Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Indicator 4.2.1: Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex

Institutional information

Organization(s):

United Nations Children's Fund (UNICEF)

Concepts and definitions

Definition:

The proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being is currently being measured by the percentage of children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, socio-emotional and learning.

Rationale:

Early childhood development (ECD) sets the stage for life-long thriving. Investing in ECD is one of the most critical and cost-effective investments a country can make to improve adult health, education and productivity in order to build human capital and promote sustainable development. ECD is equity from the start and provides a good indication of national development. Efforts to improve ECD can bring about human, social and economic improvements for both individuals and societies.

Concepts:

The domains included in the indicator currently being used as a proxy for reporting on SDG indicator 4.2.1 are operationally defined as follows:

• Literacy-numeracy: Children are identified as being developmentally on track if they can do at least two of the following: identify/name at least 10 letters of the alphabet; read at least 4 simple, popular words; and/or know the name and recognize the symbols of all numbers from 1 to 10.

Physical: If the child can pick up a small object with two fingers, like a stick or rock from the ground, and/or the mother/primary caregiver does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.

• **Social-emotional**: The child is considered developmentally on track if two of the following are true: The child gets along well with other children; the child does not kick, bite or hit other children; and the child does not get distracted easily.

• Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, and is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

Comments and limitations:

For the time being, a proxy indicator (children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning) is being used to report on 4.2.1 until the new measure has been finalized (expected by end of 2019). The proxy indicator is not fully aligned with the definition and age group covered by the SDG indicator formulation.

Methodology

Computation Method:

The number of children under the age of five who are developmentally on track in health, learning and psychosocial well-being divided by the total number of children under the age of five in the population multiplied by 100.

Proxy indicator:

The number of children aged 36-59 months who are developmentally on-track in at least three of the following four domains: literacy-numeracy, physical, social-emotional and learning divided by the total number of children aged 36-59 months in the population multiplied by 100.

Disaggregation:

Age, sex, place of residence, wealth, geographic location, caregiver education and other background characteristics.

Treatment of missing values:

At country level

When data for a country are entirely missing, UNICEF does not publish any country-level estimate

At regional and global levels

The regional average is applied to those countries within the region with missing values for the purposes of calculating regional aggregates only but are not published as country-level estimates. Regional aggregates are only published when at least 50 per cent of the regional population for the relevant age group are covered by the available data.

The global aggregate is a weighted average of all countries with available data. Global aggregates are published regardless of population coverage, but the number of countries and the proportion of the relevant population group represented by the available data are clearly indicated.

Regional aggregates:

Regional aggregates are weighted averages of all the countries within the region.

Sources of discrepancies:

The estimates compiled and presented at global level come directly from nationally produced data and are not adjusted or recalculated.

Methods and guidance available to countries for the compilation of the data at the national level:

Countries gather data on children's developmental status through household surveys such as UNICEF-supported MICS or Demographic and Health Surveys. Some of the individual items included in the ECDI may be collected through other mechanisms (such as other surveys or administrative records) in high-income countries.

Quality assurance

UNICEF maintains the global database on ECD that is used for SDG and other official reporting. Before the inclusion of any data point in the database, it is reviewed by technical focal points at UNICEF headquarters to check for consistency and overall data quality. This review is based on a set of objective criteria to ensure that only the most recent and reliable information are included in the databases. These criteria include the following: data sources must include proper documentation; data values must be representative at the national population level; data are collected using an appropriate methodology (e.g., sampling); data values are based on a sufficiently large sample; data conform to the standard indicator definition including age group and concepts, to the extent possible; data are plausible based on trends and consistency with previously published/reported estimates for the indicator.

As of 2018, UNICEF undertakes an annual consultation with government authorities on 10 of the child-related SDG indicators in its role of sole or joint custodian, and in line with its global monitoring mandate and normative commitments to advancing the 2030 Agenda for children. This includes indicator 4.2.1. More details on the process for the country consultation are outlined below.

Data Sources

Description:

Household surveys such as UNICEF-supported MICS have been collecting data on this indicator (through the Early Childhood Development Index or ECDI) in low- and middle-income countries since around 2010. Many of the individual items included in the ECDI are collected through other mechanisms in high-income (OECD) countries as well.

Collection process:

UNICEF undertakes a wide consultative process of compiling and assessing data from national sources for the purposes of updating its global databases on the situation of children. Up until 2017, the mechanism UNICEF used to collaborate with national authorities on ensuring data quality and international comparability on key indicators of relevance to children was known as Country Data Reporting on the Indicators for the Goals (CRING).

As of 2018, UNICEF launched a new country consultation process with national authorities on selected child-related global SDG indicators it is custodian or co-custodian to meet emerging standards and guidelines on data flows for global reporting of SDG indicators, which place strong emphasis on technical rigour, country ownership and use of official data and statistics. The consultation process solicited feedback directly from National Statistical Offices, as well as other government agencies responsible for official statistics, on the compilation of the indicators, including the data sources used, and the application of internationally agreed definitions, classification and methodologies to the data from that source. Once reviewed, feedback is made available to countries on whether or not specific data points are accepted, and if not, the reasons why. More details on the consultation process can be found in the guidance note.

Data Availability

Description:

Comparable data are available for 72 mostly low- and middle-income countries

Time series:

Not available

Calendar

Data collection:

UNICEF will undertake an annual country consultation likely between December and January every year to allow for review and processing of the feedback received in order to meet global SDG reporting deadlines.

Data release:

Updated data on 4.2.1 as measured by the proxy indicator will be available in March 2019.

Data providers

National Statistical Offices (in most cases)

Data compilers

UNICEF

References

URL:

data.unicef.org

References:

http://data.unicef.org/ecd/development-status.html

Development of the early childhood development index in MICS surveys (MICS Methodological Papers, Paper no. 6: https://tinyurl.com/y8t82jyk)

Work plan for Tier III SDG global indicators: https://unstats.un.org/sdgs/tierIII-indicators/files/Tier3-04-02-01.pdf

Related indicators

Indicator 4.2.2: Participation rate in organized learning (one year before the official primary entry age), by sex