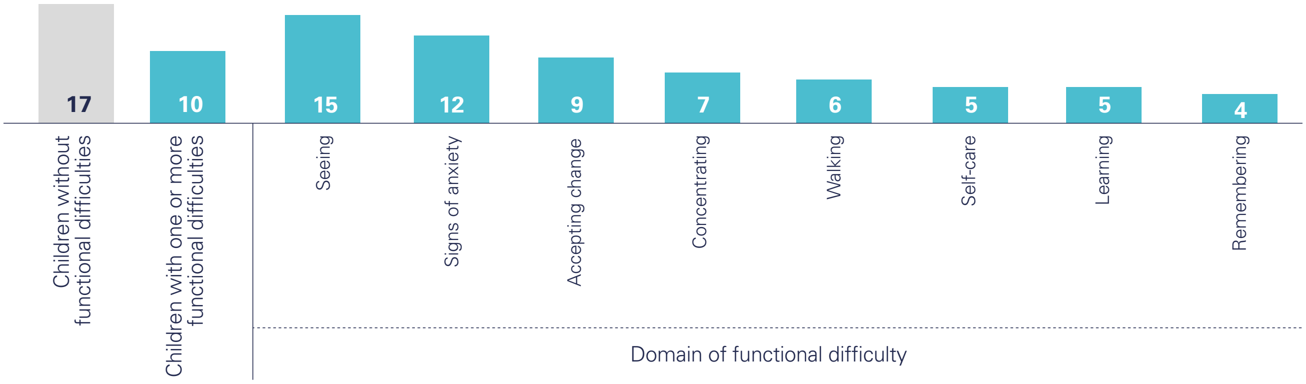
Children with difficulties communicating, learning and remembering are least likely to have foundational reading skills

FIGURE 4.26 Percentage of children aged 7 to 14 years who demonstrate foundational reading skills



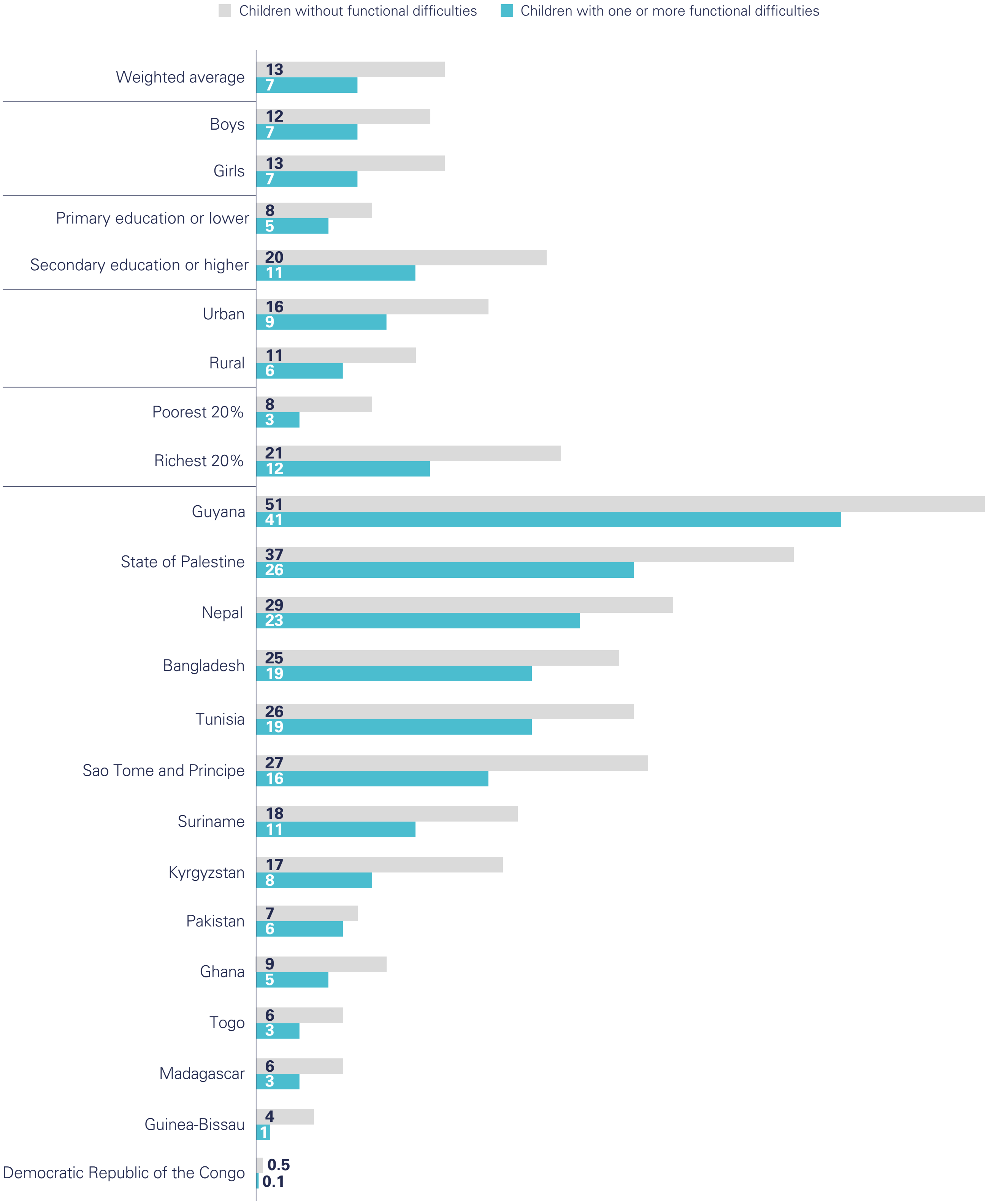
Children with difficulties remembering, learning and caring for themselves are least likely to demonstrate foundational numeracy skills

FIGURE 4.27 Percentage of children aged 7 to 14 years who demonstrate foundational numeracy skills



Low maternal education and living in rural areas or in the poorest households are associated with the worst learning outcomes

FIGURE 4.28 Percentage of children aged 7 to 14 years who demonstrate foundational numeracy skills and foundational reading skills



Note: Education refers to the education level of mothers.

Disparities in the achievement of foundational skills increase as children grow older

FIGURE 4.29 Predictive probabilities for foundational reading and numeracy skills

Notes: These graphs show the probability of demonstrating foundational reading and numeracy skills according to age, for children with and without functional difficulties. The results were estimated using generalized linear regression models, with the foundational skills variable as a dependent variable, and the age and disability status of the child as independent variables. Both models were adjusted for the child's sex, area of residence and wealth.

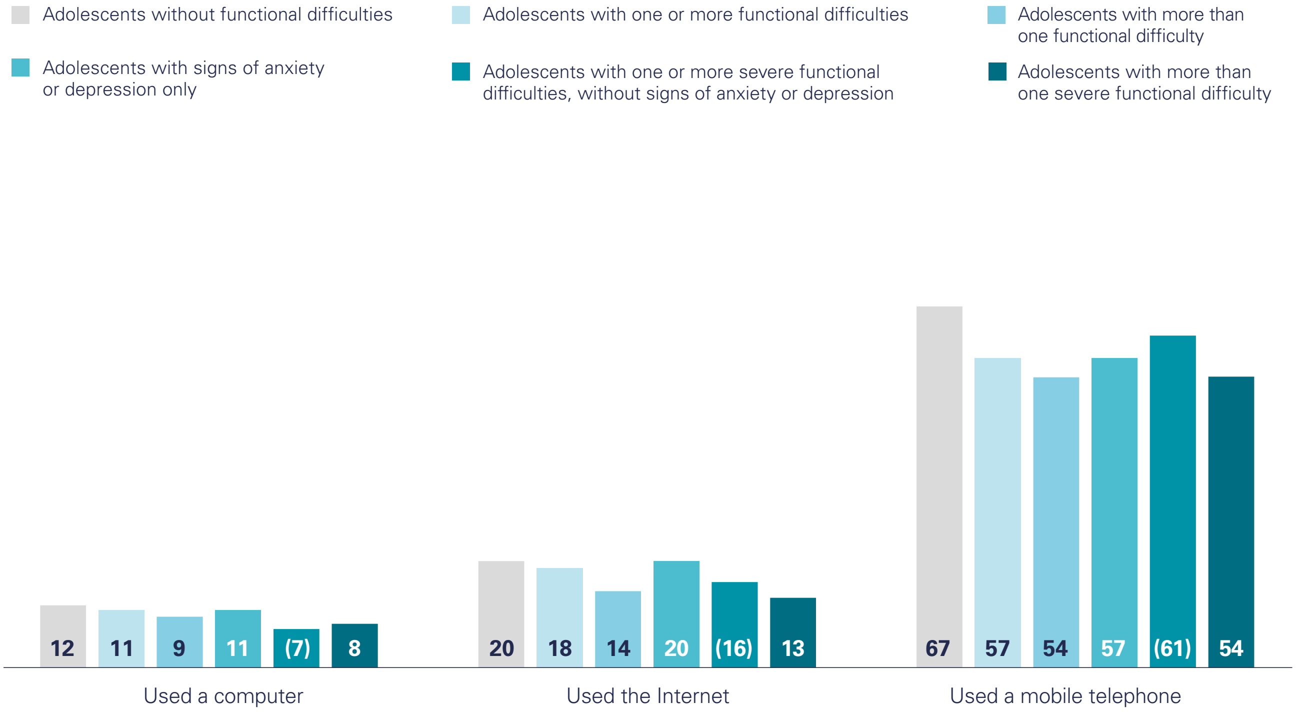
Access to and use of information and communication technology

Information and communication technology (ICT) has become an integral part of everyday life. Access to ICT can facilitate learning and strengthen the positive aspects of education, bringing with it the subsequent benefits that a good education can provide. While all children can benefit from using ICT, the advantages for children with disabilities are even more pronounced. Access to ICT can facilitate communication and interaction, especially for play and education, supporting the child's social development. Substantial evidence suggests that using ICT can also help students with disabilities learn in more inclusive ways by enabling access to technologies and resources that are not otherwise available.[22] In addition to providing additional tools for learning, ICT can help children with disabilities to communicate with their teachers and peers more readily, building stronger social skills and networks.[23]

© UNICEF/UNI182589/Pirozzi

Adolescents with disabilities report lower use of mobile phones than their peers without disabilities; however, no significant difference was found in their use of computers or the Internet

FIGURE 4.30 Percentage of adolescents aged 15 to 17 years who have used a computer, the Internet or a mobile phone in the last three months



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

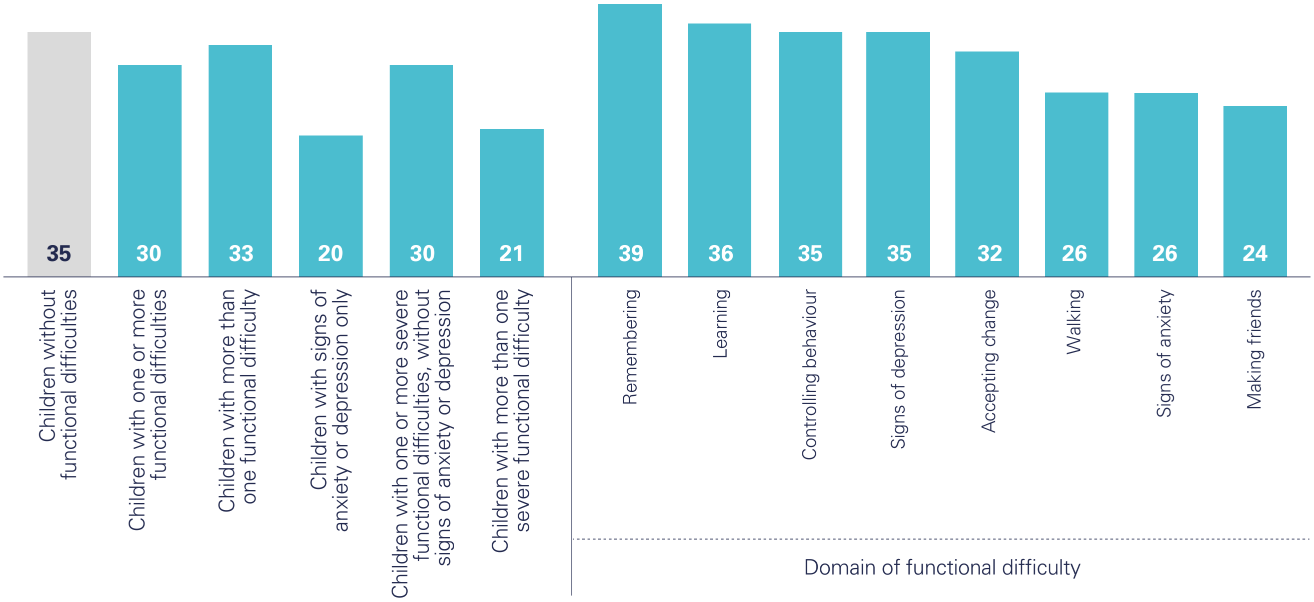
Education support

Support for education is key to promoting the inclusion of vulnerable children – including those with disabilities – in school. This support can take many forms, such as financial assistance (scholarships, cash grants or other tuition aid) or the provision of educational materials (such as textbooks, uniforms and other school supplies). Support for education is often provided by governments, but it can also come from private, charitable, local or international organizations. Many programmes offer funding to a school on identification of a child's disability to compensate for the additional resources required for his or her education. Such transfers can also be provided directly to the child and his or her family. These direct transfers are designed to give the family greater control in meeting a child's specific educational needs, including assistive technologies.[24]

© UNICEF/UN0429128/Djemidzic

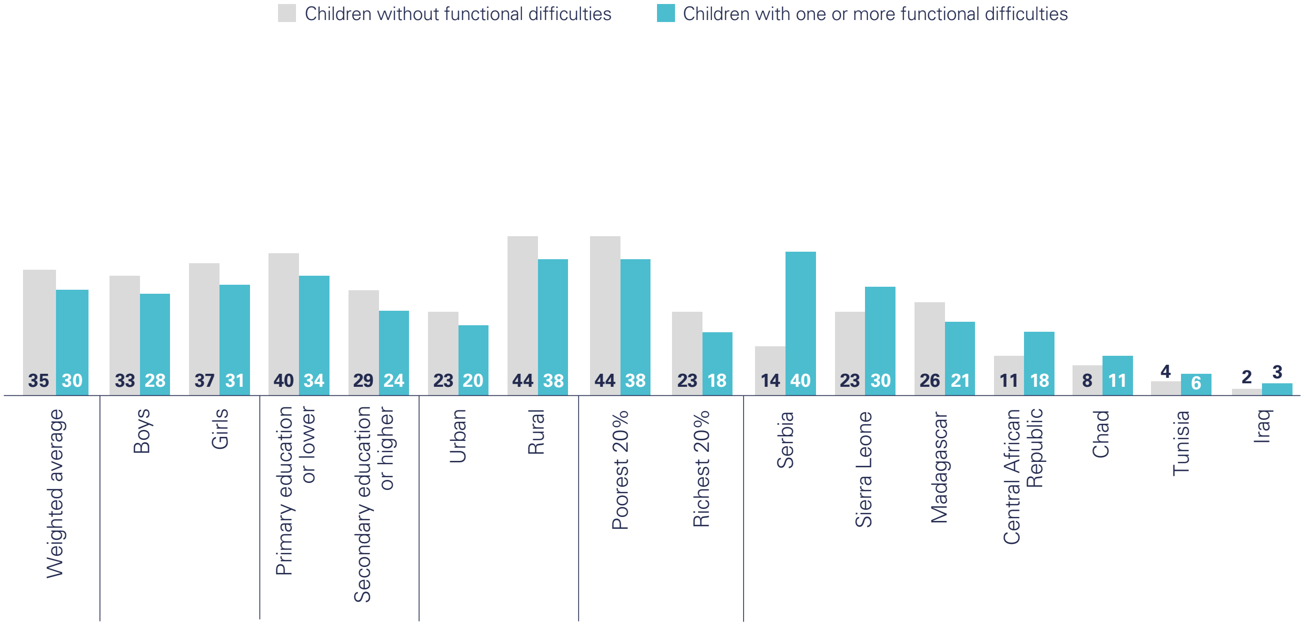
Children with difficulties making friends and walking, or with signs of anxiety, are significantly less likely to receive school-related support

FIGURE 4.31 Percentage of children aged 5 to 17 years currently attending school who received any type of school-related support in the current or most recent academic year



Although in certain countries children with disabilities are more likely to receive school-related support, overall they are less likely to receive such support compared with children without disabilities

FIGURE 4.32 Percentage of children aged 5 to 17 years currently attending school who received any type of school-related support in the current or most recent academic year



Note: Education refers to the education level of mothers.

Takeaways and programmatic implications

The data in this chapter highlight the significant disadvantages and inequities that many children with disabilities face in accessing, progressing in and benefiting from education. However, they also show that these challenges are not uniform: Outcomes and risks vary a great deal depending on a child's particular disability and background.

Many of the results regarding lower attendance and participation rates among children with disabilities are consistent with findings from the existing literature.[25] However, while the overall results show significant disparities between children with and without disabilities, they also indicate that the likelihood of a child never attending school can depend on her or his functional difficulty. These findings are further nuanced by the different participation rates of children based on their economic background. Children with disabilities from the poorest households are substantially more likely to have never attended school than their peers with disabilities from the richest households. Furthermore, disparities in attendance and participation do not appear to be adequately addressed by education transfers. The provision of transfers in the form of school-related support, such as educational materials or tuition assistance, is less frequently reported for children with disabilities than for children without disabilities, even when controlling for household wealth.

A nuanced perspective can also be gleaned from the findings on school progression. Among children in school, those with disabilities are most likely to be overage for their grade in both primary and secondary school. However, as with participation, this risk was not the same for children with difficulties in different domains. These findings add to the existing literature by providing a fuller picture of educational progression among children with disabilities.[26]

Understanding the level of parental involvement in a child's education is important in advocating for programmes that foster better support for children with disabilities and their families. The analysis shows that children with functional difficulties are less likely to have a supportive home learning environment.

As might be expected, foundational reading and numeracy skills are lower for children with disabilities. Among all children, disadvantages such as living in poor households or rural areas or having a mother with little education are strongly associated with lower levels of numeracy and literacy. But these disparities are magnified in the case of children with disabilities. Surprisingly, the disparities noted in other aspects of a child's education are not evident in the results for ICT skills and access to the Internet.

Concrete steps can be taken to immediately address the inequities faced by children with disabilities. Closing the education gap for these children requires committed effort on the part of all parties and capacity development across many sectors.

Within families, parental involvement in a child's education is important for all children but even more so for those with disabilities. It can help facilitate more effective and inclusive learning plans and provide needed educational support. Empowering parents with the requisite knowledge, attitudes and skills to provide such support is essential. Likewise, programmes to educate parents about the right to education can encourage them to advocate on behalf of their children. Within schools, all staff must be trained, buildings must be refurbished, and accessible learning materials and curricula must be available to meet the needs of all students. At the community level, stigma and discrimination need to be addressed and awareness of the multiple benefits of inclusive education increased. At the governmental level, political commitment must be fostered so that laws and policies are aligned with the Convention on the Rights of Persons with Disabilities. Such interventions must also account for the distinct barriers facing children with difficulties in various functional domains and employ targeted approaches to ensure that all children's educational needs are met. These interventions need to address both specific barriers faced by children with disabilities and broader inequities in society among households of different backgrounds to ensure that every child is reached.

The complex interaction between a health condition or impairment and environmental and personal factors means that each child's experience of disability is unique. The diversity of results by background characteristics and domains of functional difficulty highlights the challenges in making broad statements about the barriers faced by children with disabilities in accessing education. However, the findings do suggest that, on top of any pre-existing vulnerabilities, many children with disabilities experience multiple barriers that compound one another.

Dismantling barriers to education for children with disabilities also requires the strengthening of data collection systems. Data need to be regularly collected to: (1) identify the number of children with disabilities in and out of school; (2) document the experiences of children with disabilities in the education system; and (3) identify the educational structures and resources required to deliver a school environment that is adequate and inclusive of all children.

Inclusive education, increased data collection and, ultimately, the removal of barriers to education can be encouraged by greater public awareness of the multiple issues faced by children with disabilities. The evidence in this report can be used as a tool for advocacy campaigns that call for the increased commitment of governments to address long-standing inequities in education and for the deployment of concrete actions that improve the education outlook for all children.

BOX 4.1 Closing information gaps around the education of children with disabilities

All children have the right to a quality education to realize their full potential. The data in this report can be used to address the inequities that prevent children with disabilities from participating in and benefiting from education. The findings point to the immediate actions required in response. However, other crucial information is also needed to gain a fuller understanding of the experiences of these children in accessing inclusive quality education.

Inclusive education is a key strategy to achieve education for all. It involves the strengthening of conditions and capacities to enable the education system to cater to all learners, regardless of sex, ethnicity, language, socioeconomic status, nationality, place of residence and disability status, among other characteristics. It promotes meaningful and successful participation in the education system. It can include any aspect of community and school infrastructure, norms, attitudes and behaviours at the family, community and school level. It also includes the provision of adequate curricula and pedagogic approaches that accommodate the needs of all children, in line with the principles of the Universal Design for Learning.[27]

Despite growing recognition of the importance of inclusive education, children with disabilities in nearly every corner of the world face significant issues related to inclusion.[28] Often these involve underresourced schools and classrooms and inaccessible water, sanitation and hygiene facilities.[29] Stigma, discrimination and negative perceptions about disability held by teachers, coupled with a lack of knowledge and skills on how to include children with disabilities, are other common barriers.

Ensuring inclusive education requires closing the information gap around the education of children with disabilities. UNICEF – in collaboration with key partners – has been working to address this gap. One ongoing project seeks to support countries in collecting and managing data on children with disabilities through Education Management Information Systems (EMIS). Another project involves the validation of an extended set of questions on children with disabilities that focus on environmental barriers and participation in school. The questions, which are intended for use in household surveys, will identify key bottlenecks that require follow-up action.

CHAPTER 5

Every child has the right to protection from violence and exploitation

The right of children to live free from violence and exploitation is enshrined in both the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities. The protection of children from violence and exploitation has been further highlighted as a global priority in the SDGs. Target 8.7 encourages countries to take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking, secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and end child labour in all its forms by 2025. Target 16.2 calls for an end to abuse, exploitation, trafficking and all forms of violence against and torture of children. Target 16.9 aims for universal birth registration, ensuring children a legal identity and allowing them access to justice and social services.

This chapter seeks to shed light on the violence and exploitation faced by children with disabilities, which can take many forms and continue throughout a child's lifetime (see Box 5.1 on page 102). Children with disabilities living without family care and those associated with the street are especially vulnerable to these threats (see Box 5.2 on page 111). However, statistical evidence on their experiences remains scarce, and for this reason they are not included in this report. The data presented on the following pages provide an overview of violence against children in their home. Data on children's engagement in economic activities and in household chores for long hours, as well as work performed under hazardous conditions, are used to report on children's exploitation. Since the right to be recognized as a person before the law is key to ensuring lifelong protection, the chapter starts with an overview of birth registration levels.

© UNICEF/UNI62271/Ramoneda

Indicators used in this chapter

Birth registration: Percentage of children aged 24 to 59 months whose births are registered with a civil authority.

Psychological aggression: Percentage of children aged 2 to 14 years who experienced any psychological aggression by caregivers in the past month.

Physical punishment: Percentage of children aged 2 to 14 years who experienced any physical punishment by caregivers in the past month.

Severe physical punishment: Percentage of children aged 2 to 14 years who experienced severe physical punishment by caregivers in the past month.

Any violent discipline: Percentage of children aged 2 to 14 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month.

Only non-violent discipline: Percentage of children aged 2 to 14 years who experienced only non-violent discipline by caregivers in the past month.

Attitudes towards physical punishment: Percentage of mothers of children aged 2 to 14 years who believe that physical punishment is needed to bring up, raise or educate a child properly.

Child labour: Percentage of children aged 5 to 17 years who are involved in economic activities or household chores above age-specific thresholds.

Hazardous working condition: Percentage of children aged 5 to 17 years who work under hazardous conditions.

Definitions and data interpretation issues

Findings regarding violent methods of discipline should be interpreted with caution since, for a significant percentage of children with functional difficulties, no disciplinary method was reported (see Table 5.1). For children with difficulties in some domains of functioning, the finding of 'no discipline method reported' is more than five times greater than it is for children without disabilities, suggesting issues within this indicator that may have numerous explanations. Data for this indicator are collected by the interviewer asking whether a child is subjected to different disciplinary methods – both positive

TABLE 5.1 Percentage of children aged 2 to 14 years for whom no method of discipline was reported

Children without functional difficulties		7
Children with one or more functional difficulties		6
Domain of functional difficulty	Controlling behaviour	6
	Signs of anxiety	6
	Signs of depression	7
	Accepting change	8
	Remembering	12
	Learning	12
	Walking	13
	Making friends	16
	Concentrating	17
	Self-care	19
	Seeing	19
	Communicating	19
	Hearing	20
	Playing	33
	Fine motor skills	38

Note: Results for fine motor skills and playing refer to children aged 2 to 4 years only, and results for signs of anxiety, signs of depression, accepting change, remembering, making friends, concentrating and self-care refer to children aged 5 to 14 only.

© UNICEF/UNI175964/Vassie

and negative. It is therefore possible that the methods used on children with disabilities vary significantly from those used on children without disabilities. However, as these are not mentioned in the survey, they have gone unrecorded. Alternatively, it could be indicative of parents not engaging with their children with disabilities and putting time and energy into disciplining them, either positively or negatively.

A further limitation is that the definition of child labour used for statistical purposes does not include begging because this activity does not imply an exchange of goods or services. Since children with disabilities may be forced to beg,[1] the prevalence of child labour among such children may be underestimated in certain contexts.

Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lao People's Democratic Republic (for children aged 2 to 4 years only), Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Pooled results for indicators measuring birth registration (Figures 5.1 and 5.2) do not include data from Belarus, Costa Rica, Georgia and Montenegro since these were not available.

Pooled results for the indicator on violent discipline (Figure 5.9) do not include data from the Lao People's Democratic Republic since this figure presents data on children aged 5 to 14 years; that country only collected data on functional difficulties for children aged 2 to 4 years.

Pooled results for indicators measuring child labour (Figures 5.11 through 5.14) do not include data from Cuba, Nepal, Tunisia and Turkmenistan since these were not available. Also, since these figures present data on children aged 5 to 14 years, they do not include data from the Lao People's Democratic Republic.

Birth registration

Birth registration is the first step in recognizing a child before the law and is fundamental to protecting the rights of all children.[2] Despite global progress in increasing birth registration levels, many children around the world are still denied their right to a legal identity.[3] Unregistered children are predominantly from poorer households, live in rural areas and have mothers with lower levels of education.[4]

Non-registration is driven by a combination of factors and circumstances, from both the demand and supply side. Barriers to effective birth registration can include long distances to registration facilities, lack of knowledge about how to register a child and fees associated with registration or obtaining a birth certificate. In most cases, these lead to delays in registration, with children being registered at older ages. The view that birth registration is of little value may also play a major role.

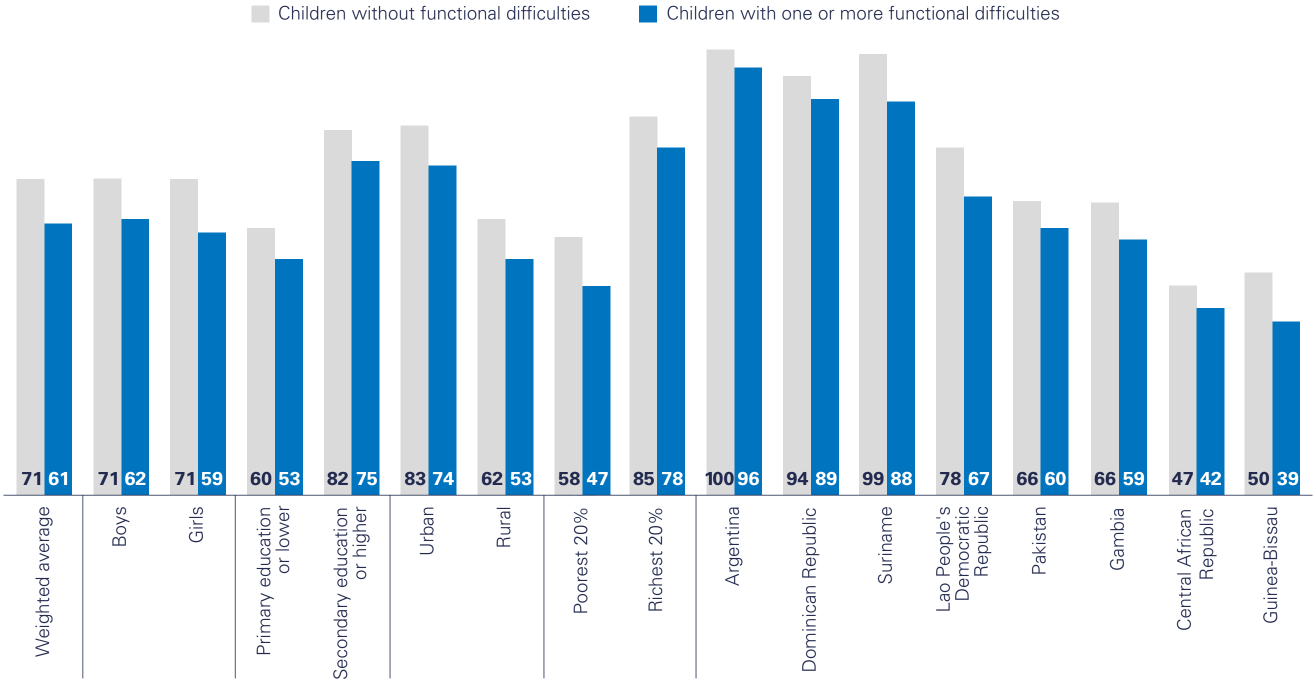
The right to birth registration is closely linked to the realization of many other rights. It has profound consequences for children's enjoyment of their rights to protection, nationality and access to health, social services and education. Disparities in birth registration rates may compound inequalities in access to basic services, heightening discrimination and vulnerability.

Evidence does not yet exist on access to birth registration among children with disabilities. That said, the impact of being unregistered is likely greater among this group of children, placing them at even higher risk of human rights violations, including abuse and exploitation or the denial of social, political or economic rights, throughout their lives.

© UNICEF/UN0152967/Schermbrucker

Children with disabilities are less likely to be registered than children without disabilities; disparities in birth registration levels are especially evident among children living in rural areas and in the poorest households

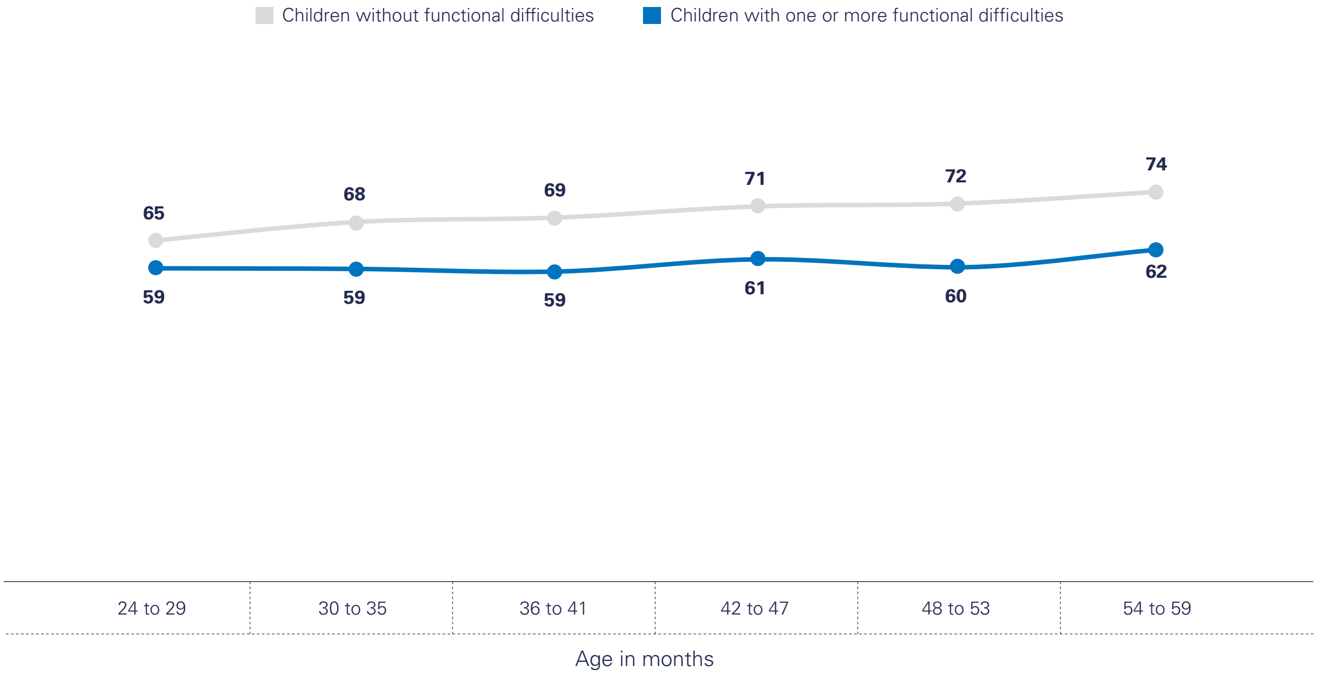
FIGURE 5.1 Percentage of children aged 24 to 59 months whose births are registered with a civil authority



Note: Education refers to the education level of mothers.

The likelihood that children with disabilities are registered does not increase with age, in contrast with their peers without disabilities

FIGURE 5.2 Percentage of children aged 24 to 59 months whose births are registered with a civil authority



Violent discipline

Too often, parents resort to violent methods of discipline because they feel they lack other options to effectively teach their children self-control and acceptable behaviour. For parents of children with disabilities, these challenges can be compounded.[5] Parenting such children often requires a higher and more constant level of involvement, which can contribute to parental distress and an increased propensity to resort to violent disciplinary methods.[6] Violent forms of discipline can also be driven by prevailing attitudes towards the disability itself. Children with disabilities face stigma along with negative attitudes and beliefs that place them at increased risk of violence and neglect, sometimes resulting in their deaths.[7]

Factors that exacerbate the risk of exposure to violent disciplinary methods include background characteristics that are associated with children both with and without disabilities, such as poverty and parental education level.[8]

BOX 5.1 A lifetime of violence

Starting at birth, children with disabilities are exposed to multiple forms of violence that can continue throughout their lives.[9]

An infant born with an impairment faces an increased risk of infanticide. This could be linked to the belief that disability makes a person 'unfit' or unworthy to live, or superstition about the misfortune such a child might bring to the household.[10] Some parents have even described killing their child as an act of love, preventing him or her from having to live with what they perceive to be the burden of disability.[11] Negative and discriminatory attitudes and beliefs can fuel such notions. The increased stress often placed on parents caring for a child with disabilities can lead to heightened risks of abuse and violence, especially when parents do not have adequate resources and support.

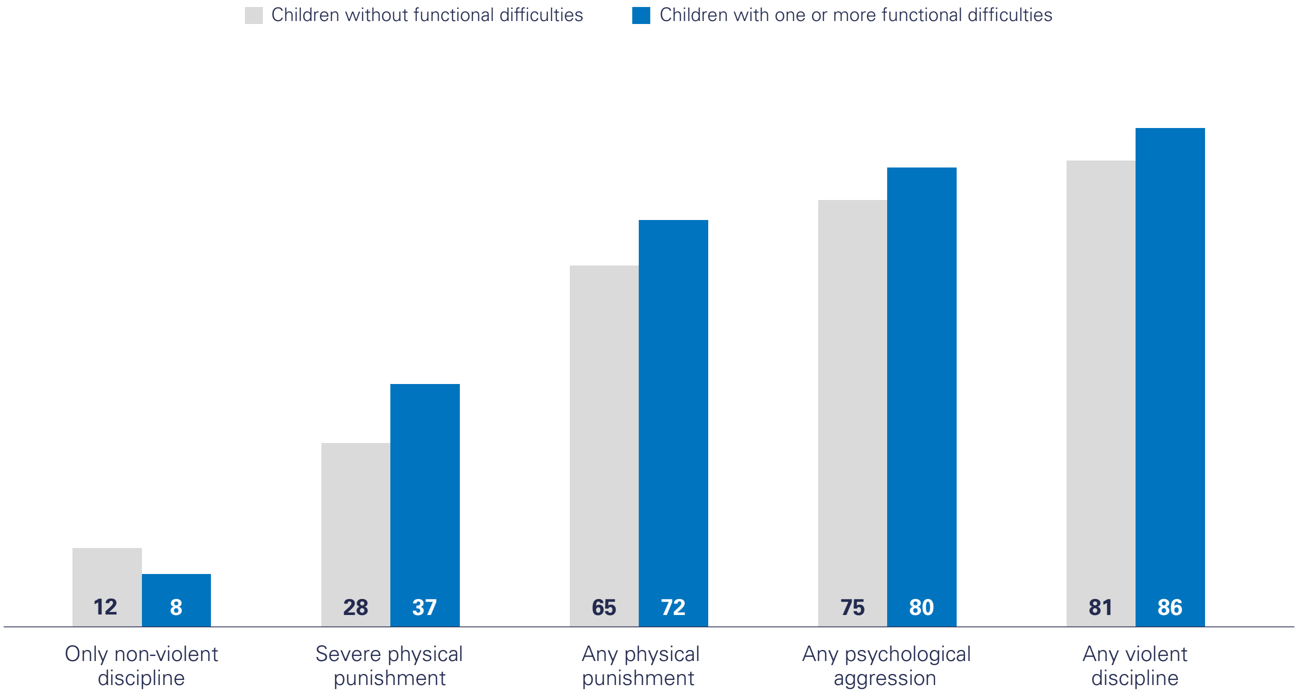
As children grow and expand their lives outside their immediate household, enter school and begin to develop other relationships, the risk of exposure to interpersonal violence from their peers increases. Research has indicated that children with disabilities experience significantly higher rates of bullying than children without disabilities.[12] Bullying of such children is also associated with certain misguided beliefs about the nature of disability – that it is a 'curse' from God for the transgressions of the child or the family, for example – or prejudice and misconceptions regarding disability more generally.[13] Often, a lack of support within communities and schools to meet the needs of children with disabilities and ensure their inclusion and participation can inadvertently encourage bullying.[14]

Children with disabilities may also face an increased risk of sexual violence,[15] with girls at higher risk than boys.[16] Children who have difficulties in the domain of self-care, or who live in institutions, are particularly vulnerable.[17] Children with disabilities, or their families, may choose not to report sexual abuse for fear of bringing additional shame to an already stigmatized child and family.[18] In addition, children with disabilities who experience sexual violence often face barriers in reporting the crime. They are frequently denied justice since their testimonies are often considered unreliable.[19] Exposure to sexual violence can be exacerbated by the lack of disability-sensitive education and protective mechanisms.[20]

© UNICEF/UN0149688/Dejongh

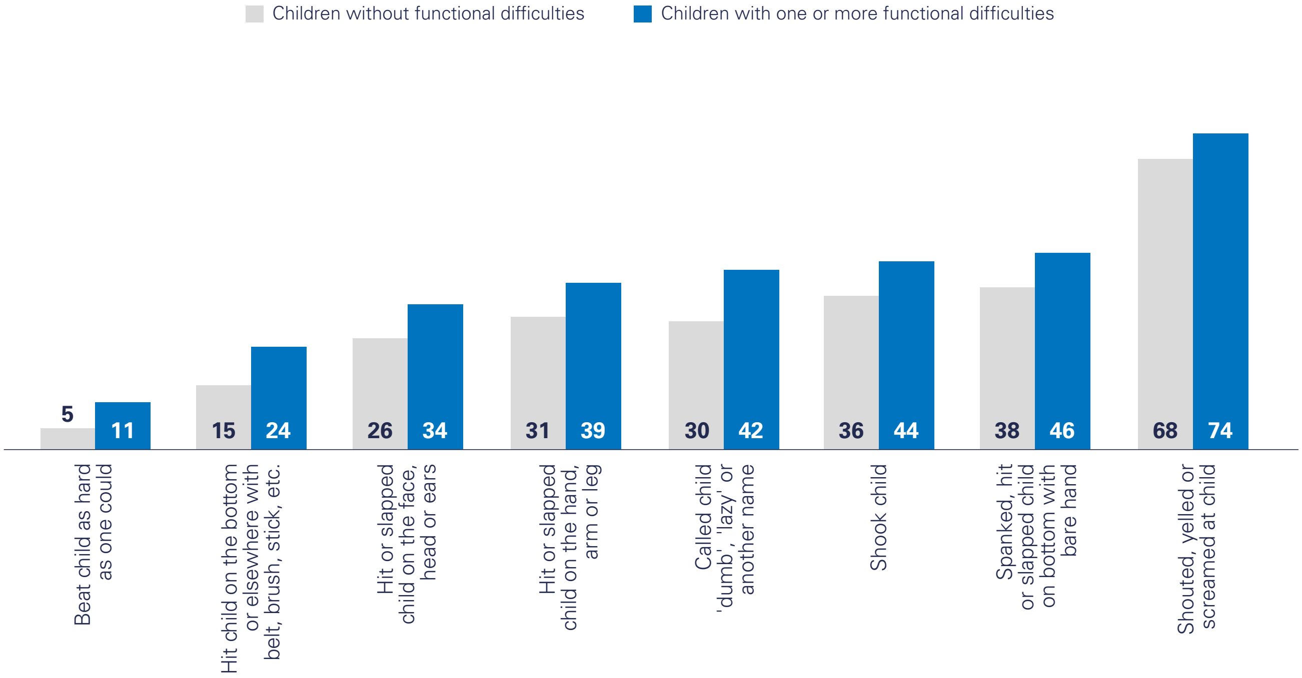
Children with disabilities are more likely to experience violent discipline than their peers without disabilities

FIGURE 5.3 Percentage of children aged 2 to 14 years who experienced any disciplinary methods by caregivers in the past month



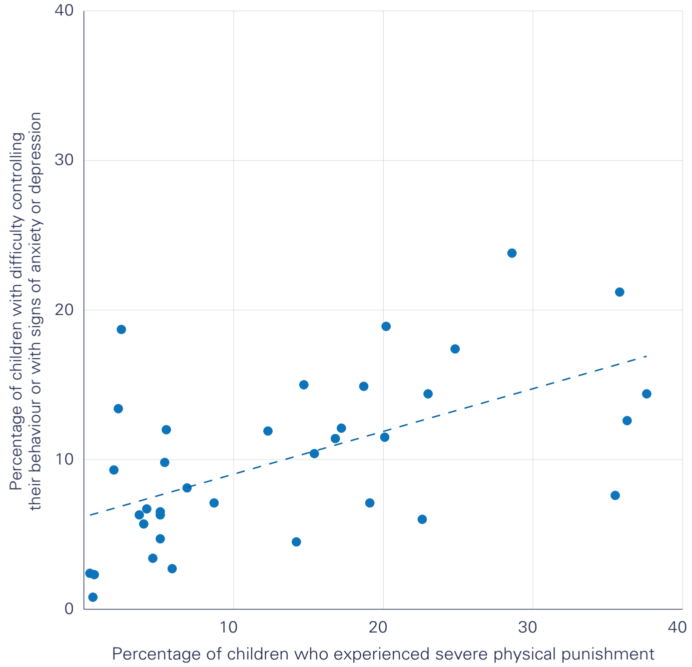
Children with disabilities are twice as likely to be beaten as a form of discipline compared with children without disabilities

FIGURE 5.4 Percentage of children aged 2 to 14 years who experienced various forms of violent discipline by caregivers in the past month



Exposure to severe physical punishment is associated with psychosocial difficulties

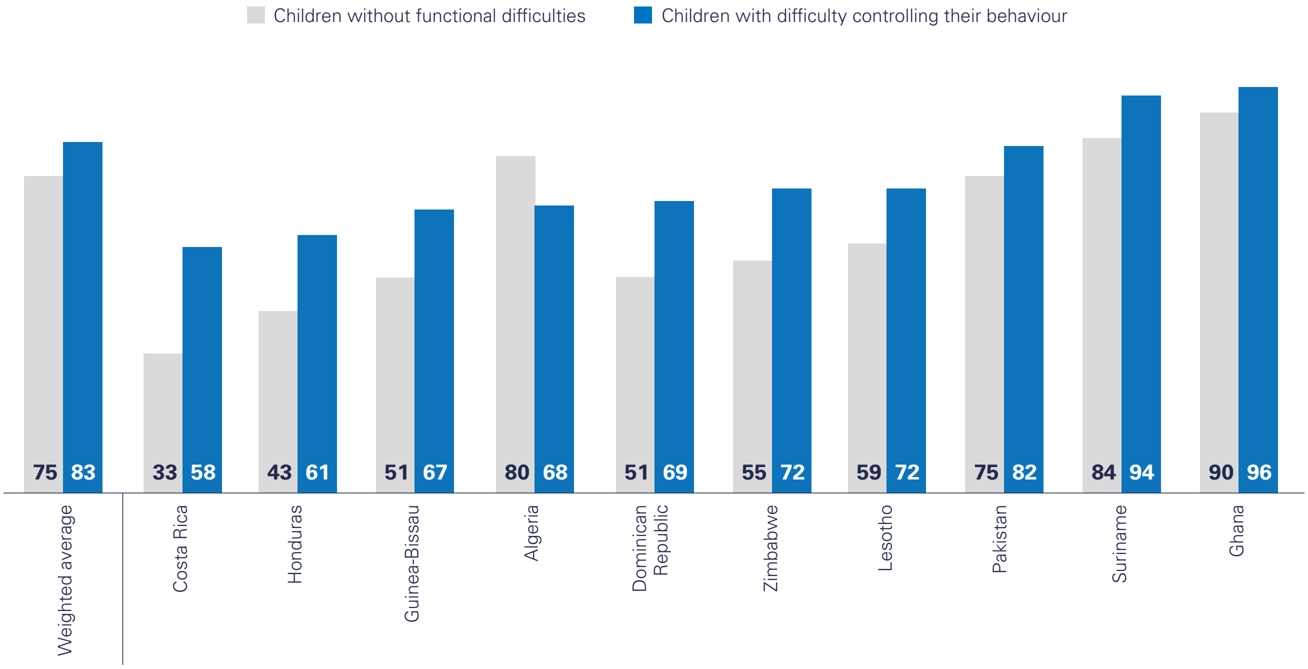
FIGURE 5.5 Percentage of children aged 5 to 14 years who experienced severe physical punishment by caregivers in the past month and percentage of children aged 5 to 14 years who have signs of anxiety or depression or difficulty controlling their behaviour



Notes: The chart shows the association between severe physical punishment and difficulties related to behavioural control or signs of anxiety or depression, across 36 countries. Each dot represents a country's proportion of children aged 5 to 14 years who experienced severe physical punishment and the percentage of children of the same age group with difficulty controlling their behaviour or who have signs of anxiety or depression in that same country.

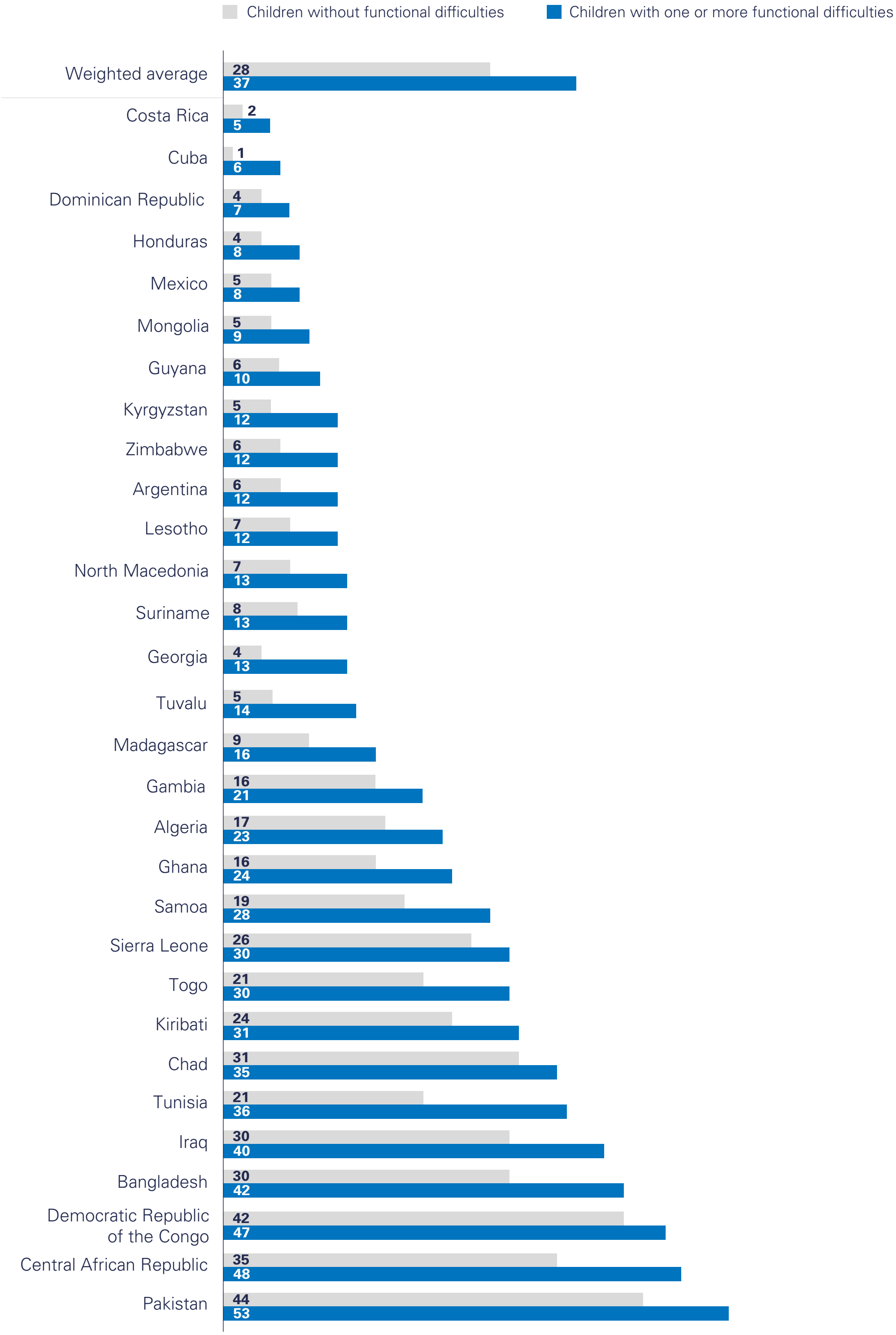
Children who have difficulty controlling their behaviour are more likely to experience psychological aggression as a form of discipline

FIGURE 5.6 Percentage of children aged 2 to 14 years who experienced any psychological aggression by caregivers in the past month



In most countries, children with disabilities are significantly more likely to be exposed to severe physical punishment than children without disabilities

FIGURE 5.7 Percentage of children aged 2 to 14 years who experienced severe physical punishment by caregivers in the past month



Caregivers of children who have behavioural difficulties are more likely to believe in the need for physical punishment

FIGURE 5.8 Percentage of mothers of children aged 2 to 4 years who believe physical punishment is needed to bring up, raise or educate a child properly

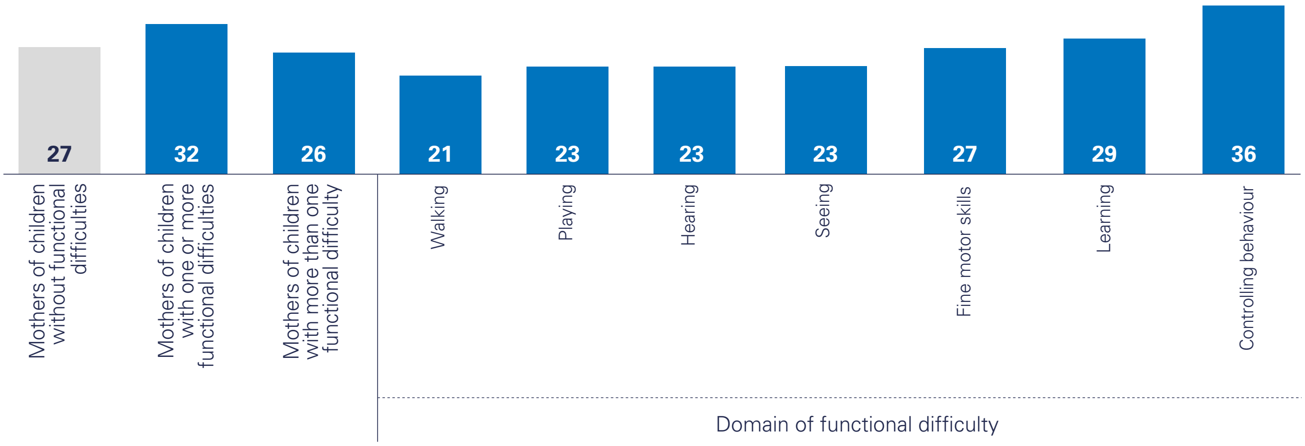
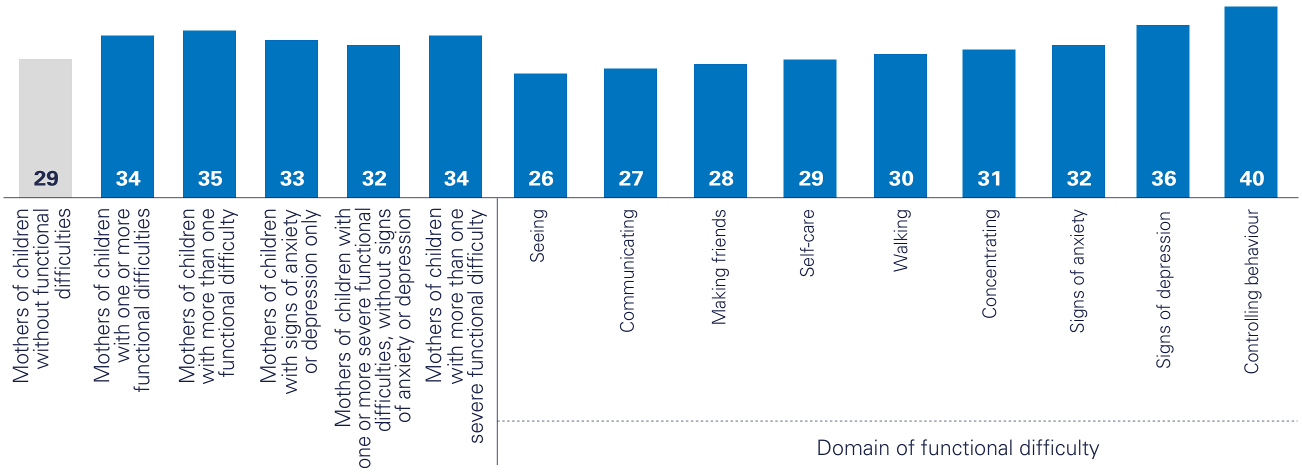
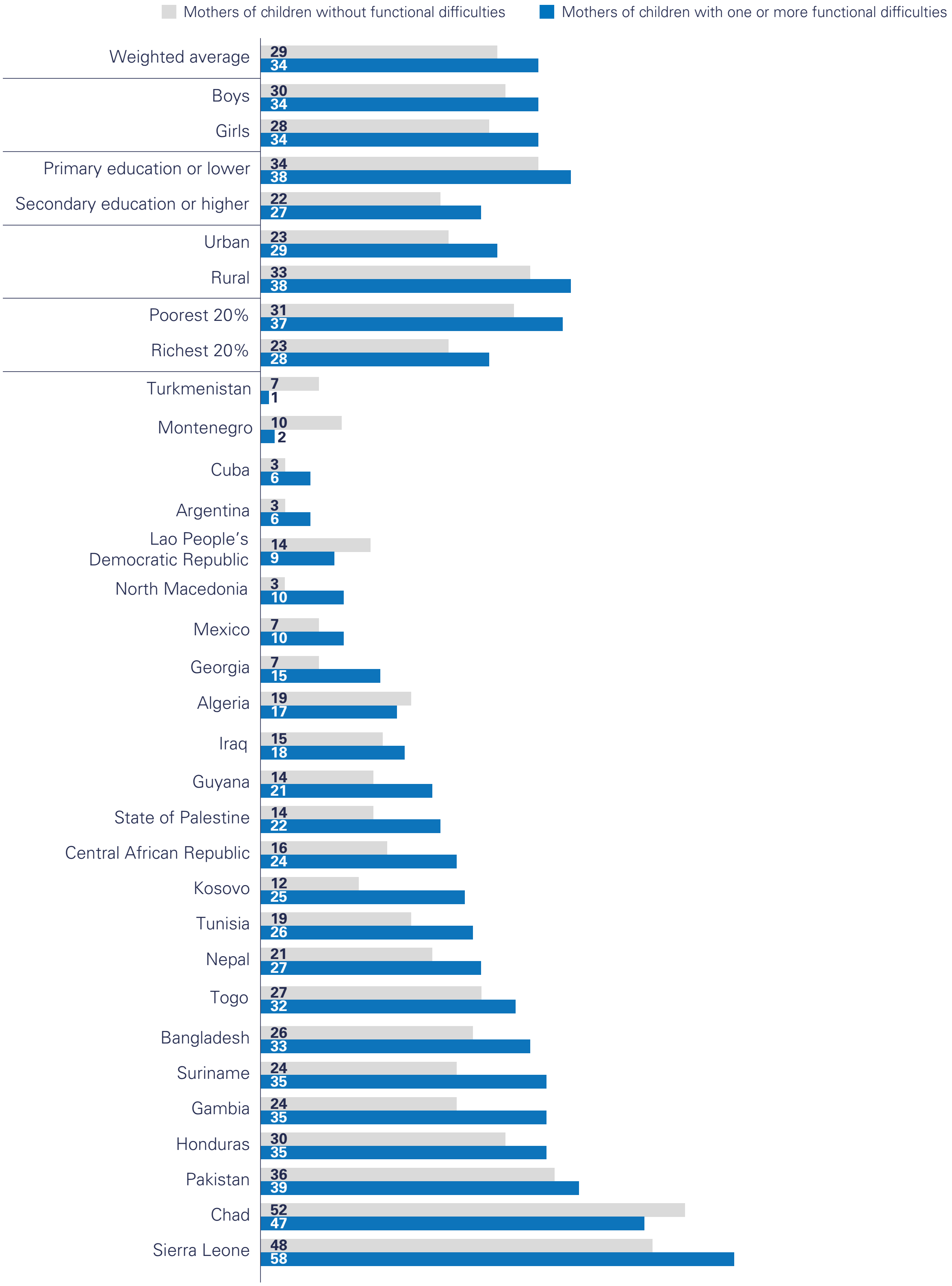


FIGURE 5.9 Percentage of mothers of children aged 5 to 14 years who believe physical punishment is needed to bring up, raise or educate a child properly



Across many countries and areas, caregivers of children with disabilities are more likely to believe physical punishment is necessary to raise a child

FIGURE 5.10 Percentage of mothers of children aged 2 to 14 years who believe physical punishment is needed to bring up, raise or educate a child properly



Notes: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only. Education refers to the education level of mothers.

Child labour

Child labour is work that is mentally, physically, socially or morally harmful to children. It interferes with normal child development, deprives children of the opportunity to attend school or obliges them to leave school prematurely, and often implies excessive, heavy and dangerous forms of work.[21]

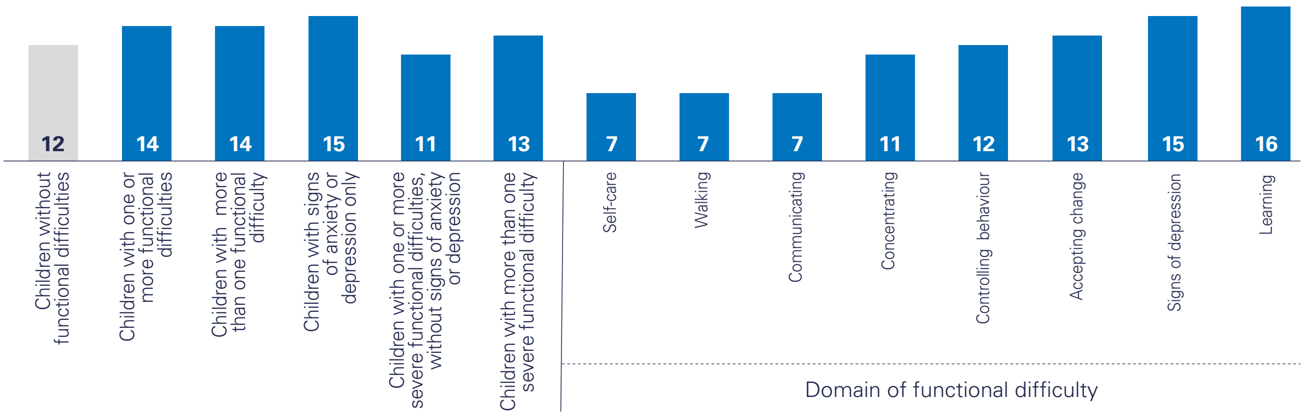
Some evidence suggests that children with disabilities are more likely to engage in child labour than children without disabilities,[22] and are at higher risk of exposure to hazardous forms of labour.[23] Additionally, evidence suggests that some children with disabilities may be more likely to become involved in begging (see Box 5.2 on page 111).[24]

Child labour is intricately connected to poverty. Since children with disabilities are often more likely to live in poverty, they are also at higher risk of child labour.[25] Furthermore, the dangers of child labour can cause children to acquire impairments or exacerbate existing ones. Studies have consistently found that children engaged in child labour are at high risk of experiencing injuries that could result in impairments.[26] Similarly, child labour can have strongly adverse impacts on the mental health of children, which can contribute to the development of psychosocial difficulties.[27]

© UNICEF/UNI156492/Mawa

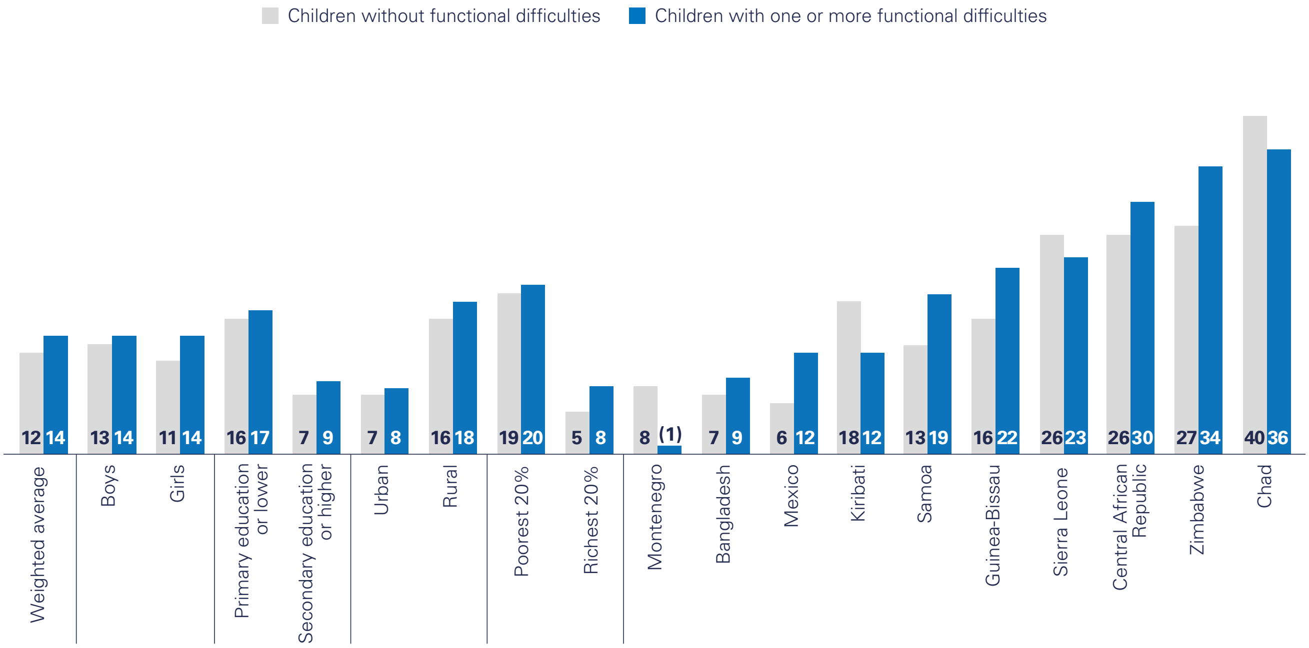
The prevalence of child labour is highest among children with difficulties learning

FIGURE 5.11 Percentage of children aged 5 to 17 years who are engaged in child labour



In some countries, children with disabilities are more likely to be engaged in child labour than children without disabilities

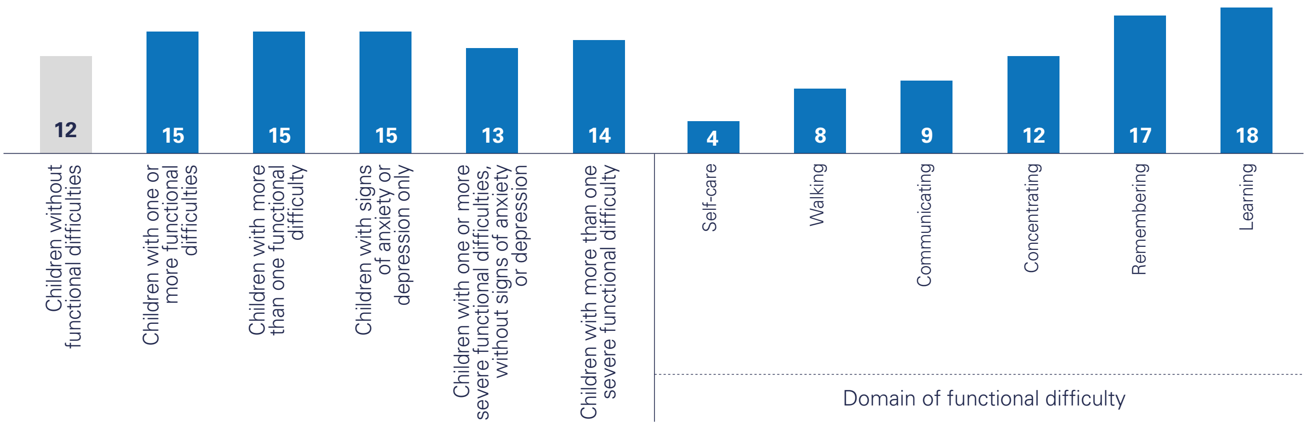
FIGURE 5.12 Percentage of children aged 5 to 17 years who are engaged in child labour



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

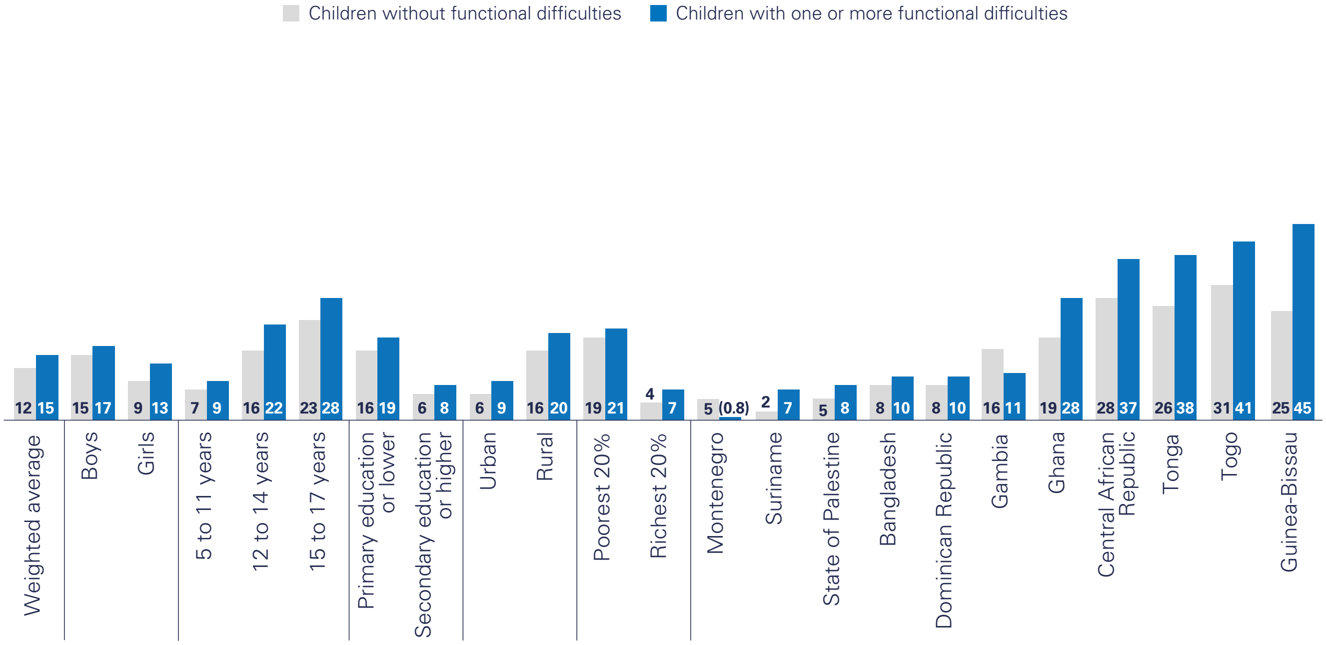
Exposure to hazardous working conditions is highest among children with difficulties learning

FIGURE 5.13 Percentage of children aged 5 to 17 years who work under hazardous conditions



Children with disabilities are slightly more likely than children without disabilities to work in hazardous conditions, but in certain countries the gap is larger

FIGURE 5.14 Percentage of children aged 5 to 17 years who work under hazardous conditions



Notes: Education refers to the education level of mothers. Numbers in parentheses are based on 25 to 49 unweighted observations.

BOX 5.2

Children with disabilities in residential care or in street situations

Children with disabilities are disproportionately represented in institutional care facilities.[28] One reason may be that caregivers become overwhelmed by the challenges of raising a child with disabilities, compounded by a lack of support within the community that would enable them to care for the child in the home.[29] Families may be unable to access disability-specific resources or services for their children, if these exist at all. Children with disabilities may also be institutionalized in the belief that such facilities can act as a form of protection – safeguarding both the child and his or her family from stigma and community violence.[30] What's more, institutions may actively recruit children for placement, promising a better situation, often incentivized by the resources provided by private donors or even government funding.[31]

Despite the best intentions of families, however, children with disabilities in institutional care often experience rights violations, abuse and other forms of violence.[32] These children are also the least likely to leave such care, since it is often more challenging to find foster or adoptive families willing to care for them due to perceptions of the added physical and psychological care they require,[33] along with limited community-based support and services. Some estimates suggest that as many as one in three children in institutions have a disability.[34] Children may also become impaired or have their impairments worsen due to institutionalization, as a result of often deplorable conditions and substantial abuse and neglect from institutional caregivers.[35] Governments, donors and civil society must work together to move away from institutionalization. Instead, they need to prioritize programmes, support and resources at the community level to facilitate the care of children with disabilities by their families in the community, or in family-based alternative care, to help them realize their right to grow and develop within a family setting.[36]

Children with disabilities are also overrepresented among children in street situations.[37] Children can end up living and/or working on the street due to a combination of 'push and pull' factors.[38] While children can be pulled towards the street by the lure of economic prospects and greater independence, those with disabilities are more vulnerable to forces pushing them in that direction. Such children often possess weaker connections to their communities, are less likely to be enrolled in school, are more likely to have strained relationships with their families (especially among children with psychosocial difficulties), and are less likely to be adequately covered by child protection systems.[39] The greater vulnerability of children with disabilities also leaves them more likely to be exploited – often by parents or family members – into working or begging on the street in the belief that their disability will garner sympathy and thus greater earnings.[40] In fact, widespread anecdotal evidence suggests that children are sometimes deliberately harmed or injured to push them into earning money by begging on the street.[41] Once associated with the street, children with disabilities are increasingly vulnerable to a wide array of further rights violations, including violence, assault, victimization, child labour and trafficking.[42]

Children with disabilities who are in street situations or in institutional care are at greater risk of violence and exploitation than children without disabilities. These risks can be mitigated through strengthened child protection and support systems within communities for children with disabilities and their families.

© UNICEF/UNI186531/Filippov

Takeaways and programmatic implications

The data in this chapter show that more children with disabilities experience violence than children without disabilities, a finding consistent with the existing literature.[43] In particular, children with disabilities are significantly more likely to be exposed to severe physical punishment at home. The risk of being subjected to violent discipline varies according to the domain of disability, with larger proportions of children with difficulties in the psychosocial realm experiencing physical punishment and psychological aggression.

Children with disabilities are also vulnerable to exploitation, with those who have difficulties learning experiencing the highest prevalence of child labour. By contrast, children with difficulties related to self-care, walking or communicating experience a substantially lower risk of being engaged in child labour than children without disabilities; the same patterns are found among children who work under hazardous conditions. It is important to note that for many of these indicators, but especially child labour, the risk factors for violence and exploitation are the same for children with and without disabilities. Children who are engaged in child labour are usually from the poorest households or rural areas. Since children with disabilities are overrepresented in child labour generally, but especially when they come from these backgrounds, a combination of risk factors and pre-existing inequalities appears to be at play.

The violence and exploitation experienced by children with disabilities is compounded by their lower rates of birth registration. Campaigns to expand birth registration must be inclusive of children with disabilities and actively reach out to their families, including through awareness-raising of the importance of registration for every child. Birth registration systems themselves must be flexible and responsive to the circumstances of children with disabilities and their parents and strive to reduce barriers, such as long distances to registration facilities or the cost of registration. Effective response strategies to address barriers include extending legally permissible registration periods, waiving associated fees and fines, deploying mobile registration units, and leveraging routine outreach programmes in health and social protection.

While children with disabilities are at increased risk of experiencing violence and exploitation, they are also at greater risk of falling through safety nets,[44] especially when protection systems are not accessible to and inclusive of them. These children may face significant challenges and barriers in reporting abuse and in providing forensically relevant details. This is particularly true if they communicate in non-verbal ways (for example, if they use augmentative and alternative communication or sign language), have difficulty accurately conveying their thoughts and ideas or have other problems communicating.[45] For children with certain disabilities, signs of abuse can sometimes be mischaracterized (for example, mistaking physical injuries for self-injurious behaviours) or overlooked due to negligence. Indeed, limited understanding of disability, along with stigma and discriminatory attitudes, affect the ability of family members, caregivers and other community members to identify and report abuse.

Professionals working with children, including teachers, social workers and health-care providers, should be trained to recognize and adequately respond to signs of abuse in children with disabilities and have the knowledge and skills necessary to support the child and his or her family. Governments and civil society organizations should be equipped to meet the needs of such children through the provision of inclusive mainstream services, specialized services where required, financial assistance and community-based support to families and caregivers. Such support to families can help lighten the burden of care when services are not tailored to children with disabilities. It can also reduce the ‘push’ factors driving the institutionalization of such children.

Similarly, justice systems must be made more accessible to children with disabilities, ensuring that their testimonies are heard and valued. This could involve training police, investigators and legal and judicial actors on the accessibility and inclusion needs of such children and how to work with them to improve access to justice. The right of every child to live a life free from violence and exploitation can be realized through raising public awareness and increasing the capacity of protection systems to support and protect children with disabilities. Moreover, since the factors that place children with disabilities at greater risk of violence and exploitation are the same for children with and without disabilities, steps should be taken to reduce social inequality more broadly and strengthen protective systems for all children.

© UNICEF/UN064133/Paleykov

CHAPTER 6

Every child has the right to a safe and clean environment

The right to a safe and clean environment is a global priority identified in the 2030 Agenda for Sustainable Development. SDG target 6.1 calls for universal and equitable access to safe and affordable drinking water for all, while target 6.2 calls for adequate and equitable sanitation and hygiene for all and an end to open defecation, with a special focus on the needs of women and girls and those in vulnerable situations.

Access to safe drinking water, sanitation and hygiene (WASH) services is essential for preventing respiratory and diarrhoeal diseases, which remain leading causes of child deaths. Despite progress, billions of people around the world still lack basic WASH services.[1] Extending access is especially important for children with disabilities, but even a basic level of service may not be sufficient to meet their needs and ensure privacy, dignity and safety. Such children need drinking water, sanitation and handwashing facilities that are specially designed to meet their particular needs and protect their rights. In addition, menstruating girls[2] with disabilities need access to personal care products as well as a private place where they can wash themselves and change.

© UNICEF/UNI346110/Modola

Indicators used in this chapter

Basic drinking water service on premises: Percentage of children aged 2 to 17 years who live in a household that uses an improved source of drinking water located in their own dwelling or their own plot/yard.

Basic drinking water service off premises: Percentage of children aged 2 to 17 years who live in a household that uses an improved source of drinking water not located in their own dwelling or their own plot/yard, but within a 30-minute round-trip collection time, including queuing.

Basic sanitation service on premises: Percentage of children aged 2 to 17 years living in a household with improved sanitation facilities not shared with other households and located in their own dwelling or in their own yard/plot.

Basic sanitation service off premises: Percentage of children aged 2 to 17 years living in a household with improved sanitation facilities not shared with other households and not located in their own dwelling or own yard/plot.

Basic hygiene service: Percentage of children aged 2 to 17 years living in a household with a place for handwashing, where water and soap or detergent are present.

Basic WASH services on premises: Percentage of children aged 2 to 17 years living in a household with basic drinking water service on premises, basic sanitation service on premises and basic hygiene service.

Basic WASH services off premises: Percentage of children aged 2 to 17 years living in a household with basic drinking water service available off premises and basic sanitation service available off premises.

Menstrual hygiene management: Percentage of girls aged 15 to 17 years reporting menstruating in the last 12 months and using menstrual hygiene products with a private place to wash and change while at home.

Exclusion from activities during menstruation: Percentage of girls aged 15 to 17 years reporting menstruating in the last 12 months who did not participate in social activities, school or work due to their last menstruation.

Definitions and data interpretation

Indicators used in this chapter are based on definitions established by the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, known as the JMP.[3] In assessing and measuring WASH services, it is important to consider not only the types of facilities available to households but also whether they are easily accessible and/or shared with other households. The distinction between availability and access is particularly significant for children with disabilities since they often face unique and disproportionate barriers to access even when services are available.[4]

The JMP defines improved drinking water sources as those that have the potential to deliver safe water due to the nature of their design and construction. They

The accessibility of WASH services can be visualized as a continuum towards meeting the needs of all children

While existing data on the type and location of household WASH facilities can be used to determine whether basic services are available on premises, such data do not shed light on whether children with disabilities are able to use such services, not only in their homes but also in other contexts, such as schools, health centres, public buildings and recreational spaces in general.

include piped water, boreholes or tube wells, protected dug wells, protected springs, rainwater and packaged or delivered water. 'Basic drinking water service' is defined as an improved drinking water source that involves a round-trip collection time of no more than 30 minutes, including queuing. If water is accessible on premises, however, this represents a higher level of service. A 'safely managed drinking water service' is defined as drinking water from an improved source that is located on premises, available when needed and free from faecal and certain chemical contaminants.[5]

According to the JMP, improved sanitation facilities include flush or pour-flush toilets connected to piped sewer system, septic tank pit latrines, pit latrines with slabs (including ventilated-improved pit latrines), and composting toilets. To meet the criteria for a 'basic sanitation service', households must use an improved sanitation facility that is not shared with other households. A 'safely managed sanitation service' is defined as an improved facility that is not shared with other households and where excreta are safely disposed of on-site or transported or treated off-site.[6]

Handwashing facilities can take many forms and may be fixed or mobile. They include a sink with tap water, buckets with taps, tippy taps and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent and soapy water, but it does not include ash, soil, sand or other traditional handwashing agents. If a household has a handwashing facility on premises with soap and water available, then it meets the criteria for a 'basic hygiene service'.[7]

The most significant limitation that runs through the data presented in this chapter is the inability of current indicators to measure the accessibility of WASH services to individual children with disabilities. For indicators on these services, the key metric assessed is the type of facility used and whether it is in the household, shared with other households or a distance away from the household. However, while the data can demonstrate the availability of WASH services for households with children with disabilities, it is not possible from the current data to assess whether that translates into a usable facility and full accessibility for the children themselves. Further work is required to develop an international standard for measuring the accessibility of WASH facilities for children with disabilities.

Furthermore, this chapter only examines data on WASH services in household settings; it does not offer insights into non-household settings in which children with disabilities may find themselves (such as schools, residential care or health-care facilities and other public buildings). Additional tools are urgently needed to address the current data gap and to gain an understanding of the true extent of the disparities in WASH access affecting children with disabilities.

Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lao People's Democratic Republic (for children aged 2 to 4 years only), Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Pooled results for indicators measuring sanitation (Figure 6.1 and 6.3) do not include data from Mexico since the survey did not collect information on the location of sanitation facilities.

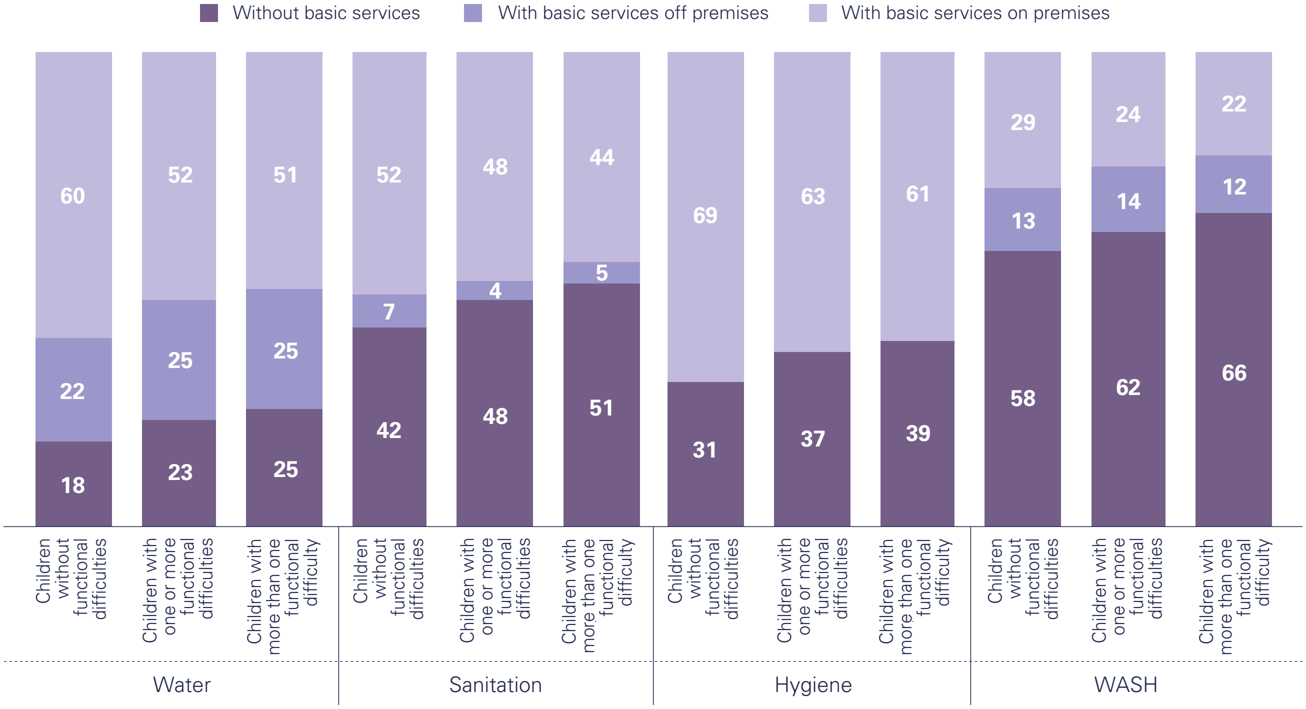
Pooled results for indicators measuring hygiene (Figures 6.1 and 6.4) do not include data from Belarus, Kosovo, Montenegro, North Macedonia, Serbia and Turkmenistan since these were not available.

Pooled results for indicators measuring WASH (Figure 6.1) do not include data from Belarus, Kosovo, Mexico, Montenegro, North Macedonia, Serbia and Turkmenistan.

Pooled results for indicators measuring menstrual hygiene management and exclusion from activities during menstruation (Figures 6.5, 6.6 and 6.7) do not include data from Belarus, Georgia, Mexico and Tunisia since these were not available. Additionally, since these figures present data on girls aged 15 to 17 years, they do not include data from the Lao People's Democratic Republic.

Children with disabilities have lower access to basic drinking water, sanitation and hygiene services than children without disabilities

FIGURE 6.1 Percentage of children aged 2 to 17 years who live in a household with basic WASH services on and off premises



Note: Due to rounding, certain values do not add up to 100 per cent.


© UNICEF/UNI315180/Adriko

Drinking water services

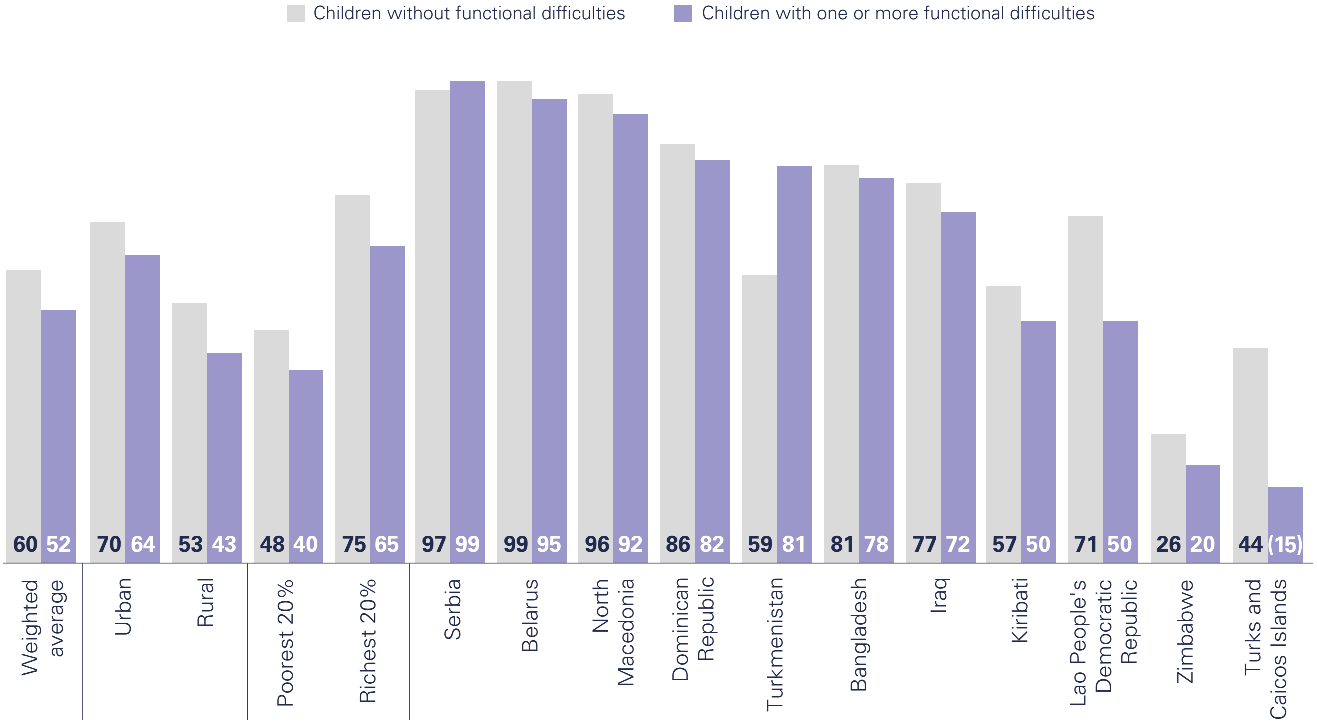
Access to safe water is a basic human right for all children. That said, substantial and well-documented inequalities in access to drinking water services are found within and among countries. In general, urban households enjoy higher levels of service than rural households, and the more impoverished a household is, the less likely it is to have access to even a basic level of service.[8] Poverty and disability are inextricably linked, and persons with disabilities are disproportionately represented in impoverished households.[9] Accordingly, they are less likely to have access to water services. Social barriers, such as community stigma against persons with disabilities and fear that they might 'contaminate' the water source, may limit access to communal water sources.[10]

In the absence of an improved water source on premises, the burden of collecting water falls disproportionately on women and children, especially girls.[11] Children charged with hauling water from a basic source often miss school due to time constraints and risk falling behind in their education. They may also face increased risks of violence, including assault, since they may have to travel to remote areas for water.[12] These risks are heightened for children with disabilities, since they tend to use these services at different times from others to avoid stigma; thus, they tend to experience further vulnerability due to their isolation.[13]

Finally, some children with disabilities may require assistance to perform daily tasks, such as dressing and using the toilet. When caregivers, especially mothers, must travel a long way to haul water, this creates an additional burden and reduces the time available for their children or for income generation.

Children with disabilities, especially those from the poorest households or living in rural areas, are less likely to have basic water service on premises

FIGURE 6.2 Percentage of children aged 2 to 17 years who live in a household that uses an improved source of drinking water on premises



Notes: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years old only. Numbers in parentheses are based on 25 to 49 unweighted observations.

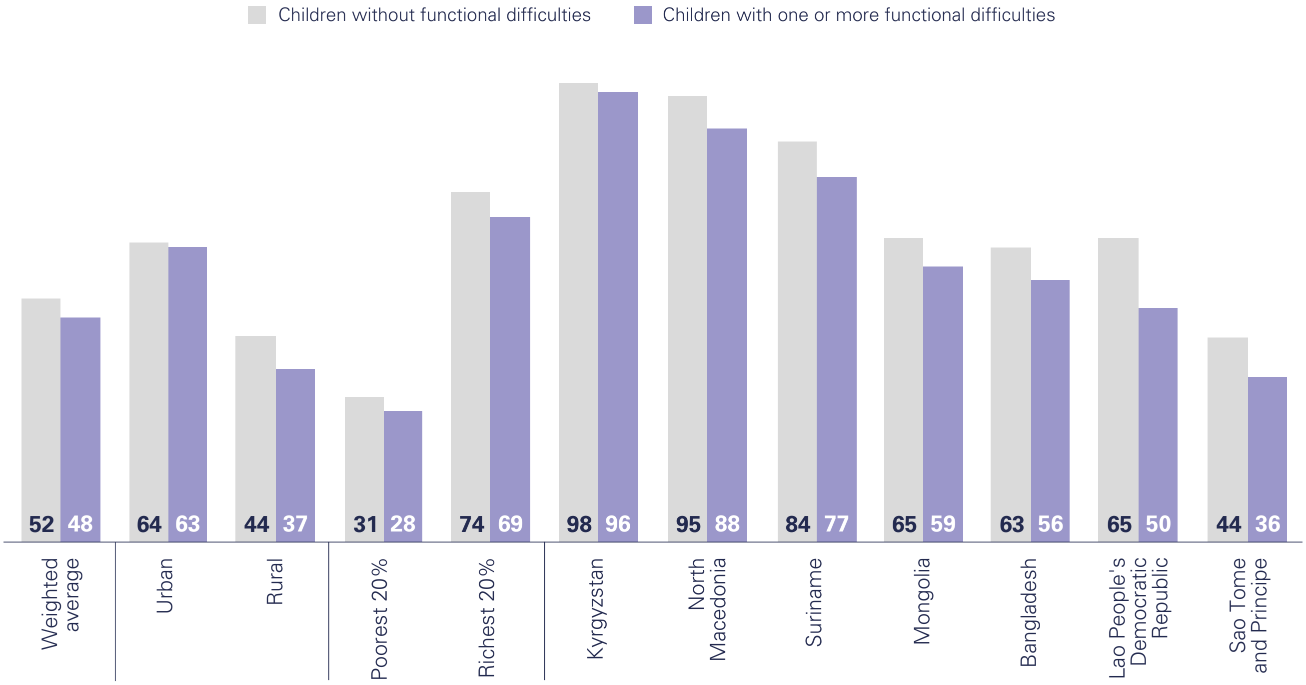
Sanitation services

Inadequate sanitation can result in a variety of poor health outcomes, including the spread of diseases that can cause impairment or death, the brunt of which are borne by children under the age of 5.[14] Even when households have improved sanitation facilities, these are often not accessible or usable by individuals with disabilities. One substantial challenge facing children with disabilities is the location of toilets or latrines and whether they are on the premises or at a distance and shared with other households. Some barriers, such as structural issues in the design or the inability to use sanitation facilities with independence and dignity, contribute to inaccessibility regardless of whether the facility is on the premises or not.[15] Other factors, such as the distance needed to travel to access the facility, can generate additional challenges.[16] When using sanitation services that are not on the child's premises, safety concerns may also arise. All these factors can cause children with disabilities to limit their visits as much as possible.[17] In some situations, children with disabilities may reduce food and water consumption to minimize their need to use the toilet, with potentially harmful consequences.[18]

A lack of accessible sanitation facilities can result in children with disabilities being dependent on others' help to use them. This can erode children's self-esteem and cause them to be perceived as a burden.[19] Challenges in accessing sanitation services can also limit a child's attendance and participation in school, resulting in poor educational outcomes.[20] For children with visual and/or physical impairments, moving through areas of open defecation or crawling to use unclean and inaccessible facilities may harm their health, result in injuries, compromise their dignity and increase stigma.[21]

Children with disabilities are less likely to have basic sanitation services on premises than children without disabilities

FIGURE 6.3 Percentage of children aged 2 to 17 years living in a household with improved sanitation facilities not shared with other households and located on premises



Note: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years old only.

Handwashing facilities with water and soap

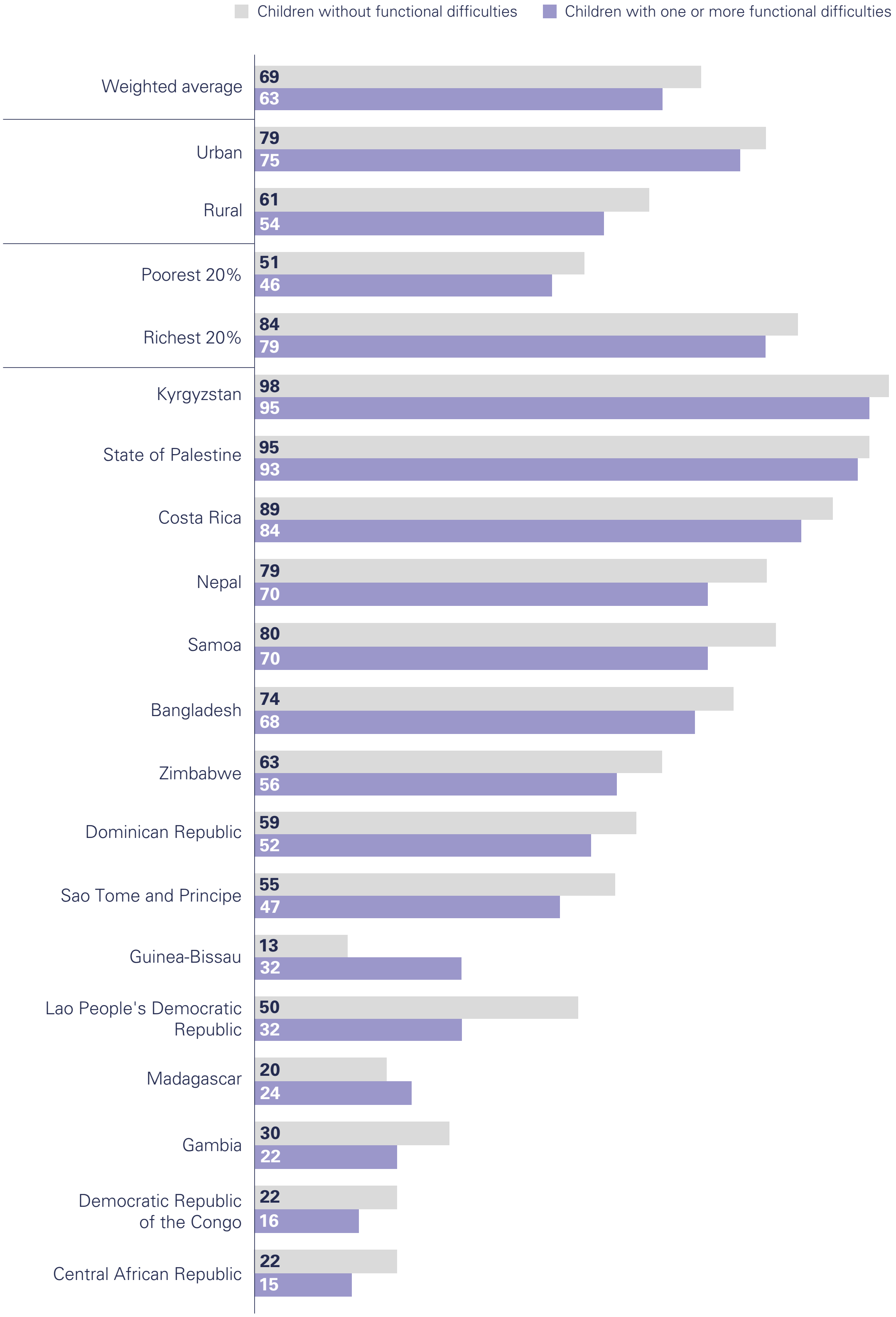
Washing hands with soap and water is fundamental to preventing disease and illness, such as diarrhoea and acute respiratory infections, and to promoting the health and well-being of individuals and communities. Children with disabilities are disproportionately affected by the lack of handwashing facilities since they are among those most susceptible to poor health outcomes from childhood illnesses.[22]

Little research has been undertaken to specifically address the accessibility of handwashing facilities for children with disabilities. Nevertheless, research on disability more generally has found that, despite the wide array of forms that handwashing facilities can take, persons with disabilities still face steep barriers in accessing them.[23] For example, persons with disabilities may be unable to physically operate pumps or taps on handwashing facilities or to locate the soap or water.[24] They may also forego the positive hygiene benefits of handwashing if, after washing, they immediately put their hands on an assistive device – such as a wheelchair or crutches – that has not been cleaned.[25] Children with intellectual or developmental disabilities can struggle to understand the need to wash their hands or to fully comprehend the process that proper handwashing entails. This can necessitate more tailored handwashing education to ensure that available facilities are used correctly by children with disabilities to obtain maximum health benefits.[26]

© UNICEF/UNI346129/Modola

While results vary significantly by country, children with disabilities are slightly less likely to have basic handwashing facilities on premises

FIGURE 6.4 Percentage of children aged 2 to 17 years living in a household with a place for handwashing, where water and soap or detergent are present



Note: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only.

Menstrual health and hygiene

For many adolescents, the onset of menstruation can be upsetting and disruptive.[27] While research on this topic has been limited due to the level of privacy surrounding menstruation, common themes have emerged in the challenges faced by adolescents with disabilities attempting to practise menstrual hygiene.[28]

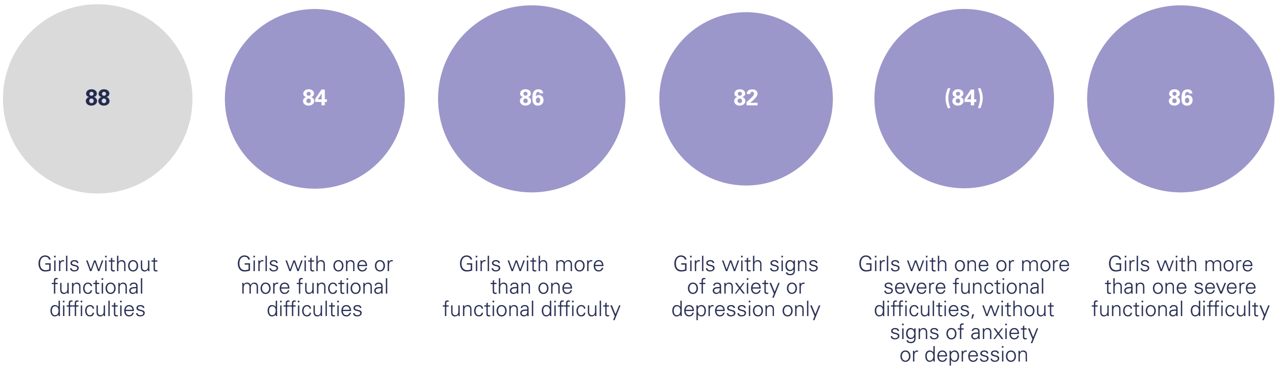
These challenges include not only the lack of a private facility but also physical, cognitive or behavioural limitations.[29] Lack of basic and private WASH services that are accessible to adolescent girls with disabilities are a major barrier to adequate management of menstrual hygiene. In contexts of social and economic vulnerability, this barrier is often compounded by the struggle to access menstrual hygiene products. However, even when such products and services are available, girls with disabilities can still have problems using them, either physically or through lack of understanding of how to use them.[30]

When girls with disabilities are unable to manage menstrual hygiene, they face increased risks of not participating in everyday activities and of feeling ashamed and socially isolated.[31] This can cause girls to miss school when school-based facilities are not accessible or when they are unable to physically manage their own menstrual hygiene and there is not a caregiver at the school who is able or willing to help.[32]

© UNICEF/UN0214841/Vishwanathan

Use of menstrual products and access to a private place to wash and change are similar for adolescent girls with and without disabilities

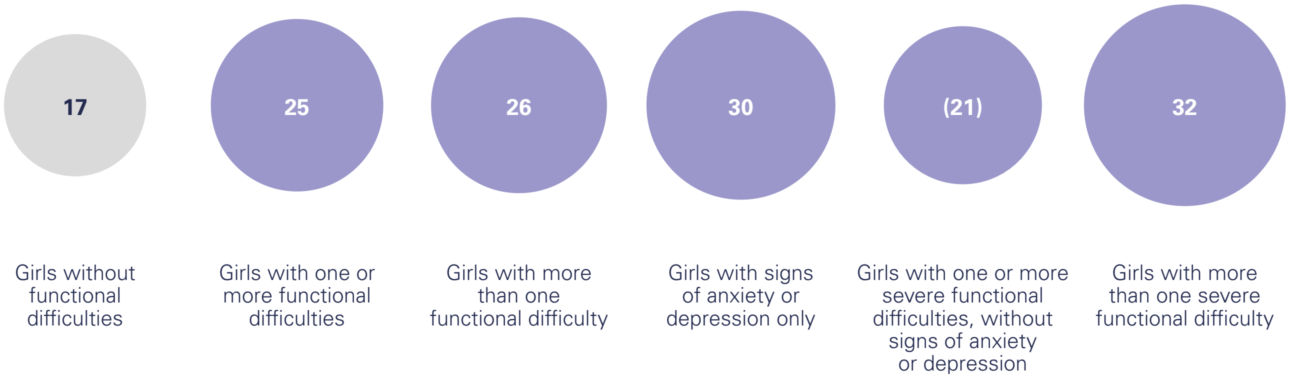
FIGURE 6.5 Percentage of girls aged 15 to 17 years reporting menstruating in the last 12 months and using menstrual hygiene products with a private place to wash and change while at home



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

Adolescent girls with disabilities are more likely to miss out on social activities, school or work due to difficulties managing menstruation

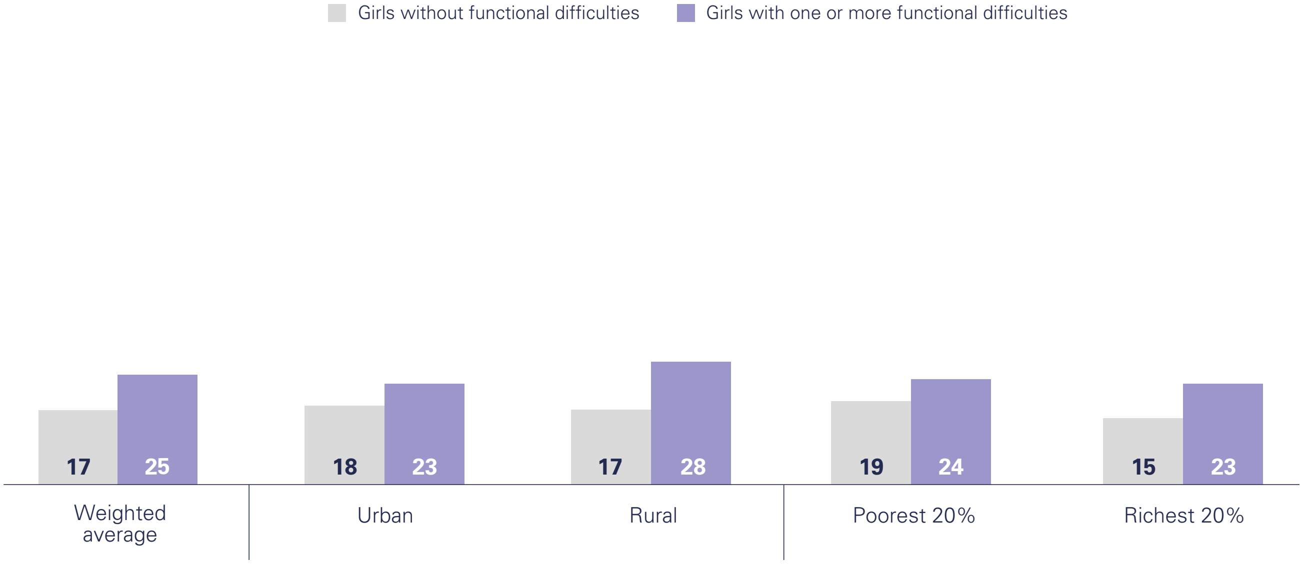
FIGURE 6.6 Percentage of girls aged 15 to 17 years reporting menstruating in the last 12 months who did not participate in social activities, school or work due to their last menstruation



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

Living in rural areas increases the chances that adolescent girls with disabilities will miss out on social activities, school or work due to difficulties managing menstruation

FIGURE 6.7 Percentage of girls aged 15 to 17 years reporting menstruating in the last 12 months who did not participate in social activities, school or work due to their last menstruation



Takeaways and programmatic implications

Depriving children with disabilities of access to WASH services not only aggravates their risk for poor health and well-being; it also has ramifications for their experience of social isolation, loss of dignity and denial of basic human rights.

The data in this chapter capture some of the challenges faced by children with disabilities when accessing WASH services. As a group, they are less likely to have drinking water and sanitation facilities on premises than children without disabilities. They are also slightly less likely to have basic handwashing facilities on premises. While the availability of a private place to wash and change is similar for girls with and without disabilities, differences were found in how this impacts their participation in society. Adolescent girls with disabilities are far more likely not to participate in social activities, school or work due to menstruation than girls without disabilities. For all indicators, significant variations were found among countries, both in the overall availability of WASH services as well as in their availability to children with disabilities.

When interpreting these findings, it must be reiterated that the data in this chapter present a far from complete picture of the access that children with disabilities have to WASH services. Even in situations where a household has basic water, sanitation and hygiene facilities, children with disabilities may still encounter obstacles to using them.[33] Many of the challenges in accessing and using WASH services are dependent on the types of adaptations they provide to accommodate the needs of children with various impairments. Unfortunately, this information is not yet reflected in available data.

To address the challenges that children with disabilities experience in using WASH services, steps need to be taken at all levels of society. Governments need to invest in the development of national standards as well as programming to ensure that safe WASH facilities are available in all households, schools, health centres and public facilities and are constructed to be used by children with a wide array of impairments. COVID-19 has highlighted the importance of handwashing with soap, and further investment is needed in accessible handwashing facilities. Moreover, disability-inclusive programmes need to be developed to remove barriers that prevent girls with disabilities from participating in society when they are menstruating. This means making affordable and suitable menstrual hygiene products available as well as ensuring that public buildings, including schools and health centres, have gender-sensitive and disability-accessible sanitation facilities. It is also critical to provide information on menstrual health and hygiene in various formats, including easy-to-read instructions for those with intellectual impairments, so that girls with different types of disabilities can understand them. Additionally, training is needed for parents of girls with disabilities to understand and support their daughters in managing menstruation.

Management of menstruation and of menstrual hygiene has important ethical and human rights implications, with profound impacts on the lives of young girls. In certain situations, adolescents with disabilities may be medicated to suppress or stop their menstruation or even forced to undergo hysterectomies.[34] These practices are not carried out in the best interest of the child[35] and can lead to irreversible damage. Adolescent girls with disabilities and their families need to be supported and empowered with relevant knowledge, attitudes and skills that can help them make informed decisions.

Increasing access to WASH services for children with disabilities can help reduce the barriers they face in realizing many other rights, including education and health. The SDG commitment to leave no one behind and to promote universal access means that targeting children with disabilities should be a priority for governments and all other stakeholders. This includes sustaining advocacy efforts and increasing investments to strengthen WASH sector programming, monitoring and reporting systems so that a disability-inclusive perspective is fully incorporated to address the needs of all children.

CHAPTER 7

Every child has the right to a fair chance in life

Addressing poverty and inequality is recognized internationally as a global priority. Goal 1 of the SDGs calls for an end to poverty everywhere, in all its forms, and acknowledges the need for a holistic view of poverty that extends beyond income levels. SDG target 1.2 seeks to reduce by at least half the proportion of women, men and children living in multidimensional poverty. The SDGs also recognize the importance of mechanisms such as health insurance and social protection to achieve this goal, and target 1.3 calls for the implementation of nationally appropriate social protection systems and measures for all. Goal 10 (target 10.3) acknowledges the need to ensure equal opportunity and reduce inequalities in achieving positive outcomes, including through the elimination of discriminatory laws, policies and practices and the promotion of appropriate legislation, policies and action. Despite these global commitments, persistent inequalities are holding back the fulfilment of children's rights. And poverty, in all its forms, remains a potent threat to the achievement of the SDGs.

Understanding the multidimensional nature of poverty is particularly important during childhood. Indeed, child poverty is quite different from adult poverty, with unique cause-and-effect mechanisms and impacts that, sadly, can be irreversible. By measuring the interrelated deprivations, exclusions and vulnerabilities experienced by children, their rights can be brought to the forefront of evidence-gathering, social policy and programming.

Children with disabilities are overrepresented among the most marginalized and underserved population groups worldwide. They are at higher risk of missing out on many aspects of life and of experiencing poor outcomes because of multiple disadvantages. Moreover, they are often deprived of opportunities that would enable them – and their future children – to break out of the cycle of deprivation and poverty.

This chapter seeks to illustrate some of the deprivations affecting children with disabilities and the barriers they face in benefiting from health insurance and social protection.

© UNICEF/UN031816/Laet

Indicators used in this chapter

Multidimensional child poverty: Percentage of children aged 2 to 17 years who experience multidimensional poverty.

The multidimensional poverty indicator follows a two-step calculation. The first step identifies whether a child is deprived of any of the rights that contribute to poverty, namely access to housing, water and sanitation, health, nutrition and education. This information is gathered through surveys producing comparable data. If a child experiences deprivation in one or more of these areas, then she or he is identified as living in poverty (the second step), according to standards developed by UNICEF.

The indicators are assigned three thresholds: no deprivation, moderate deprivation and severe deprivation. For example, to assess nutrition in children under 5 years of age, stunting is measured in accordance with an international reference population. Deprivation is considered moderate when a child's height-for-age is two standard deviations below the WHO Child Growth Standards; it is considered severe when it falls below three standard deviations. Indicators also vary by the age of the child, since what is needed to fulfil the rights of an adolescent is different from what is needed for a young child. For example, moderate deprivation in education in children aged 6 to 14 years is defined as not currently attending school; severe deprivation is defined as never having been in school. Among children aged 15 to 17 years, moderate deprivation is defined as those who are not currently attending secondary school, and severe deprivation is defined as those who have not completed primary school.

Health insurance coverage: Percentage of children aged 2 to 17 years covered by health insurance.

Social transfers: Percentage of children aged 2 to 17 years living in a household that received any type of social transfers and benefits in the last three months.

Social transfers among the poorest: Percentage of children aged 2 to 17 years living in the poorest households that received any type of social transfers and benefits in the last three months.

Definitions and data interpretation issues

As with other indicators in this report, certain issues need to be taken into account in the interpretation of results.

The multidimensional poverty indicator aggregates information from a variety of indicators in different areas of a child's life related to the core domains of housing, water and sanitation, health, nutrition and education. As discussed in previous chapters, some of these indicators present limitations since they do not consider the barriers that are specific to children with disabilities. For example, while WASH indicators convey information about the availability of services, they do not reveal whether children with disabilities are able to use such services. Similarly, nutrition status indicators are not calculated for a significant proportion of children with disabilities due to limitations in anthropometric measurement of children with certain impairments. Other limitations of the various indicators are expanded upon in their respective chapters. Therefore, the ability of the multidimensional poverty indicator to accurately capture the deprivations affecting children with disabilities is affected by the limitations of each of the indicators of which it is comprised. As a result, the number of children experiencing multidimensional poverty is likely to be underestimated. For children with disabilities to realize the same rights as other children, they often require different material resources. In so far as these differences are not measured, underreporting occurs. Moreover, if the various indicators allowed for a more accurate measurement of inclusion, the reported disparities between children with and without disabilities would likely be much greater.

A further consideration in data interpretation concerns social transfers (in cash or in kind) as an indicator of social protection coverage. While social protection encompasses a host of interventions beyond social transfers, there is a dearth of internationally comparable data about many, if not most, non-cash interventions. Moreover, the MICS Social Transfers Module is designed to be customized at the country level and therefore the resulting data are not always comparable. While six of the countries analysed in this chapter (Argentina, Nepal, Suriname, Tonga, Turkmenistan and Tuvalu) had options in the MICS module related to a disability allowance, the other countries did not or only listed disability in tandem with other eligibility criteria. So, for most countries, it is not possible to know whether the social transfer was in any way related to disability or was provided to the household based on other factors. Turkmenistan is a special case in the opposite direction. Its MICS, which was used as the basis for this analysis, had a dedicated subsection of the Social Transfers Module for children that measured whether any child aged 0 to 17 years had ever received a state allowance for disability. This allowed data from Turkmenistan to specifically capture social transfers for children with disabilities.

Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lao People's Democratic Republic (for children aged 2 to 4 years only), Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Pooled results for indicators measuring multidimensional poverty (Figures 7.1 through 7.4) only include data from Costa Rica, Gambia, Guyana, Iraq, Kiribati, Kyrgyzstan, Lao People's Democratic Republic (for children aged 2 to 4 years only), Madagascar, Mexico, Mongolia, Sierra Leone, Suriname and Tunisia.

Pooled results for indicators measuring health insurance (Figures 7.5 and 7.6) do not include data from Bangladesh, Belarus, Cuba, Kiribati, Kyrgyzstan, Lesotho, Mexico, Mongolia and Montenegro since these were not available.

Pooled results for indicators measuring social transfers (Figures 7.7 and 7.8) do not include data from Cuba, Democratic Republic of the Congo, Gambia, Ghana, Guinea-Bissau, Lesotho, Mexico, Mongolia, Montenegro and Togo since these were not available.

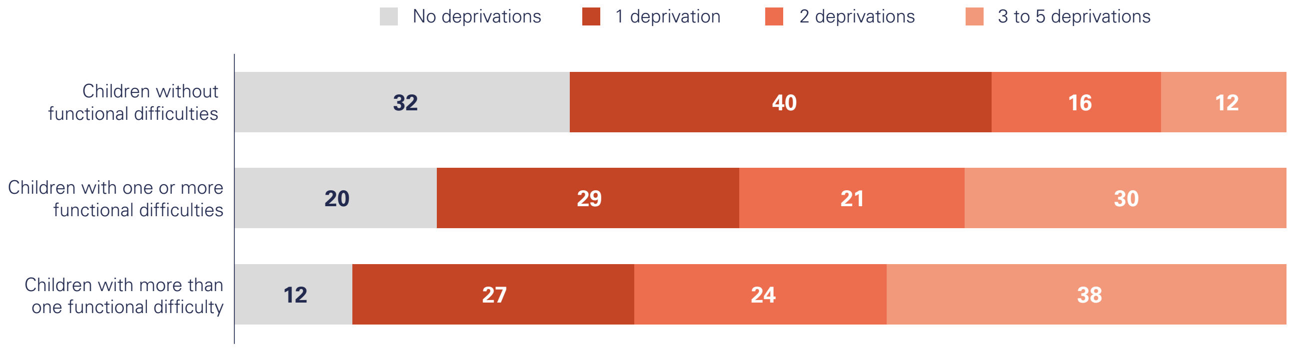
© UNICEF/UN045568/Pirozzi

Multidimensional poverty

Children living in poverty face deprivations in many areas of life simultaneously and often lack necessities such as nutritious food, sanitation services, clean water, education and health care. The multidimensional nature of poverty has widespread implications that are of particular concern for children with disabilities.[1] For example, children with disabilities in monetarily poor households can experience worse health outcomes than those in richer households due to the greater financial burden of accessing care.[2] The impact of these deprivations can last throughout childhood and well into adulthood in a downward cycle that makes it difficult to ever break out of poverty.[3]

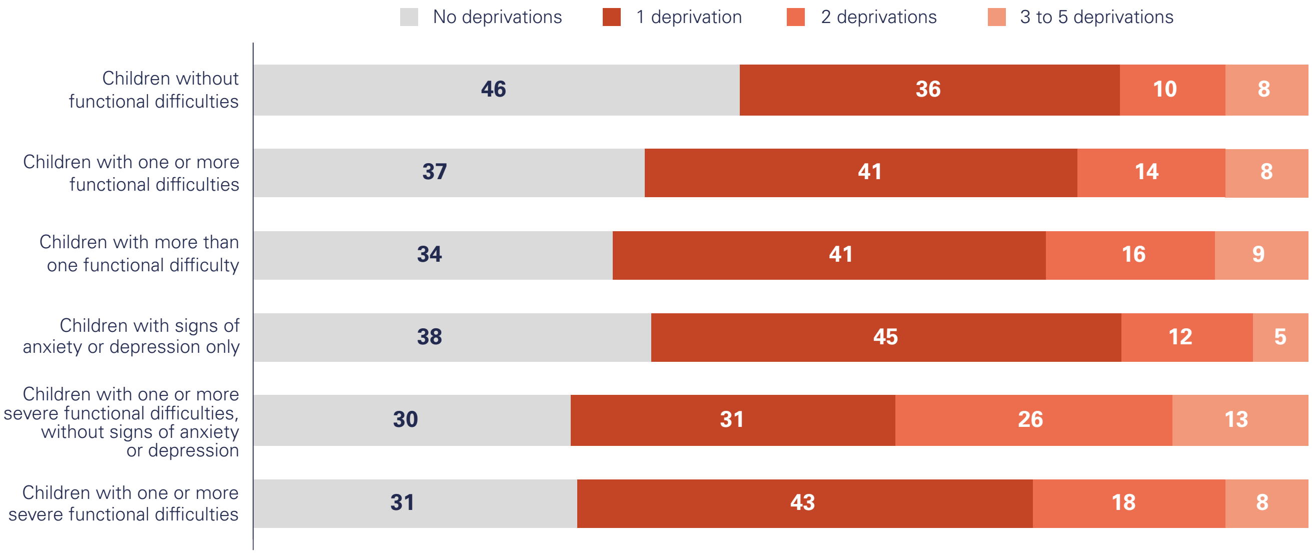
Children with disabilities experience a greater number of deprivations than children without disabilities

FIGURE 7.1 Percentage of children aged 2 to 4 years who experience multidimensional poverty



Note: Due to rounding, certain values do not add up to 100 per cent.

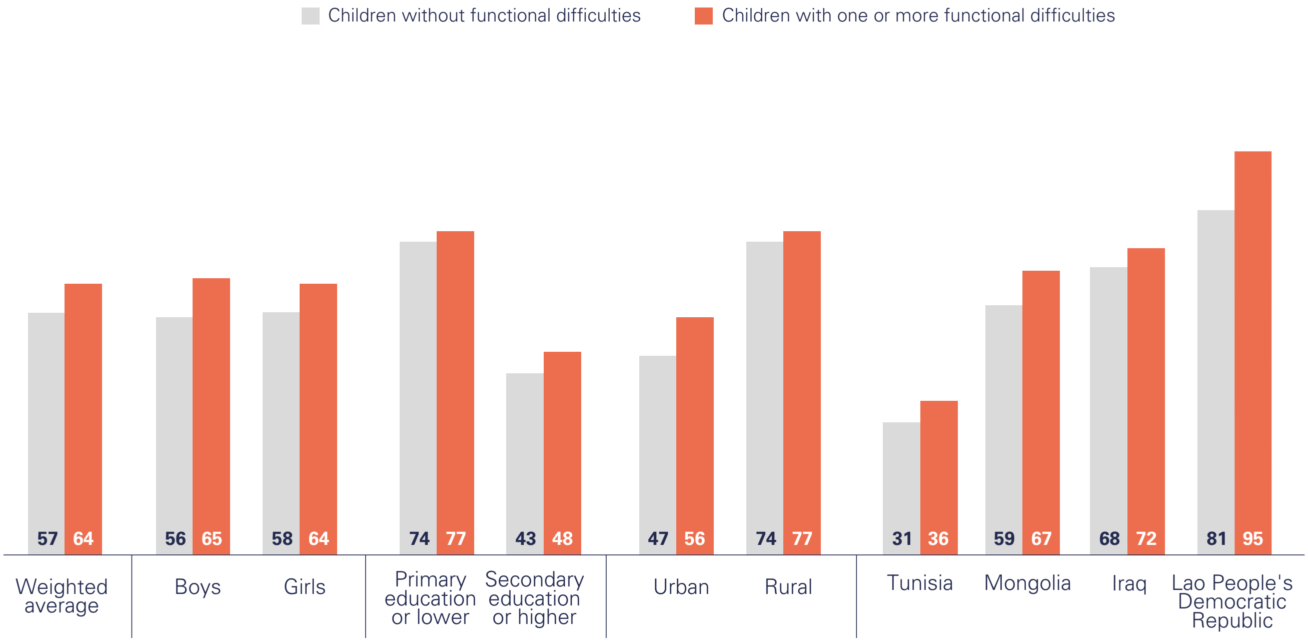
FIGURE 7.2 Percentage of children aged 5 to 17 years who experience multidimensional poverty



© UNICEF/UNI119342/Nesbitt

Children with disabilities are more likely to live in moderate multidimensional poverty than children without disabilities

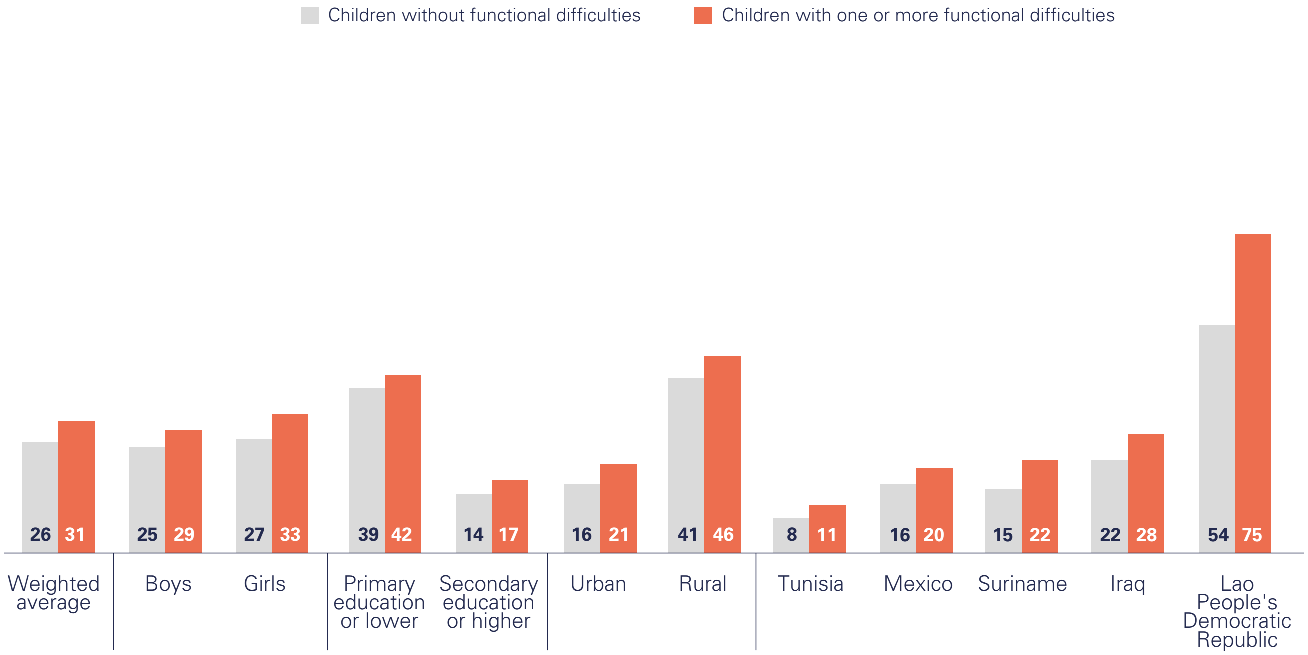
FIGURE 7.3 Percentage of children aged 2 to 17 years who experience moderate multidimensional poverty



Notes: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only. Education refers to the education level of mothers.

Children with disabilities are also more likely to live in severe multidimensional poverty than children without disabilities

FIGURE 7.4 Percentage of children aged 2 to 17 years who experience severe multidimensional poverty



Notes: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only. Education refers to the education level of mothers.

Health insurance and social transfers

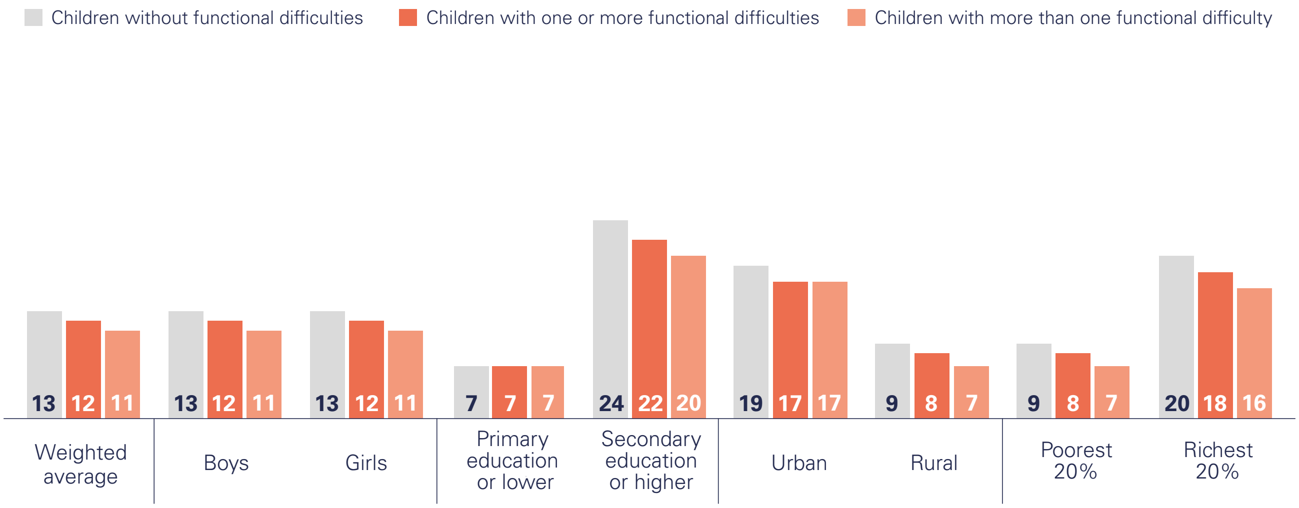
The right to health and social security seeks to address and mitigate existing inequalities, including those that affect persons with disabilities. Children with disabilities often face disproportionately higher health-care costs due to their need for extra health care and specialized services, as well as assistive devices and transportation. The burden of these additional expenses often falls entirely on families[4] and can be exacerbated by a loss of income if one or both parents have to give up – or make major sacrifices in – their jobs to care for their child.[5] As a result, persons with disabilities and their families are among those who can benefit most from social transfers and health insurance policies. All too often, however, these do not reach those most in need.[6] Many social transfer programmes are underfunded, resulting in gaps in service. And, in some countries, they fail to explicitly include children.[7] Among low- and middle-income countries, only a few provide specific child-disability benefits.[8] Similarly, many children with disabilities do not have access to health insurance, or significant gaps in coverage mean that many disability-specific health needs are not adequately covered.[9]

Realizing the right to social protection, including access to social transfers and health insurance, can be challenging for families of children with disabilities due to lack of knowledge and understanding of available programmes, as well as stringent requirements and conditions for programme inclusion.[10] Long distances to service points can also present barriers.[11] In terms of health insurance, the cost for disability-specific coverage can be prohibitive and can vary dramatically depending on the type of disability.[12]

Significant benefits accrue from giving children with disabilities access to both health insurance and social transfers. Social transfers in the form of money, particularly unconditional cash transfers, for individuals with disabilities can reduce the burden of care on other family members, provide access to additional support services and bolster the independence of the individual with disabilities.[13] In addition, social transfers can help alleviate financial stress within families, especially in situations where parents have had to give up or limit their employment in order to care for a child with disabilities.[14] Access to health insurance helps remove financial barriers to health care, ensuring that children with disabilities can get the care they need without undue financial stress on their families, helping them live healthier lives.[15]

Health insurance coverage is insufficient for all children, but especially for those with disabilities. Children who live in rural areas, in the poorest households and whose mothers have low levels of education are least likely to have health insurance

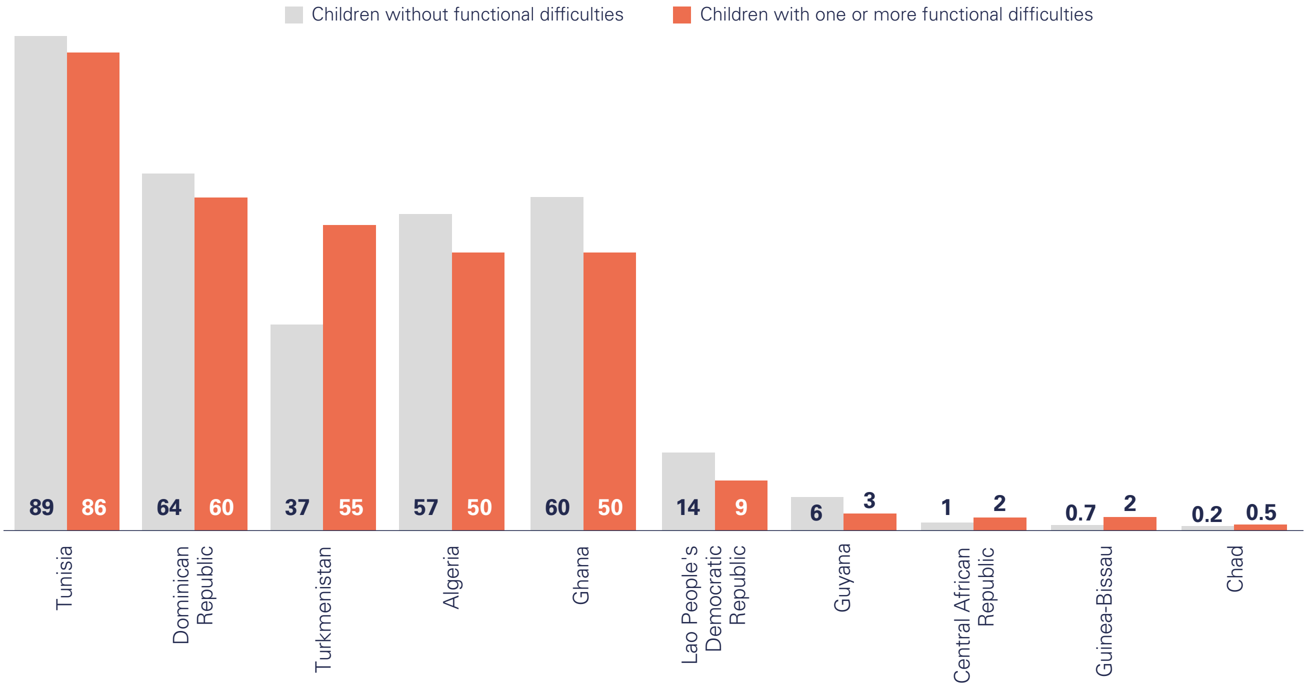
FIGURE 7.5 Percentage of children aged 2 to 17 years covered by health insurance



Note: Education refers to the education level of mothers.

Health insurance coverage varies widely across countries; in only a few of them, however, are differences in coverage found between children with and without disabilities

FIGURE 7.6 Percentage of children aged 2 to 17 years covered by health insurance

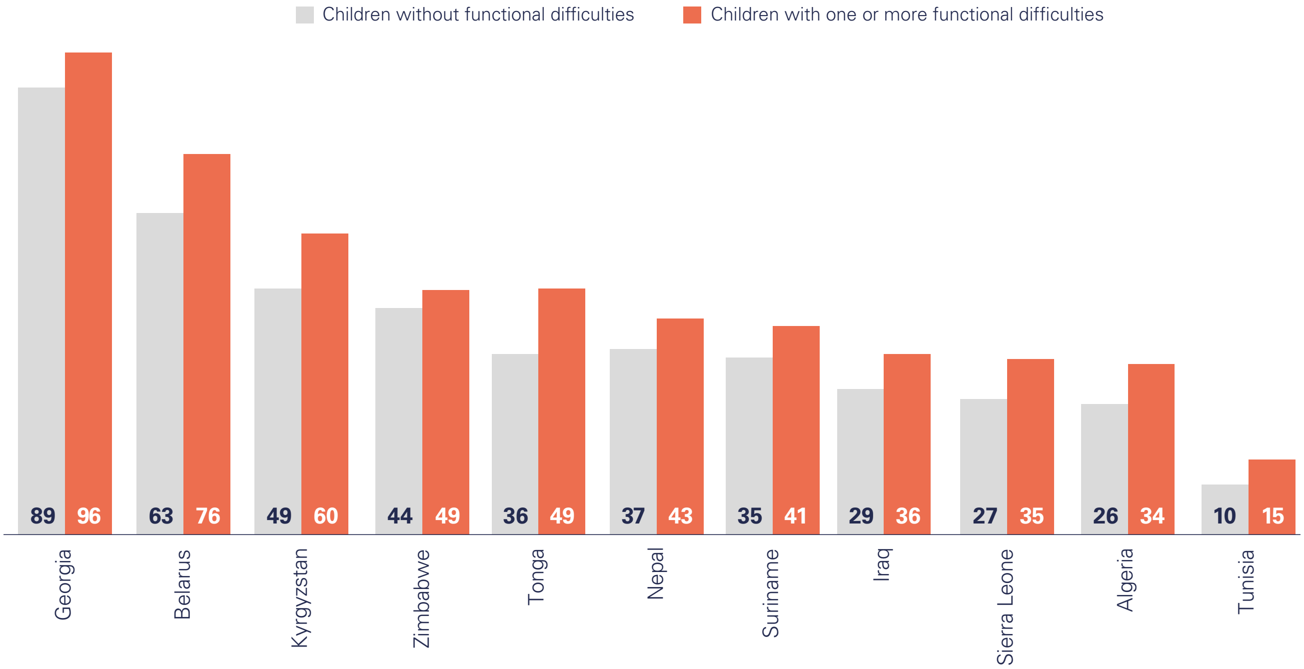


Note: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only.


© UNICEF/UN050094/Pirozzi

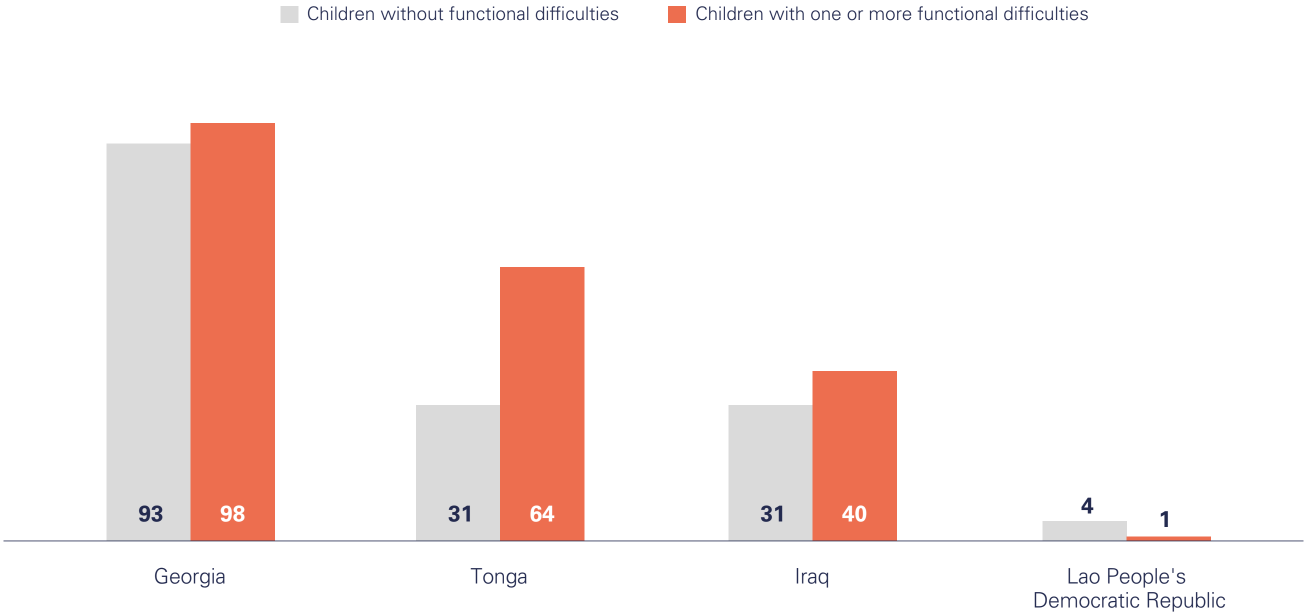
Access to social transfers and benefits also varies widely; however, only in a few countries are children with disabilities significantly more likely to live in households that receive them

FIGURE 7.7 Percentage of children aged 2 to 17 years living in a household that received any type of social transfers and benefits in the last three months



In the poorest households, children without disabilities are just as likely as children with disabilities to receive social transfers and benefits in all countries but four

FIGURE 7.8 Percentage of children aged 2 to 17 years living in the poorest households that received any type of social transfers and benefits in the last three months



Note: Results for the Lao People's Democratic Republic refer to children aged 2 to 4 years only.

© UNICEF/UN0361875/Arcos

Takeaways and programmatic implications

The findings in this chapter document some of the social inequities and interrelated deprivations faced by children with disabilities. While current indicators are not able to capture the unique deprivations of children with disabilities, the available data do confirm that these children face slightly higher levels of multidimensional poverty, both moderate and severe, than children without disabilities.

The multiple impacts of poverty are likely to be exacerbated by generally low access to social protection, such as health insurance and social transfers, which can help ease the financial burdens on families of children with disabilities and alleviate poverty. The data in this chapter suggest that while children with disabilities and their families face greater needs, they do not get significantly more support.

Concrete steps must be taken to address the deprivations confronted by children with disabilities and their families. Governments need to increase the capacity, funding, equity, efficiency and scope of social protection programmes. Barriers to accessing health insurance need to be eliminated to ensure universal coverage, and services covered by health insurance need to be expanded to include disability-specific health care, such as rehabilitation and assistive devices. Similarly, social transfer programmes should be extended to all children with disabilities. Governments need to provide additional funding for such programmes and ensure universal social protection floors. Moreover, the eligibility requirements for such schemes need to be inclusive of children with a wide array of disabilities and to address disability-related costs. Finally, awareness of such programmes needs to be expanded and the application process simplified to encourage uptake.

Empowering stakeholders (service providers, in particular) with the knowledge and skills they need to reach children with disabilities living in multidimensional poverty is essential. The right of every child to a fair chance in life can be achieved by combining all these interventions with greater public awareness to eliminate discrimination and by designing poverty reduction policies and strategies that are inclusive of children with disabilities.


© UNICEF/UNI358849/Ijazah

CHAPTER 8

Every child has the right to a happy life, free from discrimination

Subjective well-being is how individuals assess their situation in life and is influenced by both actual experiences and perceptions. More specifically, it is an individual's perceived happiness, whether he or she has positive expectations for the future and how satisfied he or she is in daily life. Children with high levels of subjective well-being often experience more positive personal, behavioural and social outcomes than children with lower levels; they also tend to be more resilient in stressful life situations.[1]

How individuals perceive their own well-being is based on a wide array of factors. Experiences of deprivation can result in lower levels of life satisfaction, whereas experiences of strong parental and familial relationships can result in higher life satisfaction.[2] Since children with disabilities frequently experience deprivations and barriers, it is reasonable to assume that these constraints have a negative impact on their subjective well-being compared with children without disabilities.

The specific challenges that children with disabilities face in their daily lives vary significantly based on the dynamic between their impairment(s) and their environment. Children who live in unaccommodating environments can be prevented from participating fully in their communities, and such exclusion is likely to affect both their current happiness and how they perceive their future.

One factor that can influence the subjective well-being of children with disabilities is discrimination. Children have the right to live free from discrimination in any form, including discrimination based on disability, as outlined in article 2 of the Convention on the Rights of the Child and article 5 of the Convention on the Rights of Persons with Disabilities.

© UNICEF/UN0368238/Ijazah

Indicators used in this chapter

Discrimination: Percentage of adolescents aged 15 to 17 years who report having personally felt discriminated against or harassed within the previous 12 months on the basis of disability or on one of the other grounds for discrimination prohibited under international human rights law.

Life satisfaction: Average life satisfaction score for adolescents aged 15 to 17 years.

Happiness: Percentage of adolescents aged 15 to 17 years who are very or somewhat happy.

Perception of a better life: Percentage of adolescents aged 15 to 17 years whose life improved during the last year and who expect that their life will be better one year later.

Definitions and data interpretation

One limitation regarding the results on discrimination and subjective well-being is the high proportion of missing information among children with difficulties in certain domains (see Table 8.1). Since these data are collected through a questionnaire that is directly administered to adolescents aged 15 to 17 years, those with certain difficulties could not be interviewed due to accommodation constraints during the survey implementation.

Another limitation regarding discrimination is the challenge inherent in a perception-based question. While results for discrimination can measure whether adolescents perceive that they have been discriminated against, either because of their disability or for another reason, these results cannot definitively show whether discrimination actually occurred. For this reason, results involving discrimination should be understood as being based on perception.

TABLE 8.1 Percentage of adolescent girls aged 15 to 17 years who did not answer questions on discrimination and percentage who did not answer questions on subjective well-being

		Did not answer questions on discrimination	Did not answer questions on subjective well-being
Adolescent girls without functional difficulties		4	3
Adolescent girls with one or more functional difficulties		7	5
Domain of functional difficulty	Signs of depression	4	3
	Signs of anxiety	5	3
	Seeing	(11)	(8)
	Walking	11	11
	Controlling behaviour	14	13
	Accepting change	20	16
	Making friends	21	18
	Remembering	(23)	19
	Learning	(35)	22
	Concentrating	(31)	(27)
	Hearing	(39)	(27)
	Communicating	(53)	(28)
	Self-care	(53)	(51)

Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

To assist respondents in answering questions on happiness, they were shown a card with smiling faces (and not-so-smiling faces) that correspond to the response categories 'very happy', 'somewhat happy', 'neither happy nor unhappy', 'somewhat unhappy' and 'very unhappy'. They were then shown a picture of a ladder with steps numbered from 0 at the bottom to 10 at the top. They were subsequently asked to indicate at which step of the ladder they feel they are standing at the time of the survey, which is intended to indicate their level of life satisfaction. The resulting score has values ranging from 0 (lowest level of satisfaction) to 10 (highest level of satisfaction).

Sources of data

Unless otherwise noted, the pooled estimates in this chapter are drawn from MICS conducted in Algeria, Bangladesh, Belarus, Central African Republic, Chad, Costa Rica, Cuba, Democratic Republic of the Congo, Gambia, Georgia, Ghana, Guinea-Bissau, Guyana, Iraq, Kiribati, Kosovo, Kyrgyzstan, Lesotho, Madagascar, Mexico, Mongolia, Montenegro, Nepal, North Macedonia, Pakistan, Sao Tome and Principe, Serbia, Sierra Leone, State of Palestine, Suriname, Togo, Tonga, Tunisia, Turkmenistan and Zimbabwe. Data for Pakistan are pooled results from surveys conducted in the regions of Sindh and Punjab (for more details, see the technical annex).

Pooled results for indicators measuring discrimination (Figures 8.1, 8.2 and Table 8.2) do not include data from Algeria, Gambia, Ghana, Guinea-Bissau, Mexico, Nepal, Sao Tome and Principe, Sierra Leone and Togo since these were not available.

Pooled results for indicators measuring subjective well-being (Figures 8.3 through 8.6 and Table 8.3) do not include data from Cuba, Guyana, Kosovo, Kyrgyzstan, Madagascar, Tunisia and Turkmenistan since these were not available.

© UNICEF/UN0261114/Gafic

Discrimination

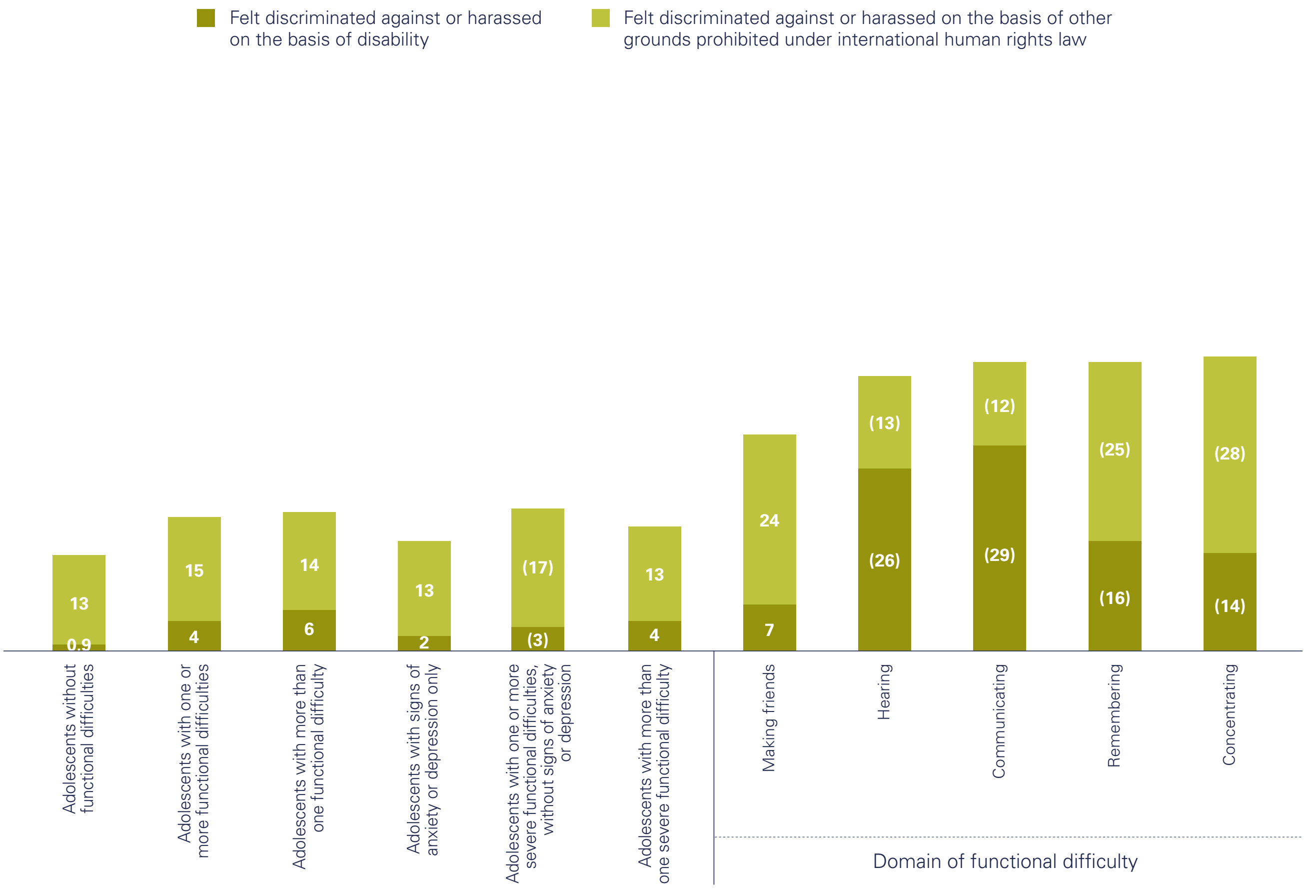
Inequalities and negative outcomes for children with disabilities often stem from discrimination, harassment, stigma and negative stereotypes.[3]

Discrimination against children with disabilities can be driven by a myriad of factors, such as the misguided belief that individuals with disabilities are less able than or inferior to those without disabilities.[4] Discrimination can also be driven by cultural or religious beliefs about disability: that those with disabilities are 'cursed' or being punished for their – or their ancestors'– failings, for example.[5]

Discrimination on the basis of disability can be compounded by additional layers of discrimination based on race, ethnicity, gender or religion.[6] When these are at play simultaneously, children with disabilities can be exposed to multiple and intersecting forms of discrimination,[7] which can lead to exclusion from education, health care and social protection, hindering their full participation and inclusion in society.[8]

A large proportion of adolescents with disabilities have personally felt discriminated against or harassed because of their disability or for other reasons

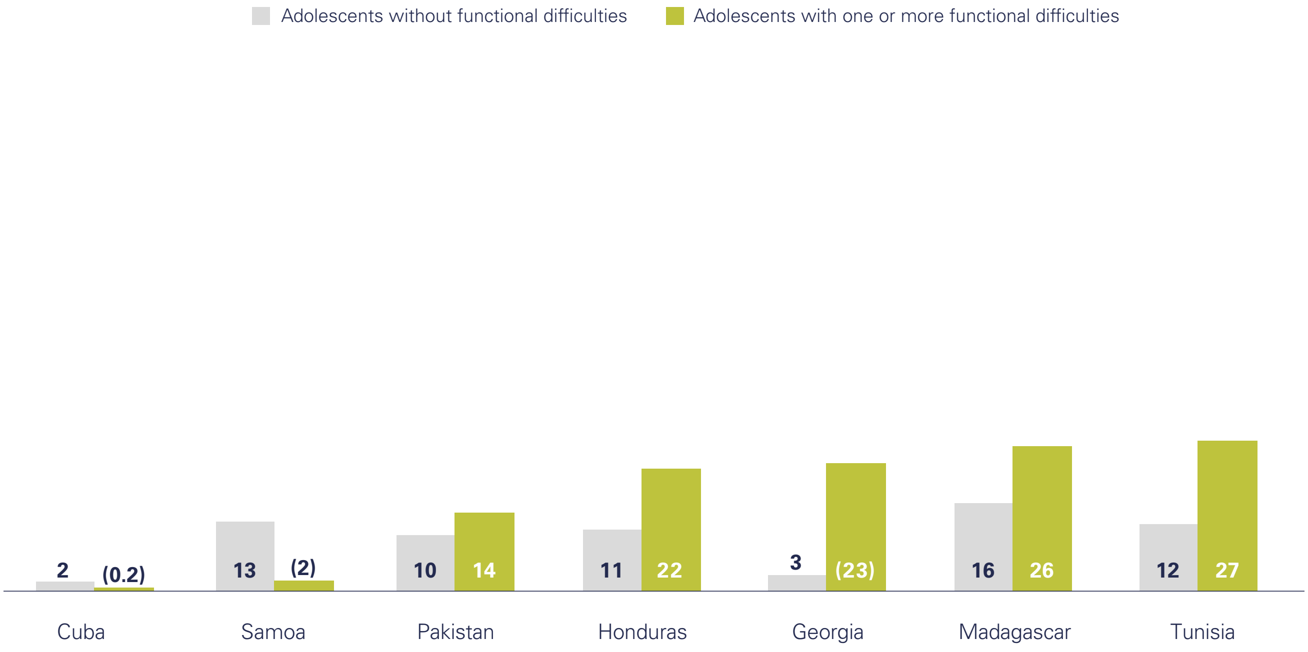
FIGURE 8.1 Percentage of adolescents aged 15 to 17 years who report having personally felt discriminated against or harassed within the previous 12 months on the basis of disability or on one of the other grounds for discrimination prohibited under international human rights law



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

The proportion of adolescents reporting experiences of discrimination varies among countries, but in many of them a higher proportion of adolescents with disabilities report such experiences

FIGURE 8.2 Percentage of adolescents aged 15 to 17 years who report having personally felt discriminated against or harassed within the previous 12 months on the basis of disability or on one of the other grounds for discrimination prohibited under international human rights law



Note: Numbers in parentheses are based on 25 to 49 unweighted observations.

Adolescents with disabilities are more likely to feel discriminated against, especially if they are girls and live in the poorest households

TABLE 8.2 Percentage of adolescents aged 15 to 17 years who report having personally felt discriminated against or harassed within the previous 12 months on the basis of disability or on one of the other grounds for discrimination prohibited under international human rights law

	BOYS		GIRLS	
	Richest 20%	Poorest 20%	Richest 20%	Poorest 20%
Adolescents without functional difficulties	11	11	13	15
Adolescents with one or more functional difficulties	(11)	(15)	18	28
Adolescents with more than one functional difficulty	(*)	(21)	(18)	(32)

Notes: Numbers in parentheses are based on 50 to 249 unweighted observations. An asterisk in parentheses (*) indicates that values are not shown because they are based on fewer than 50 unweighted observations.

Happiness, life satisfaction and expectations about the future

Having an impairment – whether physical, cognitive or psychosocial – should not prevent a child from living a fulfilling and happy life.

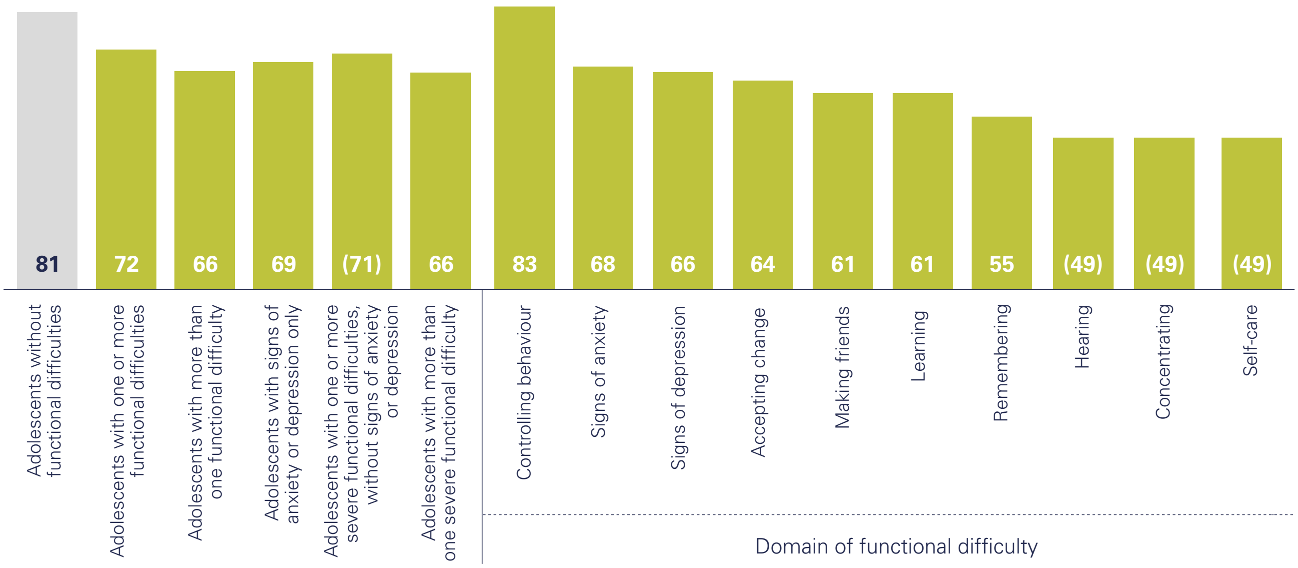
Some impairments can be accompanied by significant frustration, especially when they involve high levels of dependency on others or on assistive devices that may not always be available or functioning well. In fact, research suggests that, rather than the impairments themselves, the lack of an accommodating environment and social barriers are the major determinants of participation, happiness and well-being in persons with disabilities.[9] In this regard, a few fundamental questions need to be asked:

- Do stigma and negative attitudes prevent children with disabilities from participating on equal terms with children without disabilities?
- Do inaccessible environments make it systematically difficult or even impossible for children with disabilities to enjoy recreational and cultural activities?
- Do access barriers prevent children from going to school?
- Do social welfare and protection systems meet or support the extra costs of having a disability?
- Do children with disabilities and their families have access to justice when their rights are violated?

Too often, the answers to these questions indicate that governments, societies and communities are not doing enough to realize the fundamental human rights of children, perpetuating cycles of exclusion and disadvantage. Discrimination, marginalization and disempowerment take a heavy toll on the overall well-being of children with disabilities, with segregation remaining a reality for far too many of them. Children with disabilities in countries around the world are still denied the right to attend mainstream education and too many spend their childhood – and sometimes their lives – in long-term residential care. Stigma and negative attitudes make it difficult for these children to cultivate or maintain peer group relationships and social networks. These factors overlap to create situations in which children with disabilities experience significantly lower rates of subjective happiness and well-being than children without disabilities.

Adolescents with difficulties caring for themselves, concentrating and hearing are the least likely to describe themselves as very or somewhat happy

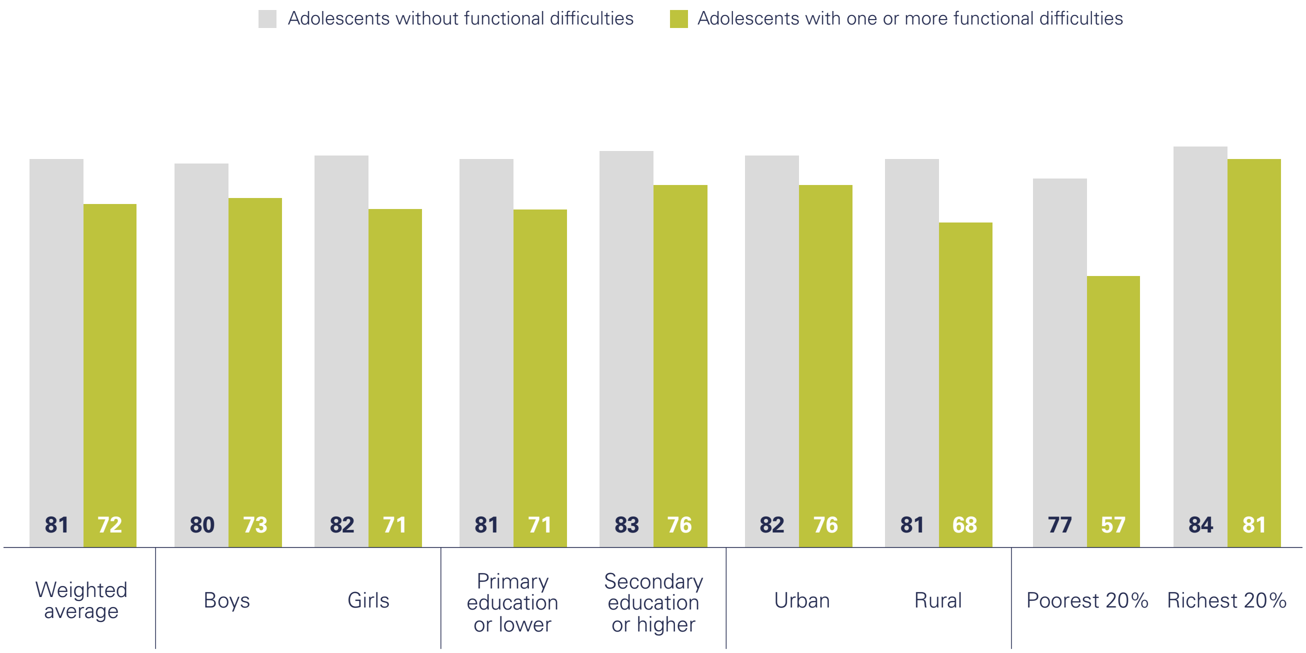
FIGURE 8.3 Percentage of adolescents aged 15 to 17 years who are very or somewhat happy



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

Adolescents with disabilities from the poorest households are the least likely to describe themselves as happy

FIGURE 8.4 Percentage of adolescents aged 15 to 17 years who are very or somewhat happy



Note: Education refers to the education level of mothers.

Adolescents with difficulties learning or communicating report the lowest levels of life satisfaction

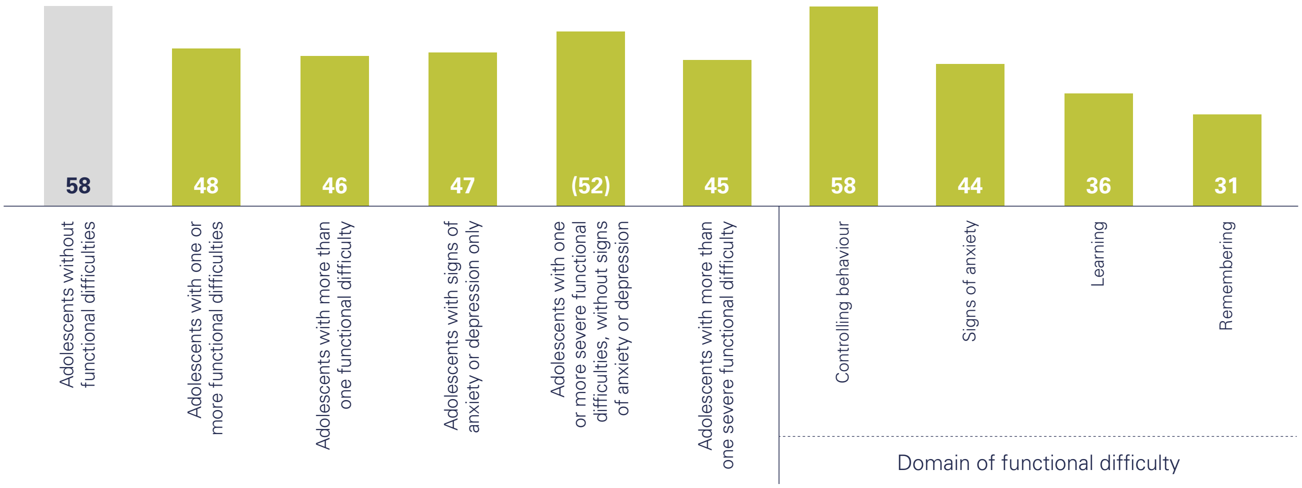
TABLE 8.3 Average life satisfaction score for adolescents aged 15 to 17 years

Adolescents without functional difficulties		6.5
Adolescents with one or more functional difficulties		6.2
Adolescents with more than one functional difficulty		5.8
Adolescents with signs of anxiety or depression only		5.9
Adolescents with one or more severe functional difficulties, without signs of anxiety or depression		(6.4)
Adolescents with more than one severe functional difficulty		5.6
Domain of functional difficulty	Controlling behaviour	6.8
	Walking	6.6
	Signs of anxiety	5.8
	Signs of depression	5.7
	Seeing	(5.6)
	Hearing	(5.4)
	Remembering	(5.1)
	Concentrating	(5.0)
	Learning	4.9
	Communicating	(4.5)

Notes: Values can range from 0 (lowest level of satisfaction) to 10 (highest level of satisfaction). Numbers in parentheses are based on 50 to 249 unweighted observations.

Adolescents with difficulties remembering and learning are significantly less likely to say their life has improved within the last year and that they expect it will be better in a year's time

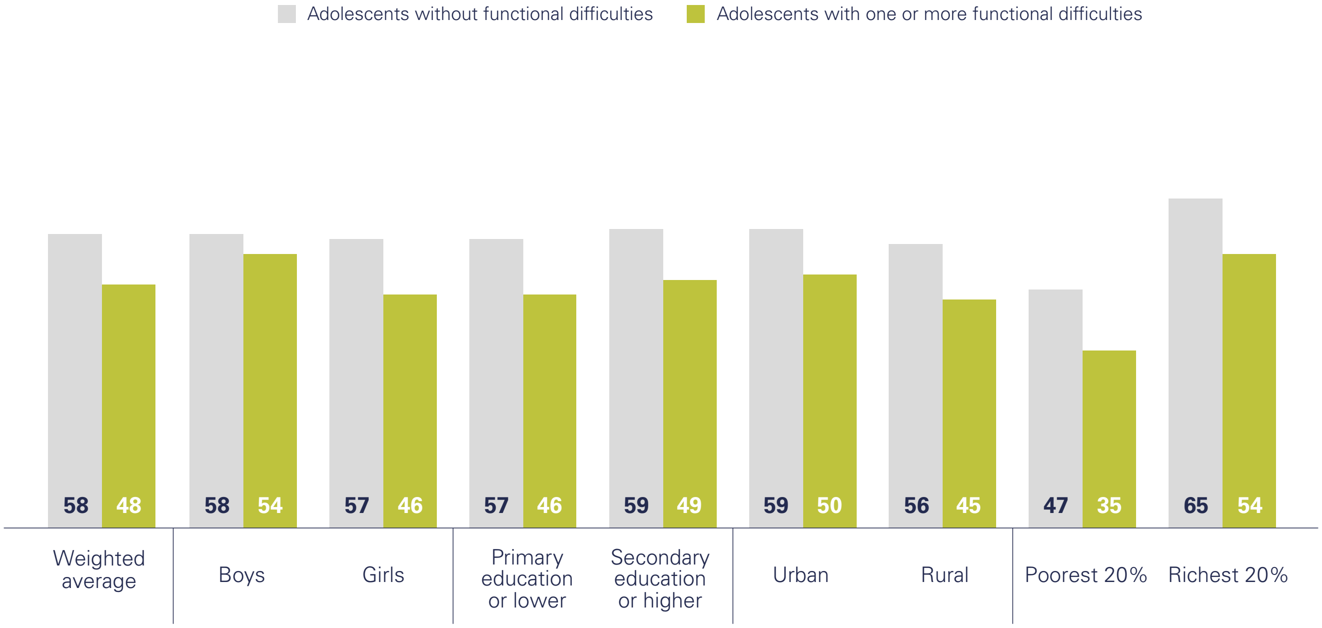
FIGURE 8.5 Percentage of adolescents aged 15 to 17 years whose life improved during the last year and who expect that their life will be better one year later



Note: Numbers in parentheses are based on 50 to 249 unweighted observations.

Positive perceptions of life are less common among adolescents with disabilities, especially among those from the poorest households

FIGURE 8.6 Percentage of adolescents aged 15 to 17 years whose life improved during the last year and who expect that their life will be better one year later



Note: Education refers to the education level of mothers.

Takeaways and programmatic implications

The evidence presented in previous chapters points to key inequalities and negative outcomes for children with disabilities in nearly all dimensions of their lives. This chapter highlights the perceptions of these children themselves, which are likely to be influenced by such experiences. The data show that children with disabilities perceive a significant amount of discrimination against them and experience generally lower levels of subjective well-being than children without disabilities.

The mechanisms that explain and drive the deprivations experienced by children with disabilities result from a complex set of interactions between specific impairments and the environment in which children live. These interactions contribute to divergent experiences among children of different social and economic backgrounds and with difficulties in different functional domains. Too often, however, barriers, exclusion from full participation and a variety of poor outcomes are exacerbated by stigma and discrimination.

Discrimination against children with disabilities stems from a variety of structural, attitudinal and behavioural factors, many of which can be prevented through appropriate interventions. Eliminating all forms of discrimination requires profound changes and committed efforts from all sectors of society in both public and private spheres. Similarly, eliminating the barriers that deny children the right to participate is a moral obligation and a legal imperative that can bring immense gains to all parts of society. Fulfilling the rights of children with disabilities can trigger a cascade of positive impacts on the lives of children as well as their families and communities. It can bring immediate gains in terms of personal well-being and dignity and give children a fair chance to live happier lives and achieve their full potential.

© UNICEF/UN0285224

SPECIAL FOCUS: How sex and gender shape disability in children

© UNICEF/UN0503534/Willocq

While each child's experience of disability is unique, biological sex differences and socially constructed gender roles[10] can systematically influence girls' and boys' risks of impairment, functional difficulties and exclusion. Sex and gender can also play a role in determining children's access to the care and resources they need to thrive.[11]

From a strictly biological perspective, differences in anatomy, brain chemistry and hormonal balance – from the prenatal period onwards – can predispose boys and girls to different risks.[12] Evidence suggests, for example, that boys are more vulnerable than girls to disruptions in foetal and neonatal development that are associated with microcephaly, motor impairments and cerebral palsy.[13] Boys are also at higher risk for negative outcomes attributed to pre- and postnatal exposure to environmental toxins and maternal substance use, including central nervous system disorders that manifest in intellectual and motor impairments.[14]

Beyond biological predisposition, sex-based differences may also influence girls' and boys' presentation of disabilities, leading to differences in screening, diagnosis and treatment. For example, evidence shows that boys with learning difficulties are more likely than girls to show higher rates of impulsivity, aggression and hyperactivity and, as a result, to be referred to special education. Girls, on the other hand, tend to manifest learning difficulties through other, less obvious behaviours, such as inattention, which is more likely to be misinterpreted as a lack of interest, and thus their difficulty may go unaddressed. This, in turn, can increase the risk of worse educational outcomes for girls. Similarly, a significant body of evidence suggests that girls with psychosocial disorders are systematically underdiagnosed, largely due to the fact that their symptoms tend to be different from those of boys.[15] Once again, this may mean girls are denied important opportunities for support.

Boys and girls with disabilities can also face different challenges depending on how gender-based discrimination and disability intersect. Compared with boys with disabilities, girls with disabilities are less likely to receive care and food in the home, to receive health care and assistive devices and to receive vocational training that would enable them to find employment.[16] Inaccessible water, sanitation and hygiene facilities at school can discourage any girl from getting an education, especially during menstruation, but the difficulties are usually compounded for girls with disabilities.[17]

Additionally, while research suggests that all children with disabilities experience narrower opportunities than their peers without disabilities, family expectations for girls with disabilities are often lower than those for boys with disabilities. They usually revolve around ensuring girls' safety by curbing their activities away from the home, with a focus on marriage and children. By contrast, boys with disabilities face more expectations around getting a job and being able to live independently.[18] On the other hand, boys with disabilities face a higher risk of physical violence than girls. As a result of gender norms, such violence is often considered a 'normal' part of boyhood, which can contribute to its perpetuation.[19]

Overall, boys are slightly more likely than girls to experience functional difficulties

TABLE 8.4 Percentage of children aged 2 to 17 years with functional difficulties

		Boys	Girls
Children aged 2 to 17 years	One or more functional difficulties	**14**	**13**
	More than one functional difficulty	**5**	**5**
Children aged 2 to 4 years	One or more functional difficulties	**6**	**5**
	More than one functional difficulty	**1**	**1**
	Seeing	0.4	0.4
	Hearing	0.3	0.3
	Walking	**0.8**	**0.6**
	Communicating	**2**	**1**
	Controlling behaviour	**2**	**2**
	Learning	2	2
	Fine motor skills	0.5	0.4
	Playing	0.6	0.5
Children aged 5 to 17 years	Children with one or more functional difficulties	**16**	**15**
	Children with more than one functional difficulty	**6**	**6**
	Children with signs of anxiety or depression only	7	7
	Children with one or more severe functional difficulties, without signs of anxiety or depression	1	1
	Children with more than one severe functional difficulty	3	3
	Seeing	6	5
	Hearing	0.4	0.3
	Walking	2	2
	Communicating	**0.9**	**0.7**
	Controlling behaviour	**4**	**3**
	Learning	**2**	**1**
	Self-care	0.9	0.8
	Concentrating	**1**	**0.9**
	Remembering	**2**	**1**
	Making friends	1	1
	Accepting change	**3**	**2**
	Signs of anxiety	**7**	**7**
	Signs of depression	4	4

Note: Numbers in bold indicate statistically significant differences between boys and girls at the 5 per cent level ($p < .05$).

Gender gaps, which only exist for some indicators of well-being, tend to be similar between boys and girls with disabilities and those without, except in the case of discrimination

TABLE 8.5 Selected indicators of well-being for boys and girls with and without functional difficulties

		Children without functional difficulties		Children with one or more functional difficulties		Children with more than one functional difficulty	
		Boys	Girls	Boys	Girls	Boys	Girls
Health and nutrition	Percentage of children aged 24 to 59 months with reported symptoms of acute respiratory infection in the last two weeks	4	4	6	6	9	9
	Percentage of children aged 24 to 59 months who are stunted	31	30	42	45	51	55
Parenting	Percentage of children aged 24 to 59 months who engaged in four or more activities to provide early stimulation and responsive care in the last three days with any adult household member	49	50	36	35	30	28
Child protection	Percentage of children aged 24 to 59 months whose births are registered with a civil authority	71	71	62	59	59	56
	Percentage of children aged 2 to 14 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	**82**	**81**	86	85	83	83
Education	Percentage of children aged 10 to 17 years who have never attended school	**6**	**8**	**9**	**12**	**13**	**17**
	Percentage of children of primary-school age who are attending primary school or higher	81	81	75	74	70	71
	Percentage of children of lower-secondary-school age who are attending lower-secondary school or higher	**54**	**58**	**44**	**48**	40	41
	Percentage of children of upper-secondary-school age who are attending upper-secondary school or higher	**41**	**45**	**27**	**34**	23	29
Discrimination	Percentage of adolescents aged 15 to 17 years who report having personally felt discriminated against or harassed within the previous 12 months on the basis of disability or on one of the other grounds for discrimination prohibited under international human rights law	12	14	**12**	**21**	**13**	**23**

Note: Numbers in bold indicate statistically significant differences between boys and girls at the 5 per cent level ($p < .05$).

Caring for children with disabilities

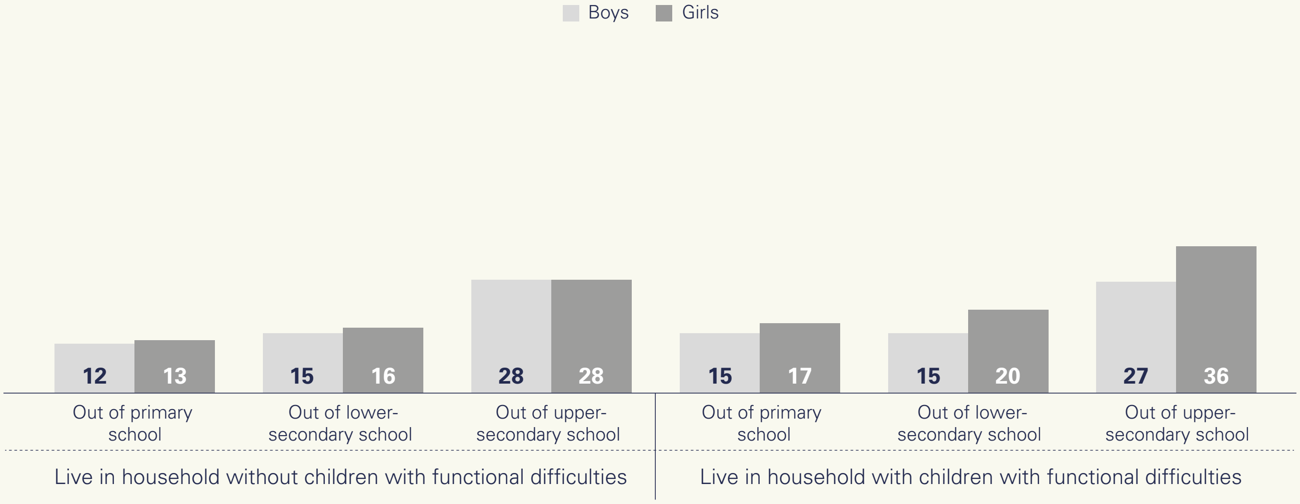
Caring for a child with disabilities can be more or less demanding depending on the level and quality of the public health infrastructure within a country. As with other care and domestic responsibilities, however, the burden is likely to fall disproportionately on women. The greater time and energy that women, versus men, spend caring for children is well documented.[20] Despite some shifting of social norms related to male involvement in caregiving among younger generations and those with higher education,[21] research shows that childcare is still mainly the responsibility of women. On an average day, women spend about three times as many hours as men do on unpaid domestic and care work.[22] This disparity has significant implications for women's health, well-being and employment opportunities[23] and can be particularly taxing for those with children with disabilities.[24]

The additional responsibilities usually entailed in caring for children with disabilities may also fall on other family members, including female siblings. Girls assume more caregiving tasks in households than boys,[25] and this also holds true in cases of households with children with disabilities, a situation that can have a negative impact on girls. Many girls, for example, become caregivers to their siblings with disabilities rather than attending school.[26]


© UNICEF/UNI297210/Schermbrucker

The likelihood that girls will be out of school increases when they live in a household with children with disabilities

FIGURE 8.7 Percentage of children aged 5 to 17 years without functional difficulties who are not attending primary, lower- or upper-secondary school



CHAPTER 9

Fulfilling the rights of every child

This report marks a pivot point. For the first time, rich, global data on children with disabilities offer a glimpse into their widely diverse experiences. The data provide the foundation for understanding who these children are and the scope and depth of the deprivation they face. When put to use through advocacy and in forging transformative policies and programmes, these data have the power to change lives.

Documenting, measuring, understanding

Nearly 240 million children in the world today have some form of disability. This estimate is higher than previous figures and is based on a more meaningful and inclusive understanding of disability, which considers several domains of functioning, including those related to psychosocial well-being.

Most children with disabilities have difficulties in just one functional domain. Psychosocial issues predominate at every age, in some cases in combination with other functional difficulties.

The lives of many children with disabilities are marked by deep exclusion and deprivation. Compared with their peers without disabilities, children with disabilities are 34 per cent more likely to be stunted, 49 per cent more likely to have never attended school, 41 per cent more likely to feel discriminated against, 51 per cent more likely to consider themselves unhappy, and 20 per cent less likely to have expectations of a better life.

Children who have difficulties in more than one domain are even more deprived: 53 per cent are stunted; just 31 per cent receive early stimulation and responsive care in the first, most critical, years of life; and 43 per cent are out of school by upper-secondary-school age.

Children with certain functional difficulties may experience particularly high levels of exclusion. For instance, children with difficulties communicating or caring for themselves are several times less likely to attend school than children who do not have difficulties in these domains. In contrast, children who experience anxiety attend school at similar rates as those without functional difficulties but appear to lag behind, especially in the acquisition of numeracy skills.

The severity of these difficulties is another critical factor. By lower-secondary-school age, the majority of children with the most severe disabilities do not attend school. By upper-secondary-school age, very few do.

© UNICEF/UN0425679/Sokol

Meanwhile, children with disabilities from disadvantaged socioeconomic backgrounds experience compounded deprivations. Young children whose mothers have, at most, a primary education are significantly more likely to have had recent episodes of diarrhoea. Young children living in the poorest households are generally less likely to receive early stimulation and responsive care, but children with disabilities are at even greater disadvantage in this regard.

From knowledge to action

All children with disabilities deserve the opportunity to thrive. For this to become a reality, governments must consider the full range of needs of these children and their families in providing programmes and services. They need to work together with persons or associations of persons with disabilities to ensure that:

- All social services and environments are inclusive and accessible, so that community-based care and assistance, critical information and opportunities to play and engage are available to every child, in times of stability as well as in humanitarian emergencies.
- Education is inclusive and accessible, so that children with disabilities can go to school in their communities and learn alongside their peers without disabilities.
- Children with disabilities are protected against violence, abuse, neglect and exploitation, are able to benefit from birth registration and family support, and can seek child-friendly, disability-inclusive support and justice when their rights are violated.
- Children with disabilities can access psychosocial support, so that they are able to maintain their well-being and receive care for mental health issues such as anxiety and depression.
- Stigma and discrimination against children with disabilities and their families are eradicated, and the voices of children with disabilities are heard.
- Children with disabilities and their families are covered by adequate social protection that supports their individual needs, links them with critical services, and helps break the cycle of poverty, deprivation and exclusion.
- Parents and caregivers of children with disabilities receive support to raise their children in the best way possible while maintaining their own mental health and well-being.
- Robust, relevant and inclusive data are generated at regular intervals. These data are used to raise awareness of rights violations and to design, implement and evaluate interventions aimed at preventing such violations.

Provide disability-inclusive services in every community

All children and their families, wherever they may live, have the right to easily accessible, high-quality, holistic services that respond to their specific needs as part of routine support across the life cycle. Moreover, they have the right to safe, inclusive and accessible environments for learning, play and civic and cultural engagement.

All services – including health, nutrition, early childhood development, mental health and psychosocial support, child protection, water, sanitation and hygiene, and social protection – should be well integrated. They must also be informed by a nuanced understanding of different types of impairments, the barriers that children with disabilities face, and the impact of both of these factors on their well-being, development and inclusion in society.

Putting this into practice involves twin-track approaches that promote increased coverage of mainstream interventions to improve outcomes for all children, while incorporating tailored and differentiated strategies to meet the needs of children with specific impairments. Children with disabilities and their families should not have to travel long distances or wait for referrals to specialized facilities to obtain basic services and support.

All professionals working with children – including health-care workers, teachers, social workers, the police, judges and lawyers – need training to understand the full extent of childhood disability and to combat related stigma and discriminatory attitudes. Parents and caregivers, too, need knowledge and skills to provide responsive care specific to their child's unique challenges.

Invest in inclusive education for all

Children with disabilities have the right to learn together with their peers without disabilities in accessible schools in their communities. Inclusive education means taking into account the distinct barriers facing children with disabilities and employing targeted approaches to help them learn.

Within schools, all staff and administrators should be able to identify and respond to the needs of learners with a range of disabilities, and to counter stigma and discrimination. Buildings must be refurbished so that classrooms, facilities such as toilets and water taps, and spaces for play and recreation are accessible to all children, and appropriate forms of transportation must be provided to and from school. All new schools must be built to be fully accessible.

Learning materials and curricula need to be tailored to children's needs, assistive technologies secured for children who require them, and additional assistance provided in the classroom so that every child can learn and progress.

Finally, schools must provide accessible and inclusive mechanisms for engagement, including feedback by students, families and communities, on the extent to which they provide an inclusive environment.

Put mental health care and psychosocial support within easy reach of all children

Mental health is central to children's right to health. All children, including children with disabilities, should have access to comprehensive and friendly primary health care that includes a psychosocial and family-centred approach. Primary health-care professionals or community health workers often provide the only safe space for many children struggling with mental health issues. When such spaces are available, accessible and effective, they constitute a critical and timely entry point for children requiring specialized care. Such support should also be available through schools, child protection and justice systems or any other social service with which children come into contact – wherever they may be, including in humanitarian settings.

Systematic efforts must also be made to address the social determinants that impact children's mental health and to tackle misconceptions and stigma. It is critical that families, communities, teachers and all professionals who work with children are equipped with


© UNICEF/UN040577/Sandovici

the knowledge and skills they need to promote mental well-being, recognize mental health issues and connect children to appropriate, community-based forms of support.

Protect children with disabilities from violence, abuse and exploitation

Every child has the right to live free from violence, abuse and exploitation. For children with disabilities, this means increasing the capacity of protection and justice officials, enabling them to understand and respond to the vulnerabilities and challenges faced by these children.

All strategies to prevent and respond to violence, abuse and exploitation must take children with disabilities into account. Professionals working with children, including teachers, social workers and health-care providers, need training to recognize and adequately respond to signs of abuse in children with different types of disabilities. They need specific knowledge and skills to support children and families. Similarly, justice systems should listen to and value the testimonies of children with disabilities. This involves training police, investigators, and legal and judicial actors on the needs of children with disabilities and working with them to improve access to justice.

Register children with disabilities at birth

Birth registration is a portal to a range of human rights, including health care and education. It is critical to preventing discrimination, abuse and other rights violations.

Campaigns to expand birth registration should make efforts to include children with disabilities by actively reaching out to their families and raising awareness about the importance of registration for every child.

Acknowledgement of their existence is the birthright of every child. For that reason, birth registration systems must be flexible and responsive to the circumstances of children and their parents and work to reduce barriers, such as the cost of registration and long distances to registration facilities. Strategies to raise levels of birth registration include extending legally permissible registration periods, waiving associated fees and fines, deploying mobile registration units, and leveraging routine outreach programmes in health and social protection.

Make water, sanitation and hygiene facilities accessible everywhere

Increasing access to WASH services for children with disabilities can help reduce the barriers they face in realizing many other rights, including education and health. This entails the strengthening of WASH systems to ensure that related services, infrastructure, supplies and information are accessible to and usable by children with different types of impairments.

Governments need to invest in the development of national standards as well as programming to ensure that safe and accessible WASH facilities are available in all households, schools, health centres and other public facilities. COVID-19 has highlighted the importance of handwashing with soap. Further investment is needed to improve the accessibility of handwashing facilities. Disability-inclusive programmes should remove barriers that prevent girls with disabilities from participating in society when they are menstruating by ensuring inclusive access to WASH facilities, menstrual hygiene products and sensitive information.

Invest in robust social protection that takes disability into account

Every child has the right to a life free from poverty and exclusion. To alleviate the deprivations confronted by children with disabilities and their families, governments need to increase the capacity, funding, equity, efficiency and scope of social protection programmes. Universal health coverage is essential, with services to include disability-specific health care, such as rehabilitation and assistive devices.

Social transfer programmes should also be extended to all children with disabilities. Additionally, governments need to provide additional funding to ensure universal social protection floors. Eligibility requirements should include children with a wide array of disabilities, recognizing the costs related to disability. Awareness of such programmes needs to be expanded and the application process simplified to encourage uptake.


© UNICEF/UN0539874/Noman

Support parents and caregivers of children with disabilities

Family-friendly policies can go a long way towards helping children with disabilities realize their right to grow up in a nurturing family environment. Ideally, disability-inclusive parenting and family-support programmes should be integrated into health and early childhood development services. They should promote responsive caregiving practices; support caregivers' own well-being and mental health, including through respite services; and empower parents with the knowledge, attitudes and skills to provide educational support and advocate on behalf of their children.

Policies on breastfeeding and parental leave, child benefits and services such as affordable, accessible, high-quality and inclusive childcare are also critical to creating supportive environments for children with disabilities and their caregivers.

Ensure access to assistive technology for all children who need it

Assistive technology can make a huge difference to the well-being, development, independence and participation of many children with disabilities, enabling them to more readily communicate, move about and care for themselves – opening up opportunities for them to learn, play and perform daily tasks.

Assistive technologies and disability-inclusive supplies are rapidly evolving. Ensuring access to them entails working with health and social service systems, businesses and organizations of persons with disabilities to promote quality standards, develop guidance, foster innovation, shape markets, and identify and address supply barriers. Increased access to these critical tools is key to creating an enabling environment.

End institutionalization and prioritize family-based care

All too often, for a multitude of reasons, children with disabilities end up in residential care. Governments, donors, United Nations agencies and civil society must work together to move away from institutionalization. Rather, they should prioritize programmes, support and resources at the community level to enable families to care for their children with disabilities at home and in the community.

When remaining with their parents is not possible, children should be placed in family-based alternative care settings – through foster or kinship care, for example – to help them realize their right to grow and develop within a nurturing, supportive family setting.

Counter stigma and discrimination

Eradicating stigma and discrimination implies systemic change in norms, attitudes and behaviours. This takes time, investment and a range of integrated programming, policy and advocacy interventions at many levels of society.

Promoting shifts of this magnitude will require awareness-raising and capacity-building around disability among key stakeholders. It also demands advocating for and implementing policies and legislation that explicitly address stigma and discrimination against children with disabilities and their families and ensuring adequate financing, so that evidence-based strategies can be taken to scale.

Social and behaviour change communication interventions are another critical tool, engaging children, families, communities, service providers and decision-makers in identifying, understanding and addressing the complex, underlying sociocultural practices and norms that influence negative attitudes and discriminatory behaviours.

Include children with disabilities in COVID-19 prevention and response

Governments must make explicit efforts to include children with disabilities and their families in COVID-19 prevention and response efforts, vaccination campaigns and reopening strategies and guidelines (see page 160). Measures must be adapted to the needs of children with a range of disabilities, taking into account the heightened health vulnerabilities of children with certain impairments, and formulating targeted strategies to reach those who may require in-home care and vaccination. Forward-looking action is required to prevent children with disabilities from being excluded as societies reopen. And with the resumption of in-person learning, assistance should be given to those children whose disabilities make changes in routine especially difficult.

Close data gaps and build knowledge that can make a difference

All countries should produce high-quality data on children with disabilities at regular intervals. An important first step is adopting data collection instruments that measure the breadth and depth of functional difficulties that children experience. Data should also capture the extent of the restrictions they face in becoming active members of society. This means collecting additional data about the context in which they live, the barriers in their environment, the extent of their participation in different spheres, and their access to core services and interventions. The collection of robust data on children and adults with disabilities needs to extend to humanitarian settings and also include children who are institutionalized or in street situations.

Counting all children requires the building of capacity so that quality standards are adopted worldwide for official disability statistics. Countries need support in their efforts to collect, analyse and disseminate data on children with disabilities. This should include the engagement – and empowerment – of all relevant stakeholders, including organizations of persons with disabilities.

For every child, inclusion

Including children with disabilities in all aspects of life must be a priority. Every child, everywhere, has something to offer. His or her energy, talents and ideas can make a positive difference to families, communities and the world.

The extent to which children with disabilities are deprived, feel discriminated against and lack hope for the future makes it clear that societies are not doing enough to realize the most basic human rights of all children. As a result, the vicious cycle of exclusion and disadvantage that leaves children with disabilities behind continues. Knowing that the problem comes down to barriers that society creates – which are a matter of choice, not immutable realities – means that there is potential for change. Part of that change will involve celebrating children with disabilities and embracing diversity in all its forms.

It starts right here, right now. When children with disabilities are seen and counted, they are no longer invisible, and the promise of inclusion becomes a real possibility.

The steps in between depend upon every stakeholder. They involve shared responsibility, accountability and working together to ensure that all children, including children with disabilities, are able to achieve their inherent potential.

© UNICEF/UNI309764// Frank Dejongh

EMERGING ISSUE: Including children with disabilities in the COVID-19 response

The COVID-19 pandemic has disrupted life in every corner of the globe, creating a crisis that is unprecedented in its scale and scope. Many unanswered questions remain about its impact and especially its long-range consequences. A growing body of evidence shows that both the virus itself, as well as the measures implemented by governments to contain its spread, disproportionately impact children with disabilities and their families.

Children with disabilities may face a heightened risk of exposure to the virus, along with complications and death, due to underlying conditions and pre-existing vulnerabilities. They are at higher risk of contracting the virus because they are more likely to live in congregate care and to be unable to practise preventive measures, such as the wearing of masks, handwashing and physical distancing.[1] In addition, overwhelmed health systems have prompted concern that children and adults with disabilities will be discriminated against in triage and suffer worse health outcomes due to poor medical care.[2]

Parallel to concerns regarding the virus itself are the inadvertent and worrisome effects of lockdowns, including isolation, increased anxiety and depression, and the exacerbation of pre-existing mental health issues, which can worsen in the absence of community support networks.[3] Changes to and the loss of structure and routines can take a heavy toll on children with disabilities, especially on those with intellectual and/or psychosocial difficulties. Such children may not understand or cope well with sudden and major disruptions or the need for certain preventive measures. Finally, quarantine constraints and the overall burden faced by families may also place children with disabilities at increased risk of violence at home.

A lack of access to services triggered by restrictions to control the spread of COVID-19 has major implications for children with disabilities. In general, such children have greater health-care needs and a higher dependency on community-based services – challenges that have mostly gone unrecognized in pandemic response plans.[4]

© UNICEF/UNI359194/Yan

In situations where services have been interrupted, social inequalities are magnified for children with disabilities since they are often most reliant on these services for their well-being.[5] For all children, school closures are likely to constitute a serious disruption to their daily lives. But for children with disabilities, remote home schooling may be exceptionally difficult since they may also need assistive devices or special curricula that allow for continued education at home.[6]

With the roll-out of vaccinations increasing rapidly in some parts of the world, many countries are slowly relaxing restrictions. But as governments, communities and families transition towards a 'new normal', further challenges are emerging. Without forward-looking action, children with disabilities risk being excluded if they are not accounted for in reopening strategies. Similarly, with the resumption of in-person learning, certain children with disabilities may find it difficult to adapt to the change in routine that accompanies a return to school and to socializing after a long period of dramatically reduced interaction.[7] Moreover, whether and how children with disabilities will access vaccinations remains a concern. This will require not only the availability of vaccines but also the integration of features that can help make them accessible to children with disabilities and their families. These range from readily understood information and communication materials to navigable physical, social and sensory environments. Special efforts are required to provide and expand opportunities for inclusive care of children with disabilities at vaccination sites and to formulate targeted strategies to reach out to children who may require in-home vaccination.

While much has been learned about the impact of the COVID-19 crisis, far more remains uncertain. Research and data collection are needed to draw attention to the experiences of children with disabilities during the pandemic, to advocate for a range of services to be available now and in the future, and to inform the design of specific interventions. As societies reopen, collecting and reporting data disaggregated by disability status is more important than ever. It can provide evidence on the extent to which vaccination campaigns and reopening strategies are excluding children with disabilities, inform ongoing efforts to increase accessibility and shape a response that accounts for the needs of all children.

Compared with children without disabilities, children with disabilities are:

26% less likely to have improved sanitation facilities in their households

12% less likely to have improved drinking water sources in their households

8% less likely to have water and soap for handwashing in their households

1.7 times more likely to have diarrhoea

1.5 times more likely to have symptoms of acute respiratory infection

1.3 times more likely to have a fever

25% less likely to receive early stimulation and responsive care

53% less likely to have three or more children's books in their households

16% less likely to read books or be read to at home

Notes: The analysis above estimated adjusted risk ratios using generalized linear regression models, with each of the variables as a dependent variable and disability as an independent variable, all of which yielded significant associations at 1 per cent ($p < .01$). Regressions were adjusted for a child's sex, age, residence and household wealth. Data on water, sanitation and handwashing refer to children aged 2 to 17 years. Data on health, early stimulation and children's books refer to children aged 2 to 4 years. Data on reading or being read to refer to children aged 7 to 14 years.

Technical annex

This report aims to generate evidence on children with disabilities aligned, to the greatest extent possible, with the Convention on the Rights of Persons with Disabilities and the biopsychosocial model of disability. This intent guided the production of the global and regional estimates and is reflected in country-level data collected by the Child Functioning Module. In line with this approach, the expression 'children with disabilities' used in charts and tables throughout the report refers to 'children with functional difficulties'.

Regional and global estimates

The following strategy was used to arrive at regional and global estimates of children with disabilities:

1. Data compilation

All available nationally representative data relevant to the estimation of disability among children were included in a database along with key metadata and information about methodologies and data quality.

2. Data selection

The selection of the data focused on harmonizing broad methodological and conceptual issues with the aim of promoting data comparability prior to estimation. Exclusion criteria targeted mostly methodological aspects of the data source in general, while inclusion criteria targeted conceptual and methodological aspects of the measurement tools used to collect the data (Table 1).

a. Data collected before 2005 and those not based on population censuses and household surveys were excluded. Disability estimates are often reported for wide age groups that include both children and adults. Data sources that did not include a separate estimate for children were excluded.

b. Classification of data sources was standardized in terms of methodological aspects that can affect the identification of children with disabilities:
  - Measurement tool used
  - Number of functional domains covered
  - Use of household-level or individual-level filter questions
  - Type of response scales employed
  - The respondent to the questionnaire.

c. Internationally comparable data sources on functional difficulties or limitations that include a rating scale to measure the severity of the difficulties were selected.

TABLE 1 Summary of inclusion and exclusion criteria guiding the selection of data sources

Exclusion criteria	Inclusion criteria
• Data not derived from household surveys or censuses • Data collected before 2005 • Results not available for children	• Data about functional difficulties or limitations • Use of severity scale • Comparable data available for at least 15 countries

Application of these criteria led to the identification of 98 sources of data meeting the inclusion criteria. These data were collected through three different instruments (Table 2):

- UNICEF/Washington Group Child Functioning Module
- Washington Group Short Set on Functioning
- Global Activity Limitation Indicator.

Most data were derived from Multiple Indicator Cluster Surveys, Demographic and Health Surveys, the European Health Interview Survey (EHIS) and the European Survey on Income and Living Conditions (EU-SILC). Censuses or independent household surveys represented a few of the data sources. Most of the data were collected from 2017 onwards. However, in some cases, earlier data points were used because they were considered more aligned with the notion of disability underlying the global estimate.

Since the initial 98 data sources did not provide sufficient regional coverage, five additional data sources were selected to ensure a minimum coverage of 50 per cent of the population of children within each region. Considering the addition of these further sources, 103 data points were considered for inclusion in the final regional and global estimates (Table 3).

3. Harmonization and adjustment of data points

a. Harmonization of age groups: Results by age group

TABLE 2 Questionnaires used to collect data on children with disabilities

	Child Functioning Module		Washington Group Short Set	Global Activity Limitation Indicator
Number of functional domains	8 (children aged 2 to 4 years)	12 (children aged 5 to 17 years)	6	Not applicable
Respondent	Mother/primary caregiver		Household head	Mother/household head
Severity scale used	Yes		Yes	Yes
Cut-score to identify children with disabilities	'a lot of difficulty' or 'cannot do at all'		'a lot of difficulty' or 'cannot do at all'	'severely limited' or 'limited, but not severely'

TABLE 3 Countries and areas, population coverage and data collection instruments

	Countries and areas		Percentage of child population	Type of instrument			
	Total number	Number included in the analysis		Child Functioning Module	Washington Group Short Set	Global Activity Limitation Indicator	Other
East Asia and the Pacific	33	16	80	10	5	0	1
Eastern and Southern Africa	25	13	74	5	7	0	1
Europe and Central Asia	55	31	59	9	1	20	1
Latin America and the Caribbean	37	14	74	10	3	0	1
Middle East and North Africa	19	10	73	5	5	0	0
North America	2	2	100	2	0	0	0
South Asia	8	5	96	3	1	0	1
West and Central Africa	24	12	74	9	3	0	0
Total	**203**	**103**	**84**	**53**	**25**	**20**	**5**

were harmonized to match the Child Functioning Module's age groups (children aged 2 to 4 years and 5 to 17 years). For some data sources, prevalence for the harmonized age groups was calculated directly from empirical results available at the country level. For the remaining sources, the harmonized results by age group were obtained using weighted averages of the data points available.

b. Adjustment of the Washington Group Short Set: Instruments that collect data based on a restricted number of functional domains tend to underestimate the proportion of children with disabilities. Results from several countries and areas that used both the Child Functioning Module and the Washington Group Short Set show that the number of children aged 5 to 17 years who are identified as having functional difficulties by the six domains covered by the Short Set is substantially lower than the number identified by the 12 domains included in the Child Functioning Module. While this underestimation is mostly due to the larger number of domains in the Child Functioning Module, other sources of underestimation should be considered, given that the two instruments are typically implemented under different conditions. For example, while the Child Functioning Module is intended to be administered to the child's mother (or if the mother is deceased or living in another household, to the child's primary caregiver), the Short Set is typically administered to the household head. Table 4 shows the differences in the estimates generated by the two instruments in seven countries and areas.

TABLE 4 Percentage of children aged 5 to 17 years with functional difficulties measured by the six domains covered by the Short Set, by the same six domains in the Child Functioning Module and by the 12 domains covered in the Child Functioning Module

	Washington Group Short Set (6 domains)	Child Functioning Module (6 domains only)	Child Functioning Module (12 domains)
Costa Rica	4.0	7.1	21.1
Guyana	2.2	5.6	17.5
Mexico	1.5	4.1	11.2
Pakistan	2.5	5.0	17.9
State of Palestine	1.5	3.0	14.9
Tonga	1.4	2.7	9.8
Zimbabwe	4.7	4.9	10.1

To correct for the underestimation of the percentage of children with disabilities, the data points based on the Short Set were adjusted. The process was as follows. First, microdata from 36 countries that used the Child Functioning Module were processed to generate country-level results of the percentage of children aged 5 to 17 years identified as having one or more functional difficulties based on: (a) the full set of 12 functional domains, and (b) the subset of 6 functional domains that are common to the two measures. Second, linear regression models were used to predict country-level results for the 12 functional domains based on the country-level results of the 6 functional domains and the country's under-five mortality rate. Three separate models were used to generate the adjustment factors for the three age groups, as shown in the following formulas:

i. 2 to 4 years: $CFM2\text{-}4 = (0.85*SS) + (0.0005*U5MR) - 0.0051$
ii. 5 to 17 years: $CFM5\text{-}17 = (1.79*SS) + (0.0006*U5MR) + 0.0466$
iii. 2 to 17 years: $CFM2\text{-}17 = (1.57*SS) + (0.0006*U5MR) + 0.0337$

where SS is the percentage of children aged 5 to 17 years with functional difficulties based on the Short Set instrument and U5MR is the under-five mortality rate per 1,000 live births. Table 5 summarizes the process of data selection, harmonization and adjustment.

4. Confidence intervals

Errors in data are inevitable. Uncertainty will always exist around data and estimates, both nationally and internationally. To allow for added comparability, estimates of children with disabilities were generated with confidence intervals. Because 66 data sources did not include the standard errors for their data points, their confidence intervals needed to be imputed. In such cases, it was assumed that countries would have produced their data points with the average precision observed in their region. Western Europe was a special case, since these countries had point estimates but lacked confidence intervals for the whole region, with the exception of one country. Considering the characteristics of the region, it was assumed that Western European countries would produce estimates with a similar precision to those of North America. Thus, confidence intervals for Western Europe were informed by the average semi-amplitude of the 95 per cent confidence intervals of the North America region.

5. Imputation of the estimate for children under 2 years of age

Data on disability among children under the age of 2 are scarce. To date, no questions on functional difficulties have been validated that could be implemented to collect data about very young children in surveys and generate results that are reliable and comparable cross-nationally. While most severe impairments manifest early, sometimes even before children are born, many functional difficulties only become evident as children grow up. Measuring functional difficulties in children under the age of 2, in the context of surveys or censuses, is thus complicated since mothers or primary caregivers might not be aware of such difficulties, especially if these are not severe.

Yet, excluding children under this age would lead to a systematic underestimation of the number of children

TABLE 5 Sources of data and adjustment procedures

Sources of data	Adjustment	Number of countries and areas
Data based on the Child Functioning Module	No	53
Data based on the Washington Group Short Set	Yes (a), (c)	25
Data based on the Global Activity Limitation Indicator	Yes (b)	20
Data based on other instruments	Yes (c)	5
Included in estimates		103
Estimates based on non-comparable data		35
No estimates available for children		36
Data older than 2005		20
No data available		9
Not included in estimates		**100**
All countries and areas		**203**

a. Adjusted for the relative contribution of the six domains measured by the Washington Group Short Set compared to the overall prevalence yielded by the 12 domains measured by the Child Functioning Module, and for the country's under-five mortality rate.
b. Harmonization of age groups.
c. Technical consultation with experts in each country.

with disabilities. Estimates of major and severe impairments at birth among surviving children, and neurodevelopmental and cognitive impairments among babies born pre-term and full-term, range between 2.4 per cent and 2.8 per cent.[1] Even though these estimates are restricted to more severe impairments and conditions, they provide evidence that functional difficulties are to be expected from birth at a prevalence of at least that magnitude. Finally, since some functional difficulties only become evident to mothers as children grow older, it is also reasonable to expect that, among those under 2 years, there is a higher proportion of children with functional difficulties than reported. Therefore, based on these considerations, it seemed reasonable to assume that the estimate for children under the age of 2 could be informed by the estimate for children aged 2 to 4 years in each country.

6. Estimation of the regional and global number of children with disabilities

The estimations use a meta-analytical approximation to calculate the regional and global number of children with disabilities. Meta-analysis of proportions was implemented using the prevalence rates of children with disabilities for each country, 95 per cent confidence intervals and the child population for all age groups. Country-level prevalence rates were transformed into the number of cases using the child population. Regional estimates were generated using random effects models considering that, despite harmonization efforts, the methods used to estimate the prevalence of disability were heterogeneous. This approach also assumed that prevalence estimates from countries that could not be included in the analysis were better informed by the random effects model. Random effects meta-analysis incorporates the heterogeneity of prevalence across countries rather than relying on the prevalence of larger countries, as assumed by the fixed effects model. The only exception was the North America region, where the two countries that constitute the region (Canada and the United States) used the same instrument and a fixed effects model was used. For all other regional estimates, random effects were utilized to incorporate the within- and between-country variability. The regional estimates were then used to generate the population-weighted global estimate (Table 6).

TABLE 6 Regional and global estimates

	Children aged 0 to 4 years				Children aged 5 to 17 years				Children aged 0 to 17 years			
	%	Lower bound	Upper bound	Number of children with disabilities (in thousands)	%	Lower bound	Upper bound	Number of children with disabilities (in thousands)	%	Lower bound	Upper bound	Number of children with disabilities (in thousands)
East Asia and the Pacific	3.5	3.3	3.8	5,333	9.5	7.5	11.6	37,788	7.8	6.7	9.1	43,121
Eastern and Southern Africa	5.2	4.5	6.0	4,509	12.8	11.2	14.4	24,356	10.4	9.5	11.3	28,865
Europe and Central Asia	2.7	2.4	3.1	1,515	6.5	5.6	7.4	9,299	5.5	4.9	6.0	10,814
Latin America and the Caribbean	3.8	3.3	4.5	1,978	12.6	11.5	13.7	17,102	10.2	9.6	10.8	19,080
Middle East and North Africa	4.5	3.3	6.0	2,246	16.9	13.5	20.5	18,694	13.1	11.3	15.1	20,940
North America	4.4	3.9	4.9	943	12.0	11.3	12.7	7,073	9.9	9.5	10.4	8,016
South Asia	3.7	2.9	4.7	6,254	13.0	10.2	16.1	58,177	10.5	9.0	12.2	64,431
West and Central Africa	6.8	5.8	7.9	6,139	18.9	15.3	22.7	34,944	14.9	12.8	17.2	41,083
World	**4.3**	**4.1**	**4.6**	**28,917**	**12.5**	**11.7**	**13.3**	**207,433**	**10.1**	**9.7**	**10.6**	**236,350**

For a complete list of countries and areas in the regions and subregions, see <data.unicef.org/regionalclassifications>. Demographic data are from: United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects 2019*, Rev. 1, online edition.

Analyses using country-level microdata

Child Functioning Module

The Child Functioning Module captures the perceptions of mothers or primary caregivers about functional difficulties among children aged 2 to 17 years, and daily signs of anxiety and depression among children aged 5 to 17 years. The reporting of anxiety or depression should be interpreted as an indication of those conditions, rather than as a clinical diagnosis. Results should not be used to assess the epidemiological characteristics of any disease or impairment; rather, they provide an indication of the prevalence of moderate to severe functional difficulties that, in interaction with various barriers, can place children at increased risk for non-participation and exclusion.

Microdata preparation

All data were obtained from publicly available MICS datasets. MICS survey design follows a probabilistic, clustered, stratified and multi-stage sampling approach to generate population-level indicators that are representative at the national level, urban-rural and other domains (usually regions), according to the country-specific stratification strategy.

As of November 2021, data were available across 43 countries and areas, including from two subnational surveys (Pakistan's Punjab and Sindh regions). Data processing was conducted to generate the child functioning variables, more than 60 standard indicators, and relevant disaggregation variables. Access to the MICS dataset for the Democratic People's Republic of Korea was restricted at the time of the analysis; therefore most indicators for this country could not be reported on.

Throughout the report, country-level analyses are used whenever sample sizes allow for them. Pooled analyses are mostly used to show results at the domain level, for which country-level sample sizes tend to be insufficient. Pooled analyses are also used to illustrate disaggregated results for key indicators at the pooled-sample level. Results for country analyses that are based on 25 to 49 unweighted observations are presented within parentheses and should be interpreted with caution. Results based on fewer than 25 unweighted observations were suppressed. Results for pooled analyses that are based on 50 to 249 unweighted observations are presented within parentheses and those on fewer than 50 unweighted observations were suppressed. Within figures, all numbers except those valued under one were rounded to the nearest whole value.

Country-level data were merged into a pooled dataset, together with the country's sample weights and sample design variables (primary sample units and strata). In this pooled dataset, weights were maintained for country-level analyses. First, a single stratum indicator was generated to reflect the complete multi-frame design and ensure that each stratum and primary sample unit assumed a unique value across countries. Next, population scaling was carried out to recalibrate the country-specific weights, adjusting for country population size relative to sample sizes. The child population in Punjab and Sindh regions represents around 75 per cent of the total population of children in Pakistan, and therefore data from these two surveys were considered to be representative at the country level. Sample weights for both regions were thus recalibrated in a similar way to that of other countries.

There are a few assumptions behind this approach that should be considered:

- The surveys are comparable with respect to aspects that could influence results, such as standardized survey questions and interviewing protocols.
- Each dataset contains nationally (or subnationally) representative probabilistic samples with similar designs.
- In the resulting pooled dataset, the sample selection process for each of the finite populations for each country is assumed to be random.
- Each country dataset includes a sample weight that reflects the county-specific sample design parameters, including selection probabilities and non-responses.
- In the pooled dataset, each country becomes like an additional stratum.
- Since country samples are independent, the variance for pooled estimations for a given indicator is equal to the sum of variance for that indicator in each country. Standard errors for the pooled estimations can then be calculated from the resulting pooled variance.
- Estimations for a given indicator at the pooled level are expected to be more precise than at the country level because the aggregated sample size is greater than the sample size of individual countries.

Analytic approach

The main goal of the report is to identify disparities affecting children with disabilities. Most of the analyses aim to illustrate differences between children with and without disabilities in relation to key indicators. To achieve this, the report analyses are heavily based on statistical inference for finite populations and follow mostly a 'design-based' approach. In survey data, standard errors and confidence intervals can be used to describe the precision of estimates.

Confidence intervals

Most analyses in the report draw on confidence intervals (CIs) to make inferences about the different indicators under study.

CIs reflect the precision of an estimate. Several factors, including the sample design and sample size, as well as the expected prevalence and variability of an indicator, can influence the precision of any reported estimate.

CIs can also be used to identify statistically significant differences between two results – that is, differences that are not due to chance. In the report, CIs and p-values were thus used to compare results for children with and without disabilities and other population subgroups of interest, such as boys versus girls or children living in rural versus urban areas.

Since the report draws on a large number of countries, country-level results only show countries and areas with statistically significant differences at the 5 per cent level ($p < .05$).

Technical note on estimates on the back cover

The results were estimated using generalized linear regression models, with each of the outcomes as a dependent variable, and the disability status of the child as independent variables, all of which yielded significant associations at 1 per cent ($p < .01$). All models were adjusted for a child's sex, age, residence and household wealth.

Endnotes

CHAPTER 1. Every child has the right to be counted

1 The inclusion of questions regarding children younger than 2 years was one objective of the Child Functioning Module. However, to date, no universal functioning questions have been identified for these very young children that could be implemented in surveys and that would elicit valid, reliable and cross-nationally comparable results.

2 Rydzewska, Ewelina, 'Unexpected Changes of Itinerary: Adaptive functioning difficulties in daily transitions for adults with autism spectrum disorder', *European Journal of Special Needs Education,* vol. 31, no. 3, 2016, pp. 330-343.

3 Loeb, Mitchell, et al., 'The Development and Testing of a Module on Child Functioning for Identifying Children with Disabilities on Surveys. I: Background', *Disability and Health Journal,* vol. 11, no. 4, 2018, pp. 495-501.

4 Massey, Meredith, 'The Development and Testing of a Module on Child Functioning for Identifying Children with Disabilities on Surveys. II: Question development and pretesting', *Disability and Health Journal,* vol. 11, no. 4, 2018, pp. 502-509.

5 International Disability Alliance, 'Joint Statement by the Disability Sector: Disability data disaggregation', <www.internationaldisabilityalliance.org/data-joint-statement-march2017>, accessed 19 May 2021.

6 United Nations Children's Fund, 'Multiple Indicator Cluster Surveys', <https://mics.unicef.org/>, accessed 4 November 2021.

7 Washington Group on Disability Statistics, 'Washington Group Short Set on Functioning', <www.washingtongroup-disability.com/question-sets/wg-short-set-on-functioning-wg-ss/>, accessed 7 November 2021.

8 Byass, Peter, 'The Imperfect World of Global Health Estimates', *PLoS Medicine*, vol. 7, no. 11, 30 November 2010.

9 World Health Organization, 'Disability Prevention and Rehabilitation: Report of the WHO Expert Committee on Disability Prevention and Rehabilitation', Technical Report Series 668, WHO, Geneva, 1981, <http://whqlibdoc.who.int/trs/WHO_TRS_668.pdf>, accessed 7 November 2021.

10 World Health Organization, *World Report on Disability*, WHO, Geneva, 2011.

11 Arnesen, Trude, and Erik Nord, 'The Value of DALY Life: Problems with ethics and validity of disability adjusted life years', *British Medical Journal*, vol. 319, 1999, pp. 1423-1425.

12 Anand, Sudhir, and Kara Hanson, 'Disability-Adjusted Life Years: A critical review', *Journal of Health Economics*, vol. 16, no. 6, 1997, pp. 685-702.

13 Mont, Daniel, 'Measuring Health and Disability', *The Lancet*, vol. 369, no. 9573, 2007, pp. 1658-1663.

14 Olusanya, Bolajoko O., et al. 'Global Burden of Childhood Epilepsy, Intellectual Disability, and Sensory Impairments', *Pediatrics*, vol. 146, no. 1, July 2020, pp. 1-17.

15 All references to Kosovo in this report should be understood to be in the context of United Nations Security Council resolution 1244 (1999).

CHAPTER 2. Every child has the right to survive and thrive

1 United Nations, Universal Declaration of Human Rights, United Nations, Paris, 10 December 1948, article 3; United Nations, Convention on the Rights of the Child, United Nations, New York, 20 November 1989, article 23; United Nations, Convention on the Rights of Persons with Disabilities, 30 March 2007, United Nations, New York, articles 10 and 25.

2 United Nations Children's Fund, 'Manual for Anthropometry', UNICEF Multiple Indicator Cluster Surveys (MICS), UNICEF, New York, undated.

3 Bell, Kristie L., et al., 'Use of Segmental Lengths for the Assessment of Growth in Children with Cerebral Palsy', in *Handbook of Anthropometry: Physical measures in human form in health and disease*, edited by Victor R. Preedy, Springer-Verlag, New York, 2021, pp. 1279-1297; Samson-Fang, Lisa, and Kristie L. Bell, 'Assessment of Growth and Nutrition in Children with Cerebral Palsy', *European Journal of Clinical Nutrition*, vol. 67, 2013, pp. S5-S8.

4 Hardy, Jane, et al., 'Reliability of Anthropometric Measurements in Children with Special Needs', *Archives of Disease in Childhood*, vol. 103, no. 8, August 2018, pp. 757-762.

5 Samson-Fang and Bell, 'Assessment of Growth and Nutrition in Children with Cerebral Palsy'.

6 Cowley, Peter, and Dean T. Jamison, 'The Cost-Effectiveness of Immunization', *World Health*, vol. 46, no. 2, March-April 1993, pp. 20-22.

7 United Nations Children's Fund and Leonard Cheshire Disability and Inclusive Development Centre, 'Disability Prevention Efforts and Disability Rights: Finding common ground on immunization efforts', Working paper, undated, <www.academia.edu/32635123/Disability_Prevention_Efforts_and_Disability_Rights_Finding_Common_Ground_on_Immunization_Efforts>, accessed 10 February 2020; Mactaggert, Islay, et al., 'Assessing Health and Rehabilitation Needs of People with Disabilities in Cameroon and India', *Disability and Rehabilitation*, vol. 38, no. 18, December 2016, pp. 1757-1764.

8 'Disability Prevention Efforts and Disability Rights'.

9 Alabaf, Setareh, et al., 'Physical Health in Children with Neurodevelopmental Disorders', *Journal of Autism and Developmental Disorders*, vol. 48, no. 1, January 2019, pp. 83-95; Seddon, Paul C., and Yasmin Khan, 'Respiratory Problems in Children with Neurological Impairment', *Archives of Disease in Childhood*, vol. 88, no. 1, January 2003, pp. 75-78.

10 'Disability Prevention Efforts and Disability Rights'.

11 United Nations Children's Fund, *One Is Too Many: Ending child deaths from pneumonia and diarrhoea*, UNICEF, New York, 2016.

12 Kuper, Hannah, et al., 'The Impact of Disability on the Lives of Children: Cross-sectional data including 8,900 children with disabilities and 898,834 children without disabilities across thirty countries', *PLoS One*, vol. 9, no. 9, September 2014, pp. 1-11.

13 Seddon and Khan, 'Respiratory Problems in Children with Neurological Impairment'.

14 Lorntz, Breyette, et al., 'Early Childhood Diarrhea Predicts Impaired School Performance', *Pediatric Infectious Disease Journal*, vol. 25, no. 6, June 2006, pp. 513-520; Niehaus, Mark D., et al., 'Early Childhood Diarrhea Is Associated with Diminished Cognitive Function 4 to 7 Years Later in Children in a Northeast Brazilian Shantytown', *American Journal of Tropical Medicine and Hygiene*, vol. 66, no. 5, May 2002, pp. 590-593; Podewils, Laura Jean, 'Acute, Infectious Diarrhea among Children in Developing Countries', *Seminars in Paediatric Infectious Diseases*, vol. 15, no. 3, July 2004, pp. 155-168.

15 Seddon and Khan, 'Respiratory Problems in Children with Neurological Impairment'.

16 Adugna, Molalign, et al., 'Barriers and Facilitators to Healthcare Access for Children with Disabilities in Low and Middle-Income Sub-Saharan African Countries: A scoping review', *BMC Health Services Research*, vol. 20, no. 1, January 2020; Kuper, Hannah, and Phyllis Heydt, 'The Missing Billion: Access to health services for 1 billion people with disabilities', International Centre for Evidence in Disability (ICED), July 2019, <www.lshtm.ac.uk/media/38726>, accessed 10 February 2021.

17 Lamptey, De-Lawrence, 'Health Beliefs and Behaviours of Families towards the Health Needs of Children with Intellectual and Developmental Disabilities (IDD) in Accra, Ghana', *Journal of Intellectual Disability Research*, vol. 63, no. 1, January 2019, pp. 12-20.

18 Ibid.
19 Groce, Nora E., et al., 'Inclusive Nutrition for Children and Adults with Disabilities', *The Lancet Global Health*, vol. 1, no. 4, October 2013, pp. E180-E181; United Nations Children's Fund, *The State of the World's Children 2019: Children, food and nutrition – Growing well in a changing world*, UNICEF, New York, 2019.
20 Sonik, Rajan, et al., 'Food Insecurity in U.S. Households that include Children with Disabilities', *Exceptional Children*, vol. 83, no. 1, July 2016, pp. 42-57.
21 Groce et al., 'Inclusive Nutrition for Children and Adults with Disabilities'.
22 Groce, Nora E., et al., 'Malnutrition and Disability: Unexplored opportunities for collaboration', *Paediatrics and International Child Health*, vol. 34, no. 4, April 2014, pp. 308-314.
23 CBM Australia, et al., 'Disability Inclusion in Drought and Food Crisis Emergency Response', Fact sheet, July 2011, <www.cbm.org/fileadmin/user_upload/Disability_Inclusion_in_Drought_and_Food_Crisis_Emergency_Response.pdf>, accessed 20 August 2021.
24 Groce, Nora E., Paola Ayora and Lawrence C. Kaplan, 'Immunization Rates among Disabled Children in Ecuador: Unanticipated findings', *The Journal of Pediatrics*, vol. 151, no. 2, August 2007, pp. 105-222.
25 Groce et al., 'Malnutrition and Disability'.
26 Ng, Marie, et al., 'Effective Coverage: A metric for monitoring universal health coverage', *PLoS Medicine*, vol. 11, no. 9, September 2014, pp.1-9.

CHAPTER 3. Every child has the right to a nurturing family environment

1 World Health Organization, United Nations Children's Fund and World Bank Group, *Nurturing Care for Early Childhood Development: A framework for helping children survive and thrive to transform health and human potential*, WHO, Geneva, 2018. Responsive care refers to interactions that are emotionally supportive and entail engagement of a child with a parent or caregiver; they can include responsive feeding, playing, singing or talking. See United Nation's Children Fund, *Early Moments Matter for Every Child*, UNICEF, New York, 2017.
2 United Nations, Convention on the Rights of the Child, United Nations, New York, 1989; United Nations, Convention on the Rights of Persons with Disabilities, United Nations, New York, 2006.
3 *Early Moments Matter for Every Child*; Walker, Susan P., et al., 'Inequality in Early Childhood: Risk and protective factors for early child development', *The Lancet*, vol. 378, 2011, pp. 1325-1338.
4 *Early Moments Matter for Every Child.*
5 Wall, Shavaun, et al., 'Child Care for Low-Income Children with Disabilities: Access, quality, and parental satisfaction', *Journal of Early Intervention*, vol. 28, no. 4, 2006, pp. 283-298.
6 Green, Katherine B., Nicole Pattern Terry and Peggy A. Gallagher, 'Progress in Language and Literacy Skills among Children with Disabilities in Inclusive Early Reading First Classrooms', *Topics in Early Childhood Special Education*, vol. 33, no. 4, 2013, pp. 249-259.
7 van der Schuit, Margje, et al., 'Home Literacy Environment of Pre-School Children with Intellectual Disability', *Journal of Intellectual Disability Research*, vol. 53, no. 12, 2009, pp. 1024-1037.
8 Buchanan, Michelle, and Tricia Giovacco Johnson, 'A Second Look at the Play of Young Children with Disabilities', *American Journal of Play*, vol. 2, no. 1, 2009, pp. 41-59.
9 Llewellyn, Gwynnyth, et al., 'The Well-Being of Children with Disabilities in the Asia Pacific Region: An analysis of UNICEF MICS 3 survey data from Bangladesh, Lao PDR, Mongolia, and Thailand', Centre for Disability Research and Policy, University of Sydney, Sydney, 2012; Spiker, Donna, Glenna C. Boyce and Lisa K. Boyce, 'Parent-Child Interactions when Young Children Have Disabilities', *International Review of Research in Mental Retardation*, vol. 25, 2002, pp. 35-70.
10 Leeb, Rebecca T., et al., 'Does Childhood Disability Increase Risk for Child Abuse and Neglect?', *Journal of Mental Health Research in Intellectual Disabilities*, vol. 5, no. 1, 2012, pp. 4-31.
11 Hibbard, Roberta A., et al., 'Maltreatment of Children with Disabilities', *American Academy of Pediatrics*, vol. 199, 2007, p. 1018.
12 Collishaw, Stephan, et al., 'Longitudinal Study of Parents and Children Study Team. Maternal childhood abuse and offspring adjustment over time', *Development Psychopathology*, vol. 19, no. 2, 2007, pp. 367-383.
13 de Castro, Filipa, et al., 'Poor Early Childhood Outcomes Attributable to Maternal Depression in Mexican Women', *Archives of Women's Mental Health*, vol. 20, no. 4, 2017, pp. 561-568.
14 Bizzego, Andrea, et al., 'Children with Developmental Disabilities in Low- and Middle-Income Countries: More neglected and physically punished', *International Journal of Environmental Research and Public Health*, vol. 17, no. 19, 2020.
15 Njelesani, Janet, '"A Child Who Is Hidden Has No Rights": Responses to violence against children with disabilities', *Child Abuse and Neglect*, vol. 89, 2019, pp. 58-69.
16 Schieman, Scot, Leah Ruppanner and Melissa A. Milkie, 'Who Helps with Homework? Parenting inequality and relationship quality among employed mothers and fathers', *Journal of Family Economic Issues*, vol. 39, no. 3, 2018, pp. 46-65.
17 Negraia, Daniela, Jennifer March Augustine and Kate Chambers Prickett, 'Gender Disparities in Parenting Time across Activities, Child Ages, and Educational Groups', *Journal of Family Issues*, vol. 39, no. 11, 2018, pp. 3006-3028.
18 Schieman, Ruppanner and Milkie, 'Who Helps with Homework?'.
19 Dabrowska-Zimakowska, Anna, and Ewa Pisula, 'Parenting Stress and Coping Styles in Mothers and Fathers of Pre-School Children with Autism and Downs Syndrome', *Journal of Intellectual Disability Research*, vol. 54, no. 3, 2010, pp. 266-280.
20 United Nations Children's Fund, 'Family-Friendly Policies: Redesigning the workplace of the future – A policy brief', UNICEF, New York, 2019.
21 Culver, Lucie, et al., 'Parenting in a Time of COVID-19', *The Lancet*, vol. 395, no. 10231, 2020.
22 Hohlfeld, Ameer S. J., Michal Harty and Mark E. Engel, 'Parents of Children with Disabilities: A systematic review of parenting interventions and self-efficacy', *African Journal of Disability*, vol. 7, 2018. p. 437.
23 United Nations Children's Fund, 'UNICEF's Vision for Elevating Parenting: A strategic note', UNICEF, New York, 2021.

CHAPTER 4. Every child has the right to learn

1 Aron, Laudan, and Pamela Loprest, 'Disability and the Education System', *The Future of Children*, vol. 22, no. 1, Spring 2021, pp. 97-122; Luo, Yifeng, et al., 'How Various Types of Disabilities Impact Children's School Attendance and Completion: Lessons learned from censuses in eight developing countries', *International Journal of Educational Development*, vol. 77, September 2020, pp. 1-6; Mizunoya, Suguru, Sophie Mitra and Izumi Yamasaki, 'Disability and School Attendance in 15 Low- and Middle-Income Countries', *World Development*, vol. 104, 2018, pp. 388-403; Kuper, Hannah, et al., 'The Impact of Disability on the Lives of Children: Cross-sectional data including 8,900 children with disabilities and 898,834 children without disabilities across 30 countries', *PLoS One*, vol. 9, no. 9, September 2014, pp. 1-11.

2 United Nations Educational, Scientific and Cultural Organization, *Global Education Monitoring Report: Inclusion and education – All means all*, UNESCO, Paris, 2020.

3 Ibid.

4 Groce, Nora, Eleanor Challenger and Marko Kerac, ‘Stronger Together: Nutrition-disability links and synergies’, Briefing Note, Leonard Cheshire Disability and Inclusive Development Centre, University College London, 2013; O’Neill, Jenny, et al., ‘The Uptake of Adolescent Vaccinations through the School Immunisation Program in Specialist Schools in Victoria, Australia’, *Vaccine*, vol. 37, no. 2, 2019, pp. 272-279.

5 Banks, Lena Morgon, et al., ‘“If He Could Speak, He Would Be Able to Point Out Who Does Those Things to Him”: Experiences of violence and access to child protection among children with disabilities in Uganda and Malawi’, *PLoS One*, vol. 12, no. 9, September 2017, pp. 1-17.

6 *Global Education Monitoring Report 2020*.

7 Kameyama, Yuriko, ‘Who Are Out-of-School Children? Children with disabilities in Mongolia’, *Compare: A Journal of Comparative and International Education*, vol. 51, no. 5, September 2019, pp. 670-689.

8 World Health Organization and the World Bank, *World Report on Disability*, WHO, Geneva, 2011, <www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/world-report-on-disability> accessed 23 August 2021.

9 Groce, Nora Ellen, and Parul Bakhshi, ‘Illiteracy Among Adults with Disabilities in the Developing World: A review of the literature and a call for action’, *International Journal of Inclusive Education*, vol. 15, no. 10, 2011, pp. 1153-1168.

10 Ibid.; Mizunoya, Suguru, Sophie Mitra and Izumi Yamasaki, ‘Towards Inclusive Education: The impact of disability on school attendance in developing countries’, Innocenti Working Paper no. 2016-03, UNICEF Innocenti Research Centre, Florence, May 2016.

11 Shandra, Carrie L., and Dennis Hogan, ‘The Educational Attainment Process among Adolescents with Disabilities and Children of Parents with Disabilities’, *International Journal of Disabilities*, *Development and Education*, vol. 56, no. 4, November 2006, pp. 363-379.

12 Castro, María, et al., ‘Parental Involvement on Student Academic Achievement: A meta-analysis’, *Educational Research Review*, vol. 14, February 2015, pp. 33-46.

13 Foster, Martha A., et al., ‘A Model of Home Learning Environment and Social Risk Factors in Relation to Children’s Emergent Literacy and Social Outcomes’, *Early Childhood Research Quarterly*, vol. 20, no. 1, March 2005, pp. 13-36; Lee, Kyunghee, et al., ‘Individualized Education Programmes and Parental Behaviours for Children with Disabilities: Moderation effects of Head Start on children’s development’, *Child and Family Social Work*, vol. 22, no. 2, September 2016, pp. 1000-1014.

14 van der Schuit, Marjge, et al., ‘Home Literacy Environment of Pre-School Children with Intellectual Disabilities’, *Journal of International Disability Research*, vol. 53, no. 12, December 2009, pp. 1024-1037.

15 Ibid.

16 Lee et al., ‘Individualized Education Programmes and Parental Behaviours for Children with Disabilities’.

17 Al-Dababneh, Kholoud Adeeb, ‘Barriers Preventing Parental Involvement in Mainstream Education of Children with Specific Learning Disabilities: Parent perspectives’, *European Journal of Special Needs Education*, vol. 33, no. 5, 2018, pp. 615-630.

18 Groce and Bakhshi, ‘Illiteracy among Adults with Disabilities in the Developing World’.

19 Karr, Valerie, Anne Hayes and Samuel Hayford, ‘Inclusion of Children with Learning Difficulties in Literacy and Numeracy in Ghana: A literature review’, *International Journal of Disability*, *Development and Education*, vol. 69, no. 5, July 2020, pp. 1522-1536.

20 Groce and Bakhshi, ‘Illiteracy among Adults with Disabilities in the Developing World’.

21 Cheong, Janice M.Y., Zachary M. Walker and Kara Rosenblatt, ‘Numeracy Abilities of Children in Grades 4 to 6 with Mild Intellectual Disability in Singapore’, *International Journal of Disability*, *Development and Education*, vol. 64, no. 2, 2017, pp. 150-168.

22 Adam, Tas, and Arthur Tatnall, ‘The Value of Using ICT in the Education of School Students with Learning Difficulties’, *Education and Information Technologies*, vol. 22, no. 1, May 2017, pp. 2711-2726; Chantry, Jane, and Carolyn Dunford, ‘How Do Computer Assistive Technologies Enhance Participation in Childhood Occupations for Children with Multiple and Complex Difficulties? A review of the current literature’, *British Journal of Occupational Therapy*, vol. 73, no. 8, August 2010, pp. 351-365; Lidström, Helene, and Helena Hemmingsson, ‘Benefits of the Use of ICT in School Activities by Students with Motor, Speech, Visual, and Hearing Impairment: A literature review’, *Scandinavian Journal of Occupational Therapy*, vol. 21, no. 4, July 2014, pp. 251-266; Murchland, Sonya, and Helen Parkyn, ‘Promoting Participation in Schoolwork: Assistive technology use by children with physical disabilities’, *Assistive Technology: The Official Journal of RESNA*, vol. 23, no. 2, May 2011, pp. 93-105; Van den Heuvel, Renée, et al., ‘Robots and ICT to Support Play in Children with Severe Physical Disabilities: A systematic review’, *Disability and Rehabilitation: Assistive Technology*, vol. 11, no. 2, February 2016, pp. 103-116.

23 Chantry and Dunford, ‘How Do Computer Assistive Technologies Enhance Participation in Childhood Occupations for Children’.

24 Judge, Sharon Lesar, ‘Accessing and Funding Assistive Technology for Young Children with Disabilities’, *Early Childhood Education Journal*, vol. 28, no. 2, December 2000, pp. 125-131.

25 Kuper et al., ‘The Impact of Disability on the Lives of Children’; Luo et al., ‘How Various Types of Disabilities Impact Children’s School Attendance and Completion’; Male, Chata, and Quentin Wodon, ‘Disability Gaps in Educational Attainment and Literacy’, *The Price of Exclusion: Disability and Education Series*, World Bank Group, Washington, DC, 2017, p. 3; Mizunoya, Mitra and Yamasaki, ‘Disability and School Attendance in 15 Low- and Middle-Income Countries’; Wapling, Lorraine, ‘Inclusive Education and Children with Disabilities: Quality education for all in low and middle income countries’, CBM Policy Brief, Christian Blind Mission, January 2016.

26 Kuper et al., ‘The Impact of Disability on the Lives of Children’.

27 Barteaux, Susan, ‘Universal Design for Learning’, *BU Journal of Graduate Studies in Education*, vol. 6, no. 2, 2014, pp. 50-54; Katz, Jennifer, ‘The Three Block Model of Universal Design for Learning (UDL): Engaging students in inclusive education’, *Canadian Journal of Education*, vol. 36, no. 1, January 2013, pp. 153-194.

28 Mizunoya, Mitra, and Yamasaki, ‘Towards Inclusive Education’.

29 Luo et al., ‘How Various Types of Disabilities Impact Children’s School Attendance and Completion’; Purdue, Kerry, ‘Barriers to and Facilitators of Inclusion for Children with Disabilities in Early Childhood Education’, *Contemporary Issues in Early Childhood*, vol. 10, no. 2, June 2009, pp. 133-143; Wapling, ‘Inclusive Education and Children with Disabilities’.

CHAPTER 5. Every child has the right to protection from violence and exploitation

1 Groce, Nora, Marie Loeb and Barbara Murray, ‘The Disabled Beggar – Literature Review: Begging as an overlooked issue of disability and poverty’, ILO Working Papers, International Labour Office, Geneva, 2014.

2 Cappa, Claudia, et al. ‘Birth Registration: A child’s passport to protection’, *The Lancet Global Health*, vol. 2, no. 2, February 2014, pp. e67-e68; Todres, Jonathan, ‘Birth Registration: An essential first step toward ensuring the rights of all children’, *Human Rights Brief*, vol. 10, no. 3, 2003, pp. 32-35.

3 United Nations Children’s Fund, *Birth Registration for Every Child by 2030: Are we on track?*, UNICEF, New York, 2019.

4 Ibid.

5 Hendricks, Charlene, et al., ‘Associations between Child Disabilities and Caregiver Discipline and Violence in Low- and Middle-Income Countries’, *Child Development*, vol. 85, no. 2, 2014, pp. 513-531.

6 Ibid.; Fisher, Marisa A., Robert M. Hodapp and Elizabeth M. Dykens, ‘Child Abuse among Children with Disabilities: What we know and what we need to know’, *International Review of Research in Mental Retardation*, vol. 35, 2008, pp. 251-289.

7 Groce, Nora, ‘Violence against Disabled Children: UN Secretary-General’s Report on Violence against Children. Thematic Group on Violence against Children with Disabilities’, New York, 2005, pp. 1-33; Njelesani, Janet, et al., ‘From the Day They Are Born: A qualitative study exploring violence against children with disabilities in West Africa’, *BMC Public Health*, vol. 18, no. 153, 2018.

8 Bizzego, Andrea, et al., ‘Children with Developmental Disabilities in Low- and Middle-Income Countries: More neglected and physically punished’, *International Journal of Environmental Research and Public Health*, vol. 17, no. 19, 2020, pp. 1-16.

9 Jones, Lisa, et al., ‘Prevalence and Risk of Violence against Children with Disabilities: A systematic review and meta-analysis of observational studies’, *The Lancet*, vol. 380, no. 9845, 2012, pp. 899-907; Njelesani et al., ‘From the Day They Are Born’.

10 Njelesani et al., ‘From the Day They Are Born’.

11 Sullivan, Patricia M., ‘Violence Exposure among Children with Disabilities’, *Clinical Child and Family Psychological Review*, vol. 12, no. 2, 2009, pp. 196-216.

12 Ibid.

13 Njelesani et al., ‘From the Day They Are Born’.

14 Banks, Lena Morgan, et al., ‘”If He Could Speak, He Would Be Able to Point Out Who Does Those Things to Him”: Experiences of violence and access to child protection among children with disabilities in Uganda and Malawi’, *PLoS One*, vol. 12, no. 9, 2017, pp. 1-17.

15 Braathen, Stine Hellum, Poul Rohleder and Gloria Azalda, ‘Sexual and Reproductive Health and Rights of Girls with Disabilities: A review of the literature’, SINTEF and the University of East London, Trondheim, Norway, 2017; Ellery, Frances, Gerison Lansdown and Corinna Csáky, ‘Out from the Shadows: Sexual violence against children with disabilities’, Save the Children UK and Handicap International, London, 2011; Hershkowitz, Irit, Michael E. Lamb and Dvora Horowitz, ‘Victimization of Children with Disabilities’, *American Journal of Orthopsychiatry*, vol. 77, no. 4, 2007, pp. 629-635.

16 Braathen, Rohleder and Azalda, ‘Sexual and Reproductive Health and Rights’.

17 United Nations Children’s Fund, ‘Promoting the Rights of Children with Disabilities’, UNICEF Innocenti Research Centre, Florence, 2007.

18 Ibid.

19 Ellery, Lansdown and Csáky, ‘Out from the Shadows’.

20 Miller, Hannah L., et al., ‘An Exploratory Study on the Knowledge of Personal Safety Skills among Children with Developmental Disabilities and their Parents’, *Journal of Applied Research in Intellectual Disabilities*, vol. 30, no. 2, 2017, pp. 290-300.

21 International Labour Organization, ‘What is Child Labour’, <www.ilo.org/ipec/facts/lang--en/index.htm#:~:text=The%20term%20%E2%80%9Cchild%20labour%E2%80%9D%20is,harmful%20to%20children%3B%20and%2For>, accessed 16 February 2021.

22 Rakshit, Ipsita, et al., ‘Educational Attainment and Child Labor Status among Disabled Children in Tamil Nadu, India: An econometric analysis’, *The Journal of Developing Areas*, vol. 53, no. 3, 2019; Villalobos, Aremis, et al., ‘Child Labor and Severe Functioning Difficulty and Disability in Mexican Children and Adolescents 5-17 Years of Age’, *Salud Publica de Mexico*, vol. 59, no. 4, 2017.

23 Emerson, Eric, and Gwynnyth Lyewellyn, ‘Youth with Disabilities Are More Likely than their Peers to Engage in Hazardous Child Labour’, *Child Care, Health and Development*, vol. 47, 2020, pp. 119-121.

24 Sarker, Tanwne, et al., ‘Education and Health Status of Child Beggars in Sylhet City, Bangladesh’, *American Journal of Social Science*, vol. 4, no. 5, 2016, pp. 58-66.

25 Rakshit et al., ‘Educational Attainment and Child Labor Status’.

26 Ibrahim, Abdalla, et al., ‘Child Labor and Health: A systematic literature review of the impacts of child labor on a child’s health in low- and middle-income countries’, *Journal of Public Health*, 2018, vol. 41, no. 1, pp. 18-26; Kuimi, Brice Lionel Batomen, et al., ‘Child Labor and Health: A systematic review’, *International Journal of Public Health*, vol. 63, 2018, pp. 663-672; Rahman, Sazedur, ‘Occupational Injuries among Children in Bangladesh’, *International Research Journal of Social Sciences*, vol. 7, no. 10, 2018, pp. 17-20.

27 Sturrock, Sarah, and Matthew Hodes, ‘Child Labor in Low- and Middle-Income Countries and Its Consequences for Mental Health: A systematic literature review of epidemiologic studies’, *European Child and Adolescent Psychiatry*, vol. 25, 2016, pp. 1273-1286.

28 Águila-Otero, Alba, et al., ‘Children and Young People with Intellectual Disability in Residential Childcare: Prevalence of mental health disorders and therapeutic interventions’, *International Journal of Social Welfare*, vol. 27, 2018, pp. 337-347; United Nations, Global Study on Children Deprived of Liberty – Note by the Secretary-General, A/74/163, 2019.

29 Global Study on Children Deprived of Liberty.

30 Njelesani, Janet, ‘”A Child Who is Hidden Has No Rights”: Responses to violence against children with disabilities’, *Child Abuse and Neglect*, vol. 89, 2019, pp. 58-69.

31 United Nations, Status of the Convention on the Rights of the Child, Report of the Secretary-General, A/74/231, 26 July, 2019, para. 36.

32 Rosenthal, Eric, and Laurie Ahern, ‘Segregation and Abuse in Institutions’, in *The State of the World’s Children 2013: Children with disabilities,* United Nations Children’s Fund, New York, 2013, p. 46.

33 Burge, Philip, et al., ‘Making Choices: Adoption seekers’ preferences and available children with special needs’, *Journal of Public Child Welfare*, vol. 10, no. 1, 2016, pp. 1-20.

34 Global Study on Children Deprived of Liberty.

35 United Nations, Interim Report of the Special Rapporteur on Torture and other Cruel, Inhuman or Degrading Treatment or Punishment, A/63/175, 2008, para 55; Status of the Convention on the Rights of the Child, Report of the Secretary-General, A/74/231, 2019, paras 53-61.

36 United Nations, Thematic Study on the Right of Persons with Disabilities to Live Independently and Be Included in the Community, Report of the Office of the United Nations High Commissioner for Human Rights, A/HRC/28/37, 2014, paras 58-66; Status of the Convention on the Rights of the Child, Report of the Secretary-General, A/74/231, 2019, paras. 62-71.

37 Anam, Nirafat, Nazmul Bari and Khandaker Jahurul Alam, 'Street Children with Disabilities: Situation analysis and need assessment on the street children with disabilities in Dhaka City', Centre for Services and Information on Disability, Dhaka, 1999; Kerfoot, Michael, et al., 'The Health and Well-Being of Neglected, Abused and Exploited Children: The Kyiv Street Children Project', *Child Abuse and Neglect,* vol. 31, 2007, pp. 27-37; Taylor, Carol, et al., 'Street-Connected Children with Communication Disabilities and their Caregivers in Western Kenya: Experiences, beliefs, and needs', *Disability and Rehabilitation*, vol. 43, no. 1, 2019, pp. 1-11; Zima, Bonnie T., et al., 'Sheltered Homeless Children: Their eligibility and unmet need for special education evaluations', *American Journal of Public Health*, vol. 87, 1997, pp. 236-240.

38 United Nations, Report of the United Nations High Commissioner for Human Rights on the Protection and Promotion of the Rights of Children Working and/or Living on the Street, A/HRC/19/35, 2012.

39 Kerfoot, 'The Kyiv Street Children Project'; Report of the United Nations High Commissioner for Human Rights on the Protection and Promotion of the Rights of Children Working and/or Living on the Street.

40 Sarker et al., 'Education and Health Status of Child Beggars in Sylhet City'.

41 Groce, Loeb and Murray, 'The Disabled Beggar'.

42 Anam, Bari and Alam, 'Street Children with Disabilities'; Sarker et al., 'Education and Health Status of Child Beggars in Sylhet City'.

43 Emerson, Eric, and Gwynnyth Llewellyn, 'The Exposure of Children with and without Disabilities to Violent Parental Discipline: Cross-Sectional Surveys in 17 Middle- and Low-Income Countries', *Child Abuse and Neglect*, vol. 111, January 2021; Jones et al., 'Prevalence and Risk of Violence'; United Nations Children's Fund, 'Focus: Violence against children with disabilities', in *The State of the World's Children 2013*, pp. 44-45.

44 Fisher, Hodapp and Dykens, 'Child Abuse among Children with Disabilities'.

45 Hershkowitz, Lamb and Horowitz, 'Victimization of Children with Disabilities'.

CHAPTER 6. Every child has the right to a safe and clean environment

1 World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, *Progress on Drinking Water, Sanitation and Hygiene in Households 2000-2020: 5 years into the SDGs*, WHO and UNICEF, 2021.

2 The term 'girls' is used as a stand-in for all those menstruating, regardless of gender identity. As part of UNICEF's commitment to equality and human rights mandates, programmes should be inclusive of transgender and non-binary persons who have menstrual health and hygiene needs.

3 World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, 'JMP Methodology: 2017 update and SDG baselines', UNICEF and WHO, March 2018, <https://washdata.org/sites/default/files/documents/reports/2018-04/JMP-2017-update-methodology.pdf>, accessed 4 November 2021; World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, *Core Questions on Drinking Water, Sanitation and Hygiene for Household Surveys: 2018 update*, WHO and UNICEF, Geneva, 2018, <https://washdata.org/sites/default/files/documents/reports/2019-05/JMP-2018-core-questions-for-household-surveys.pdf>, accessed 4 November 2021.

4 A more detailed account of WASH information at global and regional levels, along with measurement challenges, can be found on the JMP web page: <https://washdata.org>.

5 World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, 'Drinking Water', undated, <https://washdata.org/monitoring/drinking-water>, accessed 4 November 2021.

6 World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, 'Sanitation', undated, <https://washdata.org/monitoring/sanitation>, accessed 4 November 2021.

7 'JMP Methodology'.

8 Hutton, Guy, and Claire Chase, 'The Knowledge Base for Achieving the Sustainable Development Goal Targets on Water Supply, Sanitation and Hygiene', *International Journal of Environmental Research and Public Health*, vol. 13, no. 6, 2016, p. 526; Prüss, Annette, et al., 'Estimating the Burden of Disease from Water, Sanitation and Hygiene at a Global Level', *Environmental Health Perspectives*, vol. 110, no. 5, 2002, pp. 537-542; Noga, Jacqueline, and Gregor Wolbring, 'The Economic and Social Benefits and the Barriers of Providing People with Disabilities Accessible Clean Water and Sanitation', *Sustainability*, vol. 4, no. 11, 2012, pp. 3023-3041; World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene, *Progress on Household Drinking Water, Sanitation and Hygiene, 2000-2017: Special focus on inequalities*, UNICEF and WHO, New York, 2019.

9 World Health Organization and the World Bank, *World Report on Disability*, WHO, Geneva, 2011, pp. 39-40; Filmer, Deon, 'Disability, Poverty, and Schooling in Developing Countries: Results from 14 household surveys', *The World Bank Economic Review*, vol. 22, no. 1, 2008, pp. 141-163.

10 Groce, Nora, et al., 'Water and Sanitation Issues for Persons with Disabilities in Low- and Middle-Income Countries: A literature review and discussion of implications for global health and international development', *Journal of Water and Health*, vol. 9, no. 4, 2011, pp. 617-627.

11 *Progress on Household Drinking Water*.

12 Hutton and Chase, 'The Knowledge Base'.

13 United Nations Children's Fund, *The State of the World's Children 2013: Children with disabilities*, UNICEF, New York, 2013.

14 Groce et al., 'Water and Sanitation Issues'; Prüss-Ustün, Annette, et al., 'Burden of Disease from Inadequate Water, Sanitation and Hygiene for Selected Adverse Health Outcomes: An updated analysis with a focus on low- and middle-income countries', *International Journal of Hygiene and Environmental Health*, vol. 222, no. 5, 2019, pp. 765-777.

15 Banks, Lena Morgon, et al., 'Are Current Approaches for Measuring Access to Clean Water and Sanitation Inclusive of People with Disabilities? Comparison of individual- and household-level access between people with and without disabilities in the Tanahun District of Nepal', *PLoS One*, vol. 14, no. 10, 2019.

16 Groce et al., 'Water and Sanitation Issues'; White, Sian, et al., 'A Qualitative Study of Barriers to Accessing Water, Sanitation and Hygiene for Disabled People in Malawi', *PLoS One*, vol. 11, no. 5, 2015, pp. 1-18.

17 Groce et al., 'Water and Sanitation Issues'.

18 *The State of the World's Children 2013*.

19 Groce et al., 'Water and Sanitation Issues'.

20 Erhard, Loida, et al., 'Policy and Provision of WASH in Schools for Children with Disabilities: A case study in Malawi and Uganda', *Global Public Health*, vol. 8, no. 9, 2013, pp. 1000-1013.

21 United Nations Children's Fund, 'Guidance: Including children with disabilities in humanitarian action – WASH', UNICEF, New York, 2017.

22 Hutton and Chase, 'The Knowledge Base'; Prüss-Ustün et al., 'Burden of Disease'.

23 White et al., 'A Qualitative Study'.

24 Banks et al., 'Are Current Approaches'; White et al., 'A Qualitative Study'.

25 White et al., 'A Qualitative Study'.

26 Lee, Regina L.T., et al. 'Comparative Efficacy of a Simplified Handwashing Program for Improvement in Hand Hygiene and Reduction of School Absenteeism among Children with Intellectual Disability', *American Journal of Infection Control*, vol. 43, no. 9, 2015, pp. 907-912; Wilbur, Jane, et al., 'Systematic Review of Menstrual Hygiene Management Requirements, Its Barriers and Strategies for Disabled People', *PLoS ONE*, vol. 14, no. 2, 2019, pp. 1-17.

27 Jeffrey, Elizabeth, Salma Kayani and Anne Garden, 'Management of Menstrual Problems in Adolescents with Learning and Physical Disabilities', *The Obstetrician and Gynaecologist*, vol. 15, no. 2, 2013, pp. 106-112; Wilbur et al. 'Systematic Review'.

28 Wilbur et al., 'Systematic Review'.

29 Jeffrey, Kayani and Garden, 'Management of Menstrual Problems'.

30 Altundağ, Sebahat, and Nazan Çakirer Çalbayram, 'Teaching Menstrual Care Skills to Intellectually Disabled Female Students', *Journal of Clinical Nursing*, vol. 25, no. 13-14, 2016, pp. 1962-1968; Wilbur et al. 'Systematic Review'.

31 Wilbur et al., 'Systematic Review'.

32 Quint, Elizabeth H., 'Menstrual Issues in Adolescents with Physical and Developmental Disabilities', *New York Academy of Sciences*, vol. 1135, 2008, pp. 230-236.

33 Groce et al., 'Water and Sanitation Issues'; Pryor, Wesley, et al., 'The Case for Investment in Accessible and Inclusive WASH', WASH Technical Paper, United Nations Children's Fund, New York, 2018.

34 Albanese, Assunta, and Neil W. Hopper, 'Suppression of Menstruation in Adolescents with Severe Learning Disabilities', *Archives of Disease in Childhood*, vol. 92, no. 7, 2007, pp. 629-632; Márquez-González, Horacio, Edith Valdez-Martinez and Miguel Bedolla, 'Hysterectomy for the Management of Menstrual Hygiene in Women with Intellectual Disability: A systematic review focusing on standards and ethical considerations for developing countries', *Frontiers in Public Health*, vol. 28, no. 6, 2018, p. 338; Quint, Elizabeth H., and Rebecca F. O'Brien, 'Menstrual Management for Adolescents with Disabilities', *Pediatrics*,138, no. 1, July, 2016.

35 Márquez-González, Valdez-Martinez and Bedolla, 'Hysterectomy for the Management of Menstrual Health'.

CHAPTER 7. Every child has the right to a fair chance in life

1 Groce, Nora, et al., 'Poverty and Disability: A critical review of the literature in low- and middle-income countries', Working Paper Series No. 16, Leonard Cheshire Disability and Inclusive Development Centre, University College London, September 2011.

2 Emerson, E., and C. Hatton, 'Poverty, Socio-Economic Position, Social Capital and the Health of Children and Adolescents with Intellectual Disabilities in Britain: A replication', *Journal of Intellectual Disability Research*, vol. 51, no. 11, November 2007, pp. 866-874.

3 Groce, Nora, et al., 'Disability and Poverty: The need for a more nuanced understanding of implications for development policy and practice', *Third World Quarterly*, vol. 32, no. 8, September 2011, pp. 1493-1513.

4 Hogan, Dennis P., Michelle L. Rogers and Michael E. Msall, 'Functional Limitations and Key Indicators of Well-Being in Children with Disability', *Archives of Pediatrics and Adolescent Medicine*, vol. 154, no. 10, October 2000, pp. 1042-1048; Mitra, Sophie, et al., 'Extra Costs of Living with a Disability: A review and agenda for research', *Disability and Health Journal*, vol. 10, no. 4, October 2017, pp. 475-484; United Nations General Assembly, Rights of Persons with Disabilities: Report of the Special Rapporteur, A/70/297, 2015, <https://undocs.org/en/A/70/297>, accessed 4 March 2021; Shahat, Ahmed R.S., and Giulia Greco, 'The Economic Costs of Childhood Disability: A literature review', *International Journal of Environmental Research and Public Health*', vol. 18, no. 7, 2021, pp. 1-25.

5 South African Department of Social Development, 'Elements of the Financial and Economic Costs of Disability to Households in South Africa: Results from a pilot study', DSD and United Nations Children's Fund, Pretoria, 2016; Mont, Daniel, and Nguyen Viet Cuon, 'Disability and Poverty in Vietnam', *World Bank Economic Review*, vol. 25, no. 2, May 2011, pp. 323–359.

6 Devereux, Stephen, et al., 'Evaluating the Targeting Effectiveness of Social Transfers: A literature review', IDS Working Paper, vol. 2015, no. 460, July 2015, Institute for Development Studies, Brighton, UK; Lin, Jin-Ding, et al., 'Received, Understanding and Satisfaction of National Health Insurance Premium Subsidy Scheme by Families of Children with Disabilities: A census study in Taipei City', *Research in Developmental Disabilities*, vol. 30, no. 2, March-April 2008, pp. 275-283; Mont, Daniel, 'Social Protection and Disability', in *Poverty and Disability*, edited by Tanya Barron and Jabulani Manombe Ncube, Leonard Cheshire Disability and Inclusive Development Centre, London, 2010, pp. 317-339; Szilagyi, Peter G., 'Health Insurance and Children with Disabilities', *The Future of Children*, vol. 22, no. 1, Spring 2012, pp. 123-148; United Nations Children's Fund, *The State of the World's Children 2013: Children with disabilities*, UNICEF, New York, 2013.

7 Gooding, Kate, and Anna Marriot, 'Including Persons with Disabilities in Social Cash Transfer Programmes in Developing Countries', *Journal of International Development*, vol. 21, no. 5, June 2009, pp. 685-698.

8 Kidd, Stephen, et al., 'Leave No One Behind: Building inclusive social protection systems for persons with disabilities', Working Paper, Development Pathways Limited, Orpington, UK, February 2019.

9 Szilagyi, 'Health Insurance and Children with Disabilities'; Vanegas, Sandra B., and Randa Abdelrahim, 'Characterizing Systems of Support for Families of Children with Disabilities: A review of the literature', *Journal of Family Social Work*, vol. 19, no. 4, 2016, pp. 286-327.

10 Gooding and Marriot, 'Including Persons with Disabilities in Social Cash Transfer Programmes in Developing Countries'; Lin et al., 'Received, Understanding and Satisfaction of National Health Insurance Premium Subsidy Scheme'; Szilagyi, 'Health Insurance and Children with Disabilities'; Holmes, Rebecca, et al., 'Nepal's Cash Allowances for Children with Disabilities', Overseas Development Institute, London, 2018.

11 Gooding and Marriot, 'Including Persons with Disabilities in Social Cash Transfer Programmes'.

12 Szilagyi, 'Health Insurance and Children with Disabilities'; Vanegas and Abdelrahim, 'Characterizing Systems of Support for Families of Children with Disabilities'.

13 Gooding and Marriot, 'Including Persons with Disabilities in Social Cash Transfer Programmes'; Kelly, Gabrielle, 'Disability, Cash Transfers and Family Practices in South Africa', *Critical Social Policy*, vol. 39, no. 4, November 2019, pp. 541-559.

14 Mont and Cuon, 'Disability and Poverty in Vietnam'.

15 Szilagyi, 'Health Insurance and Children with Disabilities'.

CHAPTER 8. Every child has the right to a happy life, free from discrimination

1 United Nations Children's Fund, *Understanding Child Subjective Well-Being: A call for more data, research and policymaking targeting children*, UNICEF, New York, 2021.

2 Ibid.

3 Mepham, Sarah, 'Disabled Children: The right to feel safe', *Child Care in Practice*, vol. 16, no. 1, 2010, pp. 19-34; Smythe, Tracey, Jaimie Adelson and Sarah Polack, 'Systematic Review of Interventions for Reducing Stigma Experienced by Children with Disabilities and Their Families in Low- and Middle-Income Countries: State of the evidence', *Tropical Medicine and International Health*, vol. 25, no. 5, 2020, pp. 508-524.

4 Etieyibo, Edwin, and Odirin Omiegbe, 'Religion, Culture, and Discrimination against Persons with Disabilities in Nigeria', *African Journal of Disability*, vol. 5, no. 1, 2016, p. 192

5 Ibid.

6 McHatton, Patricia Alvarez, and Vivian Correa, 'Stigma and Discrimination: Perspectives from Mexican and Puerto Rican mothers of children with special needs', *Topics in Early Childhood Special Education*, vol. 25, no. 3, 2005, pp. 131-142.

7 United Nations Committee on the Rights of Persons with Disabilities, General Comment No. 3 (2016), Article 6: Women and girls with disabilities, CRPD/C/GC/3, 2 September 2016.

8 European Disability Forum, *European Human Rights Report: Ensuring the rights of persons with disabilities to equality and non-discrimination in the European Union,* Issue 3-2019, EDF, Brussels, 2019, p. 28.

9 Lung, For-Wey, et al., 'Prevalence of Bullying and Perceived Happiness in Adolescents with Learning Disability, Intellectual Disability, ADHD, and Autism Spectrum Disorder in the Taiwan Birth Cohort Pilot Study', *Medicine*, vol. 98, no. 6, 2019; Watson, Silvana M. R., and Kenneth D. Keith, 'Comparing the Quality of Life of School-Aged Children with and without Disabilities', *Mental Retardation*, vol. 40, no. 4, 2004, pp. 304-312.

10 "Sex refers to the biological characteristics of being male or female, while gender is defined as the socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to individuals on the basis of their assigned sex. Gender is relational and refers not simply to women, men, or gender diverse people but to the relationships between them. Although the words 'gender' and 'sex' are often used interchangeably, they have different connotations: sex tends to refer to biological differences, while gender more often refers to cultural and social differences and sometimes encompasses a broader range of identities than the binary of male and female." United Nations Development Group, *Resource Book for Mainstreaming Gender in UN Common Programming at the Country Level*, UNDG, New York, 2018.

11 Kuper, Hannah, et al., 'The Impact of Disability on the Lives of Children; Cross-Sectional Data including 8,900 Children with Disabilities and 898,834 Children without Disabilities across 30 Countries', *PLoS One*, vol. 9, no. 9, 2014.

12 Thompson, Travis, Mary Caruso and Kathryn Ellerbeck, 'Sex Matters in Autism and Other Developmental Disabilities', *Journal of Learning Disabilities*, vol. 7, no. 4, 2003, pp. 345-362.

13 Kuban, Karl C. K., et al., 'Girls and Boys Born before 28 Weeks Gestation: Risks of cognitive, behavioral, and neurologic outcomes at age 10 years', *The Journal of Pediatrics*, vol. 173, 2016, pp. 69-75; Tsai, Cheng-Fang, et al., 'Sex and Geographic Differences in the Prevalence of Reported Childhood Motor Disability and their Trends in Taiwan', *BioMed Research International*, 5 April 2018.

14 DiPietro, Janet A., and Kristin M. Voegtline, 'The Gestational Foundation of Sex Differences in Development and Vulnerability', *Neuroscience*, vol. 342, 2017, pp. 4-20.

15 Abdullah, Mohamad Qasim, 'Gender Difference in Learning Disabled Children', *Neuropsychological Review*, vol. 1, no. 3, 2018; Rice, Elizabeth Hess, Esther Merves and Amy Srsic, 'Perceptions of Gender Differences in the Expression of Emotional and Behavioral Disabilities', *Education and Treatment of Children*, vol. 31, no. 4, 2008, pp. 549-565.

16 Leonard Cheshire Disability and United Nations Girls' Education Initiative, *Still Left Behind: Pathways to inclusive education for girls with disabilities*, Leonard Cheshire Disability, London, 2017; Powers, Kristin, et al., 'Gender Matters in Transition to Adulthood: A survey study of adolescents with disabilities and their families', *Psychology in the Schools*, vol. 45, no. 4, 2008, pp. 349-364; Rousso, Harilyn, 'Education for All: A gender and disability perspective', background paper prepared for the *Education for All Monitoring Report 2003/4*, United Nations Educational, Scientific and Cultural Organization, Paris; United Nations Children's Fund, *The State of the World's Children 2013: Children with disabilities*, UNICEF, New York, 2013.

17 Hutton, Guy, and Claire Chase, 'The Knowledge Base for Achieving the Sustainable Development Goal Targets on Water Supply, Sanitation and Hygiene', *International Journal of Environmental Research and Public Health*, vol. 13, 2016; White, Sian, et al. 'Qualitative Study of Barriers to Accessing Water, Sanitation and Hygiene for Disabled People in Malawi', *PLoS One*, vol. 11, no. 5, 2016.

18 Powers et al., 'Gender Matters in Transition to Adulthood'.

19 Hui, Neva, et al., 'Gendered Experiences of Inclusive Education for Children with Disabilities in West and East Africa', *International Journal of Inclusive Education*, vol. 22, no. 5, 2017, pp. 457-474.

20 Schieman, Scot, Leah Ruppanner and Melissa A. Milkie, 'Who Helps with Homework? Parenting inequality and relationship quality among employed mothers and fathers', *Journal of Family Economic Issues*, vol. 39, 2018, pp. 46-65.

21 Beghini, Valentina, Umberto Cattaneo and Emanuela Pozzan, *A Quantum Leap for Gender Equality: For a better future of work for all*, International Labour Office, Geneva, 2019.

22 United Nations Department of Economic and Social Affairs, Statistics Division, 'Time Spent in Unpaid Work; Total Work Burden; and Work-Life Balance', *World's Women 2020*, <https://worlds-women-2020-data-undesa.hub.arcgis.com/apps/time-spent-in-unpaid-work-total-work-burden-and-work-life-balance/explore>, accessed 1 October 2021.

23 Beghini, Cattaneo and Pozzan, *A Quantum Leap for Gender Equality*.

24 Dabrowska, Anna, and Ewa Pisula, 'Parenting Stress and Coping Styles in Mothers and Fathers of Pre-School Children with Autism and Downs Syndrome', *Journal of Intellectual Disability Research*, vol. 54, no. 3, 2010, pp. 266-280.

25 United Nations Children's Fund, *Harnessing the Power of Data for Girls: Taking stock and looking ahead to 2030*, UNICEF, New York, 2016.

26 United Nations Children's Fund, 'Promoting the Rights of Children with Disabilities', Innocenti Digest No. 13, UNICEF Innocenti Research Centre, Florence, 2007, p. 15, box 5.1; *The State of the World's Children 2013*.

CHAPTER 9. Fulfilling the rights of every child

1 Boyle, Coleen A., et al., 'The Public Health Response to the COVID-19 Pandemic for People with Disabilities', *Disability and Health Journal*, vol. 13, no. 3, 2020, pp. 1-4; Courtenay, Ken, and Bhathika Perera, 'COVID-19 and People with Intellectual Disability: Impacts of a pandemic', *Irish Journal of Psychological Medicine*, vol. 37, no. 3, 2020, pp. 231-236; Sabatello, Maya, Scott D. Landes and Katherine E. McDonald, 'People with Disabilities and COVID-19: Fixing our priorities', *The American Journal of Bioethics*, vol. 20, no. 7, 2020, pp. 187-190.

2 Scully, Jackie Leach, 'Disability, Disablism, and COVID-19 Pandemic Triage', *Bioethical Inquiry*, vol. 17, 2020, pp. 601-605.

3 Masi, Anne, et al., 'Impact of the COVID-19 Pandemic on the Well-Being of Children with Neurodevelopmental Disabilities and Their Parents', *Journal of Paediatrics and Child Health*, vol. 57, no. 5, 2021, pp. 631-636; Patel, Khushboo, 'Mental Health Implications of COVID-19 on Children with Disabilities', *Asian Journal of Psychiatry*, vol. 54, no. 5, 2020.

4 Ramkumar, Aishworiya, and Ying Qi Kang, 'Including Children with Developmental Disabilities in the Equation during this COVID-19 Pandemic', *Journal of Autism and Developmental Disorders*, vol. 51, no. 6, 2021, pp. 2155–2158.

5 Jan, Sophia, and Nicole Lurie, 'Perspective: Disaster resilience and people with functional needs', *The New England Journal of Medicine*, vol. 367, no. 24, 2012, pp. 2272-2273; Peek, Lori, and Laura M. Stough, 'Children with Disabilities in the Context of Disaster: A social vulnerability perspective', *Child Development*, vol. 81, no. 4, 2010, pp. 1260-1270; Yates, Sophie, and Helen Dickinson, 'Navigating Complexity in a Global Pandemic: The effects of COVID-19 on children and young people with disability and their families in Australia', *Public Administrative Review*, vol. 81, no. 6, 2021, pp. 1192-1196.

6 Jeste, S., et al., 'Changes in Access to Educational and Healthcare Services for Individuals with Intellectual and Developmental Disabilities during COVID-19 Restrictions', *Journal of Intellectual Disability Research*, vol. 64, no. 11, 2020, pp. 825-833; Jones, Benjamin, et al., 'COVID-19 Pandemic: The impact on vulnerable children and young people in Australia', *Journal of Paediatrics and Child Health*, vol. 56, 2021, pp. 1851-1855; Mbazzi, Femke Bannick, et al., 'The Impact of COVID-19 Measures on Children with Disabilities and their Families in Uganda', *Disability and Society*, vol. 37, no. 7, 2022, pp. 1173-1196.

7 Couper-Kenney, Fiona, and Sheila Riddell, 'The Impact of COVID-19 on Children with Additional Support Needs and Disabilities in Scotland', *European Journal of Special Needs Education*, vol. 36, no. 1, 2021, pp. 20-34.

Technical annex

1 Bourke, Jenny, et al., 'Predicting Long-Term Survival without Major Disability for Infants Born Preterm', *The Journal of Pediatrics*, vol. 215, 2019, pp. 90-97.

Key facts

Compared with children without disabilities, children with disabilities are:

34%	more likely to be stunted
25%	more likely to be wasted
53%	more likely to have symptoms of acute respiratory infection
25%	less likely to receive early stimulation and responsive care
25%	less likely to attend early childhood education
16%	less likely to read or be read to at home
42%	less likely to have foundational reading and numeracy skills
49%	more likely to have never attended school
47%	more likely to be out of primary school
33%	more likely to be out of lower-secondary school
27%	more likely to be out of upper-secondary school
32%	more likely to experience severe physical punishment at home
41%	more likely to feel discriminated against
51%	more likely to consider themselves unhappy
20%	less likely to have expectations of a better life

unicef
for every child

United Nations Children's Fund
Data and Analytics Section
Division of Data, Analytics, Planning and Monitoring
3 United Nations Plaza
New York, NY 10017, USA

Email: data@unicef.org
Website: data.unicef.org