

Department of Economic and Social Affairs

Population Division

# **Fertility among young adolescents aged 10 to 14 years**

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## Notes

The designations employed in this report and the material presented in it do not imply the expression of any opinions whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The term “country” as used in this report also refers, as appropriate, to territories or areas.

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## EXPLANATORY NOTES

### **The following symbols have been used in the tables throughout this report:**

A minus sign (-) before a figure indicates a decrease or negative number.

A full stop (.) is used to indicate decimals.

Years given refer to 1 July.

Use of a hyphen (-) between years, for example, 1995-2000, signifies the full period involved, from 1 July of the first year to 1 July of the second year.

An em dash (—) indicates that the magnitude is not zero, but less than half of the unit employed (i.e. is rounded to 0, when in fact it is not 0)

A 0 or 0.0 indicates that the magnitude is zero

Two dots (..) indicate that data are not available or are not reported separately

Numbers and percentages in this table do not necessarily add to totals because of rounding.

### **References to regions, development groups, countries or areas:**

The designations employed in this publication and the material presented in it do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The term “country” as used in this publication also refers, as appropriate, to territories or areas.

In this table, data for countries or areas have been aggregated in six continental regions: Africa, Asia, Europe, Latin America and the Caribbean, Northern America, and Oceania. Further information on continental regions is available from <https://unstats.un.org/unsd/methodology/m49/>. Countries or areas are also grouped into geographic regions based on the classification being used to track progress towards the Sustainable Development Goals of the United Nations (see: <https://unstats.un.org/sdgs/indicators/regional-groups/>).

The designation of “more developed” and “less developed” regions is intended for statistical purposes and does not express a judgment about the stage reached by a particular country or area in the development process. More developed regions comprise all regions of Europe plus Northern America, Australia and New Zealand and Japan. Less developed regions comprise all regions of Africa, Asia (excluding Japan), and Latin America and the Caribbean as well as Oceania (excluding Australia and New Zealand).

The group of least developed countries includes 47 countries located in sub-Saharan Africa (32), Northern Africa and Western Asia (2), Central and Southern Asia (4), Eastern and South-Eastern Asia (4), Latin America and the Caribbean (1), and Oceania (4). Further information is available at <http://unohrrls.org/about-ldcs/>.

The group of Landlocked Developing Countries (LLDCs) includes 32 countries or territories located in sub-Saharan Africa (16), Northern Africa and Western Asia (2), Central and Southern Asia (8), Eastern and South-Eastern Asia (2), Latin America and the Caribbean (2), and Europe and Northern America (2). Further information is available at <http://unohrrls.org/about-lllcs/>.

The group of Small Island Developing States (SIDS) includes 58 countries or territories located in the Caribbean (29), the Pacific (20), and the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS) (9). Further information is available at <http://unohrlls.org/about-sids/>.

\* For country notes, please refer to: <https://population.un.org/wpp/Download/Metadata/Documentation>

**List of Abbreviations**

DESA	Department of Economic and Social Affairs
DHS	Demographic and Health Survey
SDG	Sustainable Development Goal
TFR	Total fertility rate
ABR	Adolescent Birth Rate
ASFR	Age-specific Fertility Rate

## **KEY FINDINGS**

Young adolescents aged 10-14 years currently represent 8 per cent of the total world population; a majority of them, an estimated 545 million, live in the less developed regions.

Early adolescent childbearing, that occurs in the 10-14 age group, is much more common in sub-Saharan Africa and Latin America and the Caribbean than in other parts of the world.

Early childbearing is more common in the less developed regions than in the developed regions.

Fertility among girls aged 10-14 is currently a matter of high concern in a select number of

countries in sub-Saharan Africa and in Bangladesh.

Elevated early adolescent fertility is often associated with early marriage and child marriage.

Fertility under age 15 is also associated with high fertility in later adolescence (15-19), higher total fertility levels and high population growth rates.

Most countries with measurable levels of early fertility recorded a reduction in early adolescent fertility between 2000-2007 and 2010-2017.

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## INTRODUCTION

The onset of fertility in early adolescence changes the lives of girls and young women in profound ways. Early childbearing limits their options to decide how to lead the rest of her life, if, when and whom to marry, when to start a family and how many children they may want to have. Early adolescent fertility<sup>1</sup> also entails heightened risks of morbidity and mortality for the mother and baby, and related complications affecting their wellbeing. Early teenage pregnancies are often unplanned or unwanted, and are sometimes the result of forced marriages, which tend to take place under social norms and traditions that perpetuate gender inequality, and lead to a pre-mature transition from childhood to motherhood. Very early motherhood also affects young girls' development and their ability to achieve high standards of health, education and economic wellbeing. While in some circumstances, parenthood may confer a perceived positive change in social status along with new roles and responsibilities, early childbearing often reproduces an intergenerational cycle of poverty, low socioeconomic status, and gender inequality, that diminish the adolescents' ability to exercise of their human and reproductive rights.

While demographers and health sector experts recognize that the reproductive life span of a women covers the ages 15 to 49 years, there is a growing interest to learn more about childbearing at the younger adolescent ages. Young adolescents differ in numerous ways, including in their stage of biological and intellectual development, from older adolescents aged 15-19. The study of early adolescent fertility is further justified because of the lasting impacts it has on the socio-economic, physical and mental development of these girls.

Yet little is known about the fertility of young adolescent boys and girls between the ages of 10 and 14 years, and even less is known about their sexual and reproductive health. The cultural sensitivity of the matter, the fact that young girls under age 15 are generally less sexually active than older adolescents or women, and that they very rarely bear children at such young ages, makes the topic difficult to study systematically. Most surveys on the topic interview only older adolescents, aged 15 or over. As a result, research and programs targeting sexual and reproductive health of very young adolescents are rather sparse in comparison with those focused on older adolescents.

However, given that the onset of puberty and sexual maturation is occurring at younger ages (Pathak et al., 2014; Song et al., 2015), it has become ever more important to learn about sexual and reproductive health and related childbearing of young adolescents. Chronological age gives a convenient basis to define adolescence, but age alone is often insufficient to fully capture the biological, cognitive and intellectual development of girls, that tend to vary across socio-cultural environments in addition to chronological age.<sup>2</sup>

The increased interest of the global community to fill the knowledge gap about young adolescent reproductive health and fertility led to the inclusion of adolescent girls aged 10-14 into the Sustainable Development Goals indicator framework adopted by the United Nations General Assembly in July 2017.<sup>3</sup>

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<sup>1</sup> Early adolescent childbearing is defined in this document as childbearing to girls under age 15.

<sup>2</sup> WHO: [https://www.who.int/maternal\\_child\\_adolescent/topics/adolescence/development/en/](https://www.who.int/maternal_child_adolescent/topics/adolescence/development/en/) accessed on 10 December 2019

<sup>3</sup> A/RES/71/313, operative paragraph 1.

Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development, operative paragraph 1.

*Fertility among adolescents aged 10 to 14 years*

Sustainable Development Goal 3 ‘monitoring good health and wellbeing’, indicator 3.7.2 is defined as the adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in the respective age group.<sup>4</sup>

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<sup>4</sup> Data and meta data for this indicator are available at <https://unstats.un.org/sdgs/indicators/database/>. However, no data on adolescent birth rates of girls aged 10-14 have been reported or published to date in the global SDG repository or reports.

## **I. YOUNG ADOLESCENTS - DEMOGRAPHIC TRENDS**

Young adolescents, those aged 10 to 14 years, account for about half of the 1.2 billion people aged 10–19 worldwide in 2020<sup>5</sup> and they represent 8 per cent of the total world population.<sup>6</sup> The vast majority of young adolescents, 9 out of 10, reside in developing countries where achieving good sexual and reproductive health can be challenging for all women, and where adolescents, especially girls, tend to face additional barriers in accessing services and information useful to that end.

At present, there are an estimated 545 million adolescents aged 10 to 14 years living in developing regions. The largest share of the world's 10-14-year-olds live in Central and Southern Asia (29 per cent of the world total), Eastern and Southern Eastern Asia (23 per cent) and in sub-Saharan Africa (21 percent). The remaining 10-14-year-olds live in Latin America and the Caribbean and Oceania (excluding Australia and New Zealand). Globally, there are about 29 million more 10-14-year-olds than 15-19-year-olds, mainly due to the continued high total fertility and population growth rates in sub-Saharan Africa.

The young adolescent population in the developing world is projected to increase by more than 30 million between 2020 and 2030, with most of the total growth expected to occur in sub-Saharan Africa. Northern Africa and Western Asia and Oceania (excluding Australia and New Zealand) are the only two other developing regions that are expected to see an increase in adolescents aged 10-14. Owing to earlier fertility declines elsewhere, the number of young adolescents in other developing regions is expected to decline during this period.

Currently, almost half of all 10-14-years-olds in the world are girls, comprising nearly 310 million globally. Another 15 million adolescents in this age group will be added from 2020 to 2030. Almost one quarter of girls aged 10-14 currently live in in sub-Saharan Africa.

In developing countries, the number of girls in this age group is expected to grow by 5 per cent over the next decade, with the fastest increases foreseen in sub-Saharan Africa (22 per cent) and in Northern Africa and Western Asia (16 per cent). All other regions of the world will see considerably smaller increases or even declines in the population in this age group. Australia and New Zealand, as well as Oceania will see increases in the range of almost 10 per cent, whereas in Eastern and South-Eastern Asia will experience smaller increases (+2 per cent). All other regions, namely Central and South Eastern Asia, Latin America and the Caribbean and Europe and Northern America, are expected to experience slight declines (between 2 and 3 per cent) in the number of young adolescent girls through 2030.

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<sup>5</sup> Age range used by the WHO to define adolescence (WHO 1989). Adolescence is considered to be the period between childhood and adulthood; there are several ways and criteria to more precisely define this period (United Nations, 2012); see E/CN.9/2012/4, page 3.

<sup>6</sup> United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*, Available at: <https://population.un.org/wpp/>.

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## II. MEASUREMENT AND DATA SOURCES

Data on fertility among girls under age 15 are deficient, as noted before, in part because childbirth at these ages is uncommon in most societies. In addition, childbearing at these ages, which often occurs within marriage, is likely to be underreported or concealed to avoid shame and stigmatization.<sup>7</sup> Data are particularly scarce in settings where birth registration is deficient. Recent estimates provided by UNICEF<sup>8</sup> show that as of 2019 only three quarters of the births of children under age 5 had been registered with a civil authority. In sub-Saharan Africa, it is estimated that less than half of all those births are registered, and in South Asia, that proportion is roughly two-thirds. In all other regions of the world, nearly all the births of children under 5 had been registered, with complete registration accomplished in Western Europe and North America (100 per cent), followed by Eastern Europe and Central Asia (99 per cent) and by Latin America and the Caribbean, with more than 95 per cent of all births registered.

The group of least developed countries shows the lowest birth registration rate with only an estimated 40 per cent of all births registered. Given that birth registration is quite incomplete in many of the countries with high levels of early adolescent fertility, such as Chad (12 per cent of births registered) and South Sudan (35 per cent). In Angola and Mozambique, only one in four of the births of children under age 5 is registered. These unregistered births may include some born to young adolescents or the omission of children that died before reaching their fifth birthday, a heightened risk in the case of early age motherhood. In the context of the Sustainable Development Goals, the importance of registration of all births has been recognized with the inclusion of indicator 16.9.1,<sup>9</sup> the proportion of children under 5 years of age whose births have been registered with a civil authority, by age.<sup>10</sup>

For the present analysis of early adolescent fertility, the Population Division has drawn on two sets of data:

### A. THE UNITED NATIONS DEMOGRAPHIC YEARBOOK

One source of data on early fertility is the Demographic Yearbook maintained by the Statistics Division of the United Nations.<sup>11</sup> The Statistics Division collects, compiles and disseminates official demographic and social statistics on a wide range of topics, such as population size and composition, births, deaths, marriage and divorce, as well as respective rates, on an annual basis. These data have been collected since 1948 annually from 230 national statistical offices and are accessible via the Demographic Yearbook collection. The Population Division regularly accesses the *Demographic Yearbook* database.<sup>12</sup> For the present analysis, a dataset of 1,174 data points on early adolescent fertility for 118 countries between 2000 and 2018 has been used.

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<sup>7</sup> Maly C, McClendon KA, Baumgartner JN, et al. Perceptions of Adolescent Pregnancy Among Teenage Girls in Rakai, Uganda. *Glob Qual Nurs Res.* 2017;4:2333393617720555. Published 2017 Aug 10. doi:10.1177/2333393617720555

<sup>8</sup> <https://data.unicef.org/topic/child-protection/birth-registration/>: accessed on 9 December 2019 (data updated in March 2019). This dataset draws on household surveys, but also on national civil registration systems to monitor levels and trends in birth registration

<sup>9</sup> Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels Target 16.9: By 2030, provide legal identity for all, including birth registration

<sup>10</sup> The most recent data on Indicator 16.9.1 (as well as all other SDG Indicators) can be retrieved from the global SDG database, <https://unstats.un.org/sdgs/indicators/database/>

<sup>11</sup> The Demographic Yearbook System is available on the following website: <https://unstats.un.org/unsd/demographic-social/products/dyb/>

<sup>12</sup> The most recently accessed update was that of 26.07.2018

## B. DEMOGRAPHIC AND HEALTH SURVEYS

Fertility indicators are seldom reported for very young adolescents; they are typically calculated for women aged 15-49 only, since this is generally recognized as the main part of the female reproductive life span. However, more information to better understand the circumstances and consequences of sexual activity and fertility at young adolescent ages is needed in the face of increasingly young ages of reaching sexual maturity.

To fill this data gap, the Demographic and Health Surveys (DHS) have recently begun to analyze retrospective birth-history data<sup>13</sup> from young women aged 15-19, which include births that occurred before the girls reached age 15. Birth history data is especially valuable for the topic at hand because girls aged 10-14 are typically not interviewed in DHS or other surveys. The gain in number of additional births captured from lowering the age to interview girls younger than 15 years would be small, while considerable additional resources would be required to include this age group in the survey and to overcome cultural barriers already referred to.

However, DHS researchers have demonstrated that birth history data collected from adolescents aged 15-19 using a window of 3 or 5 years before the survey make it possible to obtain useful information about fertility and related reproductive health indicators for girls aged 10 to 14 years. Indeed, DHS has published these research findings, including the methods employed, in a series of recent reports that focus on sexual and reproductive health of young adolescents (Way, 2014; Mac Quarrie et al., 2017; Pullum et al, 2018).

DHS reports do not include births to women at ages younger than 15 years in the calculation of the total fertility rate (TFR), but the births to girls aged 10-14 at the time of birth are included in the calculation of the age-specific fertility rate (ASFR) for ages 10-14. Births in the month of the interview are excluded because the month of the interview generally does not represent a full month but is censored by the date of the interview. In line with general DHS policy, no adjustment is made for possible omissions, misreporting of the dates of birth of children or misreporting of the date of birth of the women. When using samples of ever-married women, the estimation of fertility rates assumes that never-married women have not had any births. Only the denominator of the rates is adjusted to estimate the number of all women exposed to the risk of childbearing in the age-group (Croft et al., 2018).

Data collected in birth histories are certainly not error-free, and they may be subject to reporting errors that can impact the accuracy of fertility estimates derived from these data. The omission of births cause fertility rates to be underestimated and errors in the reporting of the date of birth of children and of the age of the mother at the birth of the child affect the accuracy of the age-specific fertility rates (Pullam et al, 2014). DHS internal analyses of birth histories has demonstrated that birth histories in most DHS surveys appear to be of sufficiently good quality (Pullam et. al, 2014), although some surveys do show signs of omission, displacement of events or both. The omission or the displacement of the date of births (which amounts to misreporting of the age at the time of birth) tend to produce underestimates of fertility below age 15 and over-estimates of fertility for the age-group 15-19. This also impacts on the estimates of the TFR, since as noted above, it includes fertility between age 15-49 but excludes fertility under the age of 15. Furthermore, omissions and underreporting of children born out of wedlock occurs when data are collected only from married women, and omissions are also more likely where fertility under age 15 is stigmatized, or where births are not recorded when newborns die shortly after birth.

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<sup>13</sup> Birth history data include all live births ever born to adolescents age 15-19 by the time of the interview.

Research by Pullam et al (2014) suggests that the omission of births and displacement of births in DHS surveys generally represent less than 2 percent of births, and rarely exceed 5 per cent. An in-depth analysis of the quality of birth history data of adolescents included in the surveys showed that the birth histories of women aged 15-19 provide nearly complete information on all births to adolescents, since most of the under-15 fertility occurs at age 14 and only in exceptional cases before that age (Pullum et al, 2018).

As indicated earlier, DHS surveys do not adjust for omissions or age-misreporting, but a series of checks are applied to assess the quality of fertility data collected. Three measures undertaken to check data quality (Croft, et. al., 2018) are: (1) Examining the data during fieldwork, for example by re-interviewing some of the same respondents, checking for consistency of responses and reconciling any discrepancies during the fieldwork; (2) Checking calculated rates from survey data from successive surveys for consistency and/or comparison with rates derived from other data sources; (3) checking internal consistency of the files of births prior to the calculation of the fertility rates.

Building on this work, the Population Division has analysed birth history data and available administrative records from more than 200 countries or areas in Africa, Latin America and the Caribbean, Asia and the Pacific, Europe and North America, available as of December 2018, covering years 1940 through 2017. In an effort to fill the knowledge gap on the present status and recent trends of early adolescent fertility, this report takes a closer look at levels and trends of early adolescent fertility from 2000 to 2017.<sup>14</sup> Age-specific fertility rates by single ages were calculated for girls aged 10 to 14 years during the five years before the survey, therefore including any births that may have occurred starting at age 10.<sup>15</sup>

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<sup>14</sup> The Population Division wishes to acknowledge the work undertaken in 2018 by Bruno Schoumaker, Université catholique de Louvain, Louvain-la-Neuve, to estimate adolescent fertility for girls aged 10-14 based on harmonized data sets generated from international surveys.

<sup>15</sup> The preparation of the estimates of recent adolescent fertility of girls aged 10-14 by single ages followed the methodology described in the Guide to DHS statistics (Croft, et. Al. 2018). Computations were performed by Bruno Schoumaker using customized Stata ado codes.

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### **III. LEVELS AND TRENDS OF EARLY ADOLESCENT FERTILITY AMONG GIRLS AGED 10-14**

#### **A. EARLY ADOLESCENT CHILDBEARING IS MORE COMMON IN SUB-SAHARAN AFRICA AND LATIN AMERICA AND THE CARIBBEAN THAN IN OTHER PARTS OF THE WORLD.**

The most recent data available for 190 countries (referring to the year 2000 or earlier) show elevated levels of early adolescent fertility<sup>16</sup> for a limited number of countries in sub-Saharan Africa and in Latin America and the Caribbean.

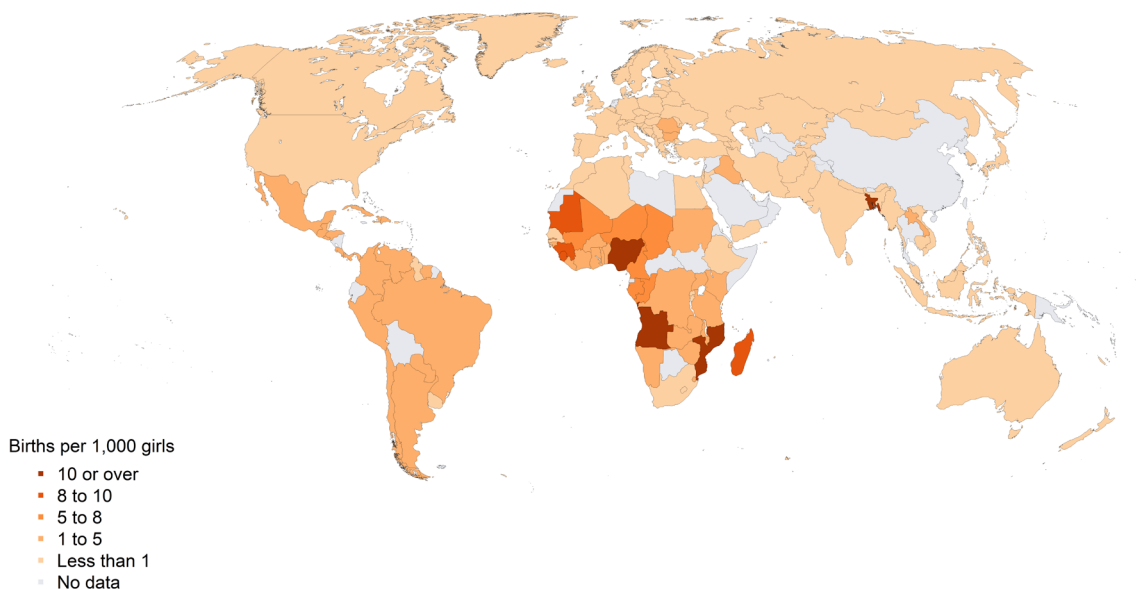
Elevated levels of childbearing at ages 10-14 years are not common in other regions, with the notable exception of Bangladesh in Asia (map III.1). In sub-Saharan Africa, particularly in Western and Central Africa, rates of early adolescent fertility are generally higher and more diverse than in other regions of the world. Three of the four countries in the world with an estimated 10 births per 1,000 girls aged 10 to 14 years are in sub-Saharan Africa, namely Angola, Mozambique and Nigeria. Outside Africa, Bangladesh also is estimated to have 10 births per 1,000 girls at ages 10-14. These countries are followed by Guinea, Sierra Leone, Madagascar and Mauritania with rates from eight to nine births per 1,000 girls aged 10-14. Gabon, Cameroon, Chad, Congo, Mali, Niger, South Sudan, Cote d'Ivoire and Liberia have estimated rates between five and seven births per 1,000 girls in this age-group (table IV.1 and figure map III.1). Fertility rates among young adolescents in Latin America and the Caribbean are considerably lower than in sub-Saharan Africa and Bangladesh (map III.1). The vast majority of Latin American and Caribbean countries had adolescent birth rates between one and five births per 1,000 girls aged 10-14; the highest rate was recorded for Venezuela, with five births per 1,000, followed by two per 1,000 for the Dominican Republic.

Notably, even in countries with somewhat elevated levels of early adolescent fertility, births to girls below age 15 are estimated to be of such low frequency that they are very difficult to measure. Recent data from surveys (figure III.1) suggest that the youngest age at which the level of fertility can be meaningfully described as a rate (annual number of births per 1000 girls) is around age 12, and then only for a small number of countries. In very few countries, such as Mali and South Sudan, births are occasionally recorded starting as early as age 10, but the accuracy of this record is difficult to assess reliably.

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<sup>16</sup> "Elevated levels of early adolescent fertility" in the context of this report means age-specific fertility rates of more than 1 per 1,000 girls of the respective age.

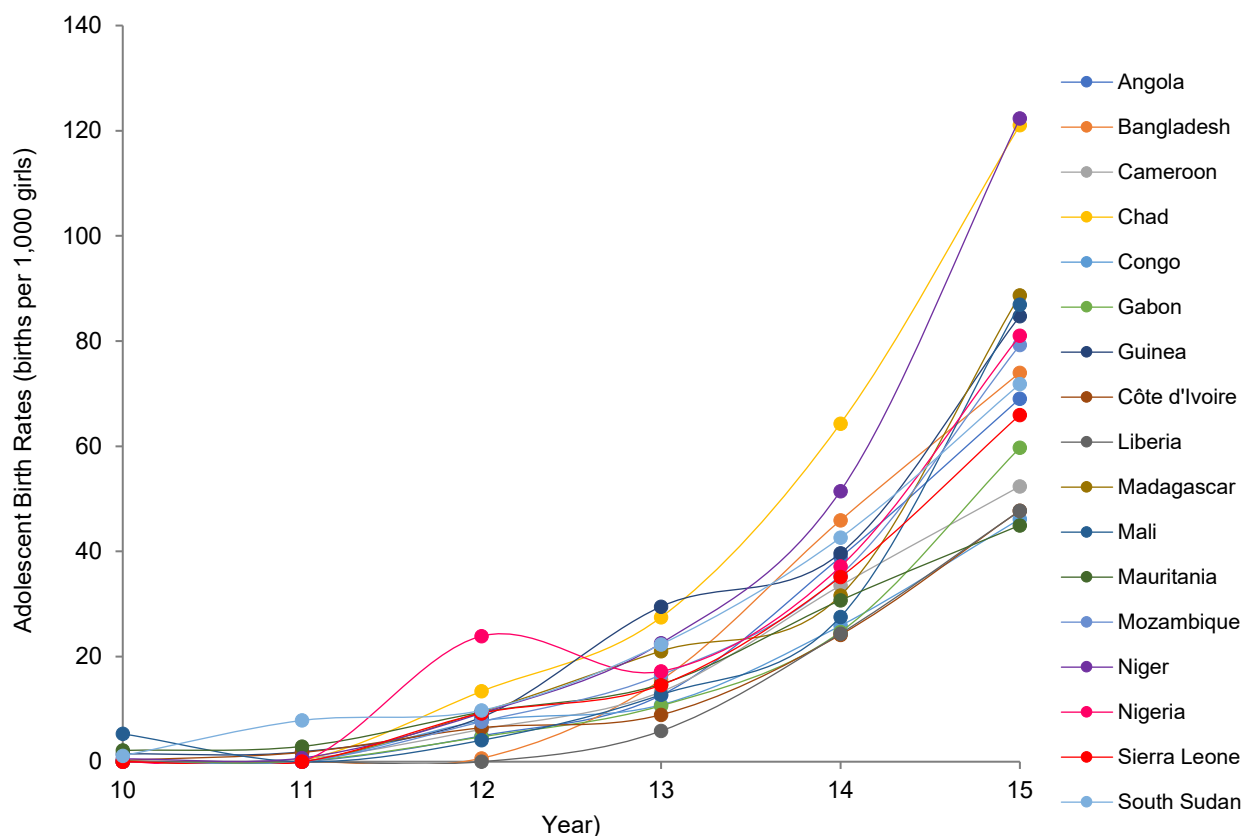
Map III.1. Number of births per 1,000 girls aged 10 to 14 around the world, most recent estimates (2010 – 2017)



*Disclaimer:* The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

*Source:* DHS, Demographic Yearbook: several years

Figure III.1. Fertility rates by single age of mother for countries with measurable levels of early fertility, 2000 – 2017 (births per 1,000 girls of the respective age)

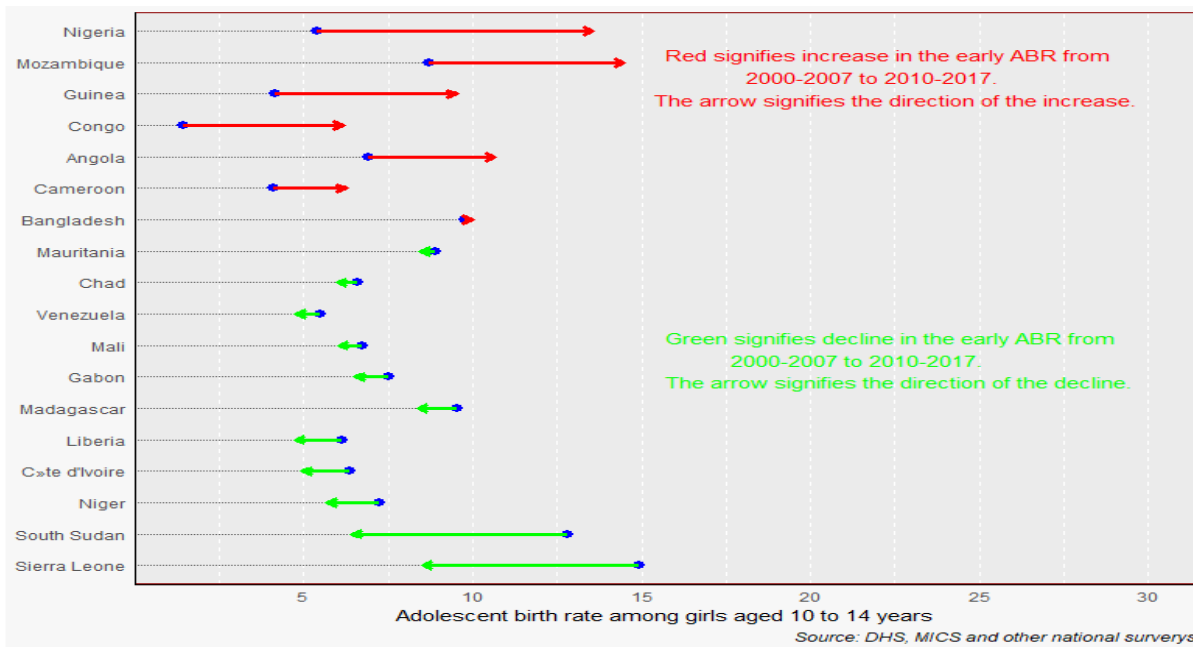


Source: DHS, several years

**B. MOST COUNTRIES WITH MEASURABLE LEVELS OF EARLY CHILDBEARING SHOWED A REDUCTION IN THE ADOLESCENT BIRTH RATE AT AGES 10-14 BETWEEN 2000-2007 AND 2010-2017**

A decline in the early adolescent birth rate was particularly sharp in Sierra Leone and South Sudan (the green arrows in figure III.2), both of which recorded a reduction of 6.4 births per 1,000 girls aged 10-14 years between 2000-2007 and 2010-2017. In addition, presented in order of magnitude, Niger, Côte d'Ivoire, Liberia, Madagascar, Gabon Mali, Venezuela, and Chad recorded reductions in the adolescent birth rate at ages 10-14 years of less than 1.5 births per 1,000 girls aged 10-14. In contrast to these declines, six countries with relatively high levels of early adolescent fertility – Angola, Cameroon, Congo, Guinea, Mozambique and Nigeria – recorded increases in early fertility between 2000-2007 and 2010-2017 (red arrows in figure III.2). Very little change was observed for Bangladesh and Mauritania over the same period.

Figure III.2. Trends in fertility in early ABR (adolescents aged 10-14) between 2000-2007 and 2010-2017



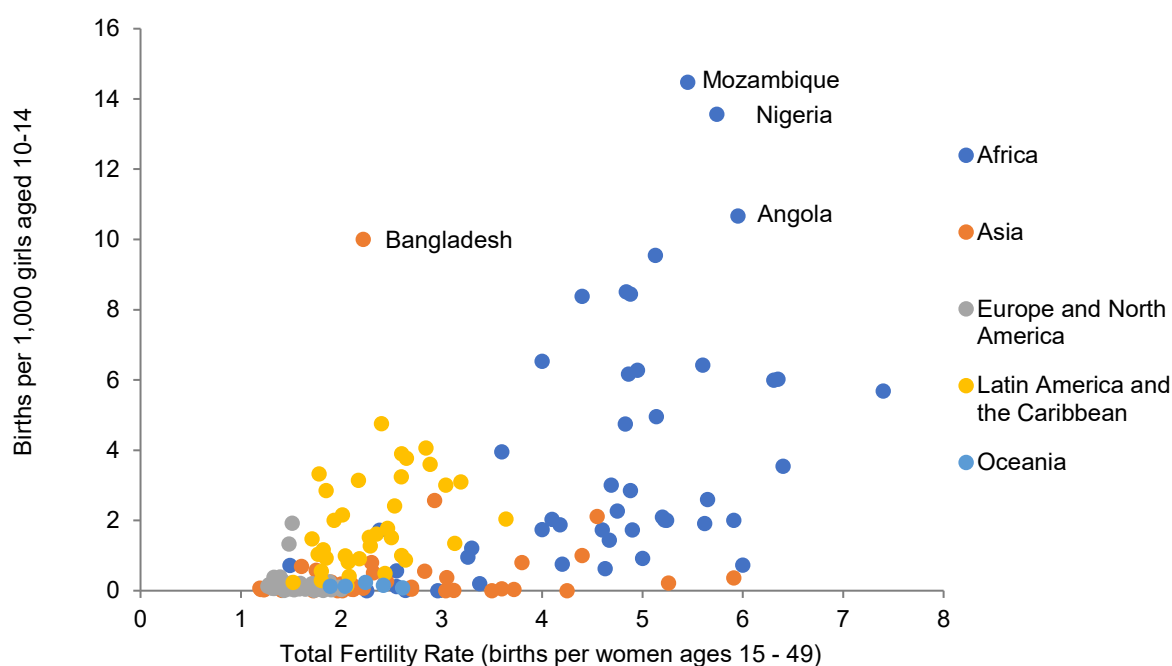
Note: Estimates shown in this figure are for countries with high levels of fertility rates for adolescents aged 15-19 years (of 110 or more births per 1,000 adolescents in that age group)

## IV. EARLY CHILDBEARING AND DEMOGRAPHIC DYNAMICS

### A. EARLY ONSET OF CHILDBEARING IS RELATED TO HIGHER TOTAL FERTILITY

Early childbearing is positively associated with the total fertility rate of women aged 15-49. In the 17 African countries with at least 5 births per 1,000 girls at ages 10-14, total fertility levels in 2019 were over 4 births per woman (figure IV.1),<sup>17</sup> ranging from 7 births per woman in Niger to 4 in Gabon. In countries outside of Africa with measurable early adolescent fertility, total fertility rates were much lower, 2.1 births per woman in Bangladesh, 2.4 in the Dominican Republic and 2.3 in Venezuela.<sup>18</sup>

Figure IV.1. Fertility rates for girls aged 10 to 14 years by level of total fertility, 2010-2017



Source: DHS, several years

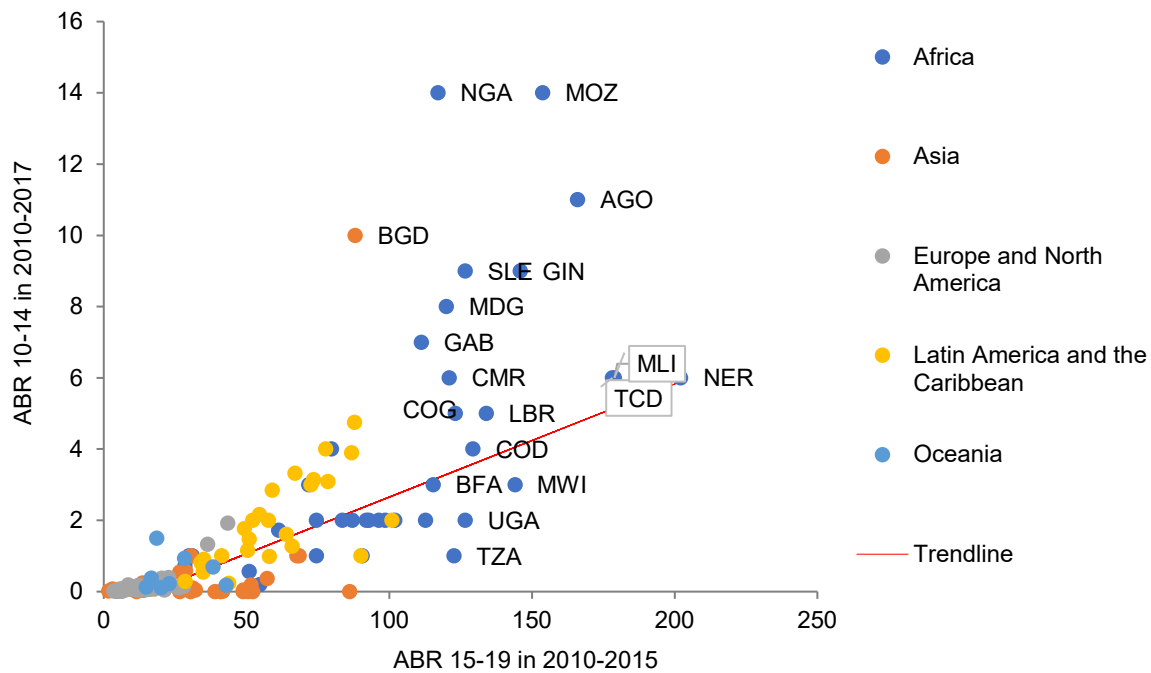
### B. EARLY ONSET OF CHILDBEARING IS CORRELATED TO ELEVATED FERTILITY IN OLDER ADOLESCENCE

Levels of adolescent fertility are correlated across the adolescent age span. Early adolescent fertility is often high where fertility in later adolescence (between age 15-19) is also elevated (table IV.1 & figure IV.2). Almost all countries in sub-Saharan Africa with high levels of early adolescent fertility, as well as Bangladesh in Asia, have rates of fertility for 15-19-year-old women above 110 per 1,000.

<sup>17</sup> This is in line with findings from: i) United Nations, Department of Economic and Social Affairs, Population Division (forthcoming) *World Fertility 2019* and ii) MacQuarrie, Kerry L.D., Lindsay Mallick, and Courtney Allen. 2017. *Sexual and Reproductive Health in Early and Later Adolescence: DHS Data on Youth Age 10-19*. DHS Comparative Reports No. 45. Rockville, Maryland, USA: ICF International

<sup>18</sup> United Nations (2019a)

Figure IV.2. Distribution of countries by level of ABR 10-14 in 2010-2017 and ABR 15-19 in 2010-2015



Source: DHS, MICS, and Demographic Yearbook

Fertility rates of girls aged 10-14 are also elevated in Angola, Chad, Côte D’Ivoire, Guinea, Liberia, Mali, Mozambique and Niger, where fertility for adolescents aged 15-17 years is high (United Nations, 2020). This correlation is not limited to the African region; all other countries with elevated early adolescent fertility, including those in Asia and Latin America and the Caribbean, have fertility rates of 15-17-year-olds between the 71.1 births per 1,000 estimated for the Dominican Republic and the 85.7 per 1,000 of Cameroon.

### C. EARLY ONSET OF CHILDBEARING IS RELATED TO HIGH ANNUAL POPULATION GROWTH RATES

As it may be expected, all African countries with high early adolescent fertility (5 or more births per 1,000 girls aged 10-14) also have high average annual rates of population growth, between 3.8 per cent per year in Niger and 2.1 per cent in Gabon. This is however not the case in Bangladesh or in The Dominican Republic, where total population growth rates are much lower, around 1.1 per cent per year (table IV.1).

#### 1. Drivers of early childbearing

Research has shown (United Nations, 2020; Wong et al, 2019; MacQuarrie, et al, 2017) that key drivers of the onset of fertility at young ages include the level of economic development, early and child marriage,<sup>19</sup>

<sup>19</sup> Child marriage, or early marriage, is any marriage where at least one of the parties is under 18 years of age. Forced marriages are marriages in which one and/or both parties have not personally expressed their full and free consent to the union. (United Nations Office of the High Commissioner on Human Rights: <https://www.ohchr.org/EN/Issues/Women/WRGS/Pages/ChildMarriage.aspx>).

and low rates of use of modern contraception. Other factors underlying early childbearing are cultural traditions and norms that favour boys over girls, particularly regarding completing secondary and advanced education, and those pertaining to early sexual initiation of young girls. Available evidence from developing and developed countries suggests that risks of maternal mortality are generally higher for young adolescents, with girls under the age of 15 facing higher risks than older adolescents (MacQuarrie, et al, 2017; Nove, et al, 2014; UNFPA, 2016; United Nations 2020; WHO, 2018; Wong et al, 2019).

The present chapter takes a closer look at early adolescent fertility in relation to indicators of the level of development, marriage and contraceptive use. The impact of other variables on adolescent fertility, such as education and age at sexual initiation, among others, are discussed more comprehensively in a separate Population Division publication (United Nations, 2020).

## *2. Early adolescent fertility is related to the level of development and the level of poverty*

High early adolescent birthrates are linked to the level of development. The majority of the countries with elevated early adolescent fertility, 9 out of 14 countries (table IV.1), are classified by the United Nations as least developed countries (LDCs).<sup>20</sup> LDCs are “low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets.”<sup>21</sup> According to the most recent data for SDG monitoring,<sup>22</sup> in the majority of the countries with available data on early adolescent fertility, large proportions of the population live below the national poverty line. These include Bangladesh, the Dominican Republic, Gabon, Sierra Leone (with poverty rates between 24 and 32 per cent) and Cameroon and Nigeria (between 34 and 38 per cent). The highest poverty rates were recorded in Chad, Côte d’Ivoire, Guinea, Liberia, Mali, Mozambique and Niger (from 41 to 57 per cent of the population).

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<sup>20</sup> The group of least developed countries, as defined by the United Nations General Assembly in its resolutions (59/209, 59/210, 60/33, 62/97, 64/L.55, 67/L.43, 64/295 and 68/18) included 47 countries in June 2017: 33 in Africa, 9 in Asia, 4 in Oceania and one in Latin America and the Caribbean.

<sup>21</sup> United Nations DESA, 2019: <https://www.un.org/development/desa/dpad/least-developed-country-category.html>

<sup>22</sup> Data for indicator 1.2.1 ‘Proportion of population living below the national poverty line’, drawn from the United Nations SDG database, accessed 12 December 2019

*Fertility among adolescents aged 10 to 14 years*

TABLE IV.1. ADOLESCENT BIRTH RATES, TOTAL FERTILITY RATES (TFR) AND ANNUAL POPULATION GROWTH RATES (R), 2000 – 2017

<i>Region, country or area</i>	<i>TFR (2015- 2020)</i>	<i>r (2015- 2020)</i>	<i>Adolescent birth rate, by age group (2000-2017)</i>			
			<i>10-14 years</i>	<i>15-17 years</i>	<i>18-19 years</i>	<i>15-19 years</i>
<i>Africa</i>						
Angola*.....	5.6	3.3	10	120.4	231.2	162.5
Cameroon.....	4.6	5.8	6	85.7	189.9	126.5
Chad*.....	5.8	3	6	139.2	247.2	179.1
Côte d'Ivoire.....	4.7	2.5	5	101.1	171.4	128.7
Gabon.....	4	2.7	7	84.9	159.4	113.4
Guinea*.....	4.8	2.8	9	113.5	201	146.2
Liberia*.....	4.4	2.5	5	112.8	209.4	149.3
Mali*.....	5.9	3	6	131.4	228.3	171.6
Mozambique*.....	4.9	2.9	10	123	240	166.6
Niger*.....	7	3.8	6	149.9	281.2	205.8
Nigeria.....	5.4	2.6	10	82	180.6	121.6
Sierra Leone*.....	4.3	2.1	9	81.2	81.2	125
<i>Asia</i>						
Bangladesh*.....	2.1	1.1	10	83.9	162.4	113.4
<i>Latin America and the Caribbean</i>						
Dominican Republic...	2.4	1.1	2	71.1	117.5	89.8

\* Least developed countries;

Sources: TFR, r: United Nations (2019b); adolescent birth rates 10-14, 15-17 & 18-19: Population Division calculations based on DHS and MICS data, various years during 2000-2017 (United Nations, 2018)



D. EARLY ADOLESCENT FERTILITY IS MORE COMMON IN COUNTRIES WITH EARLY MARRIAGE AND LOW LEVELS OF CONTRACEPTIVE PREVALENCE

*1. Marriage and early fertility*

In most African countries, the proportion of women who were married before age 15 ranges from 1 per cent to 10 per cent (Wong V., et al, 2017). The countries with the highest proportions of women married before age 15 years are in Western and Middle Africa; they include Central African Republic (22 per cent), Chad (16 per cent), Mali (19 per cent) and Niger (24 per cent). According to the most recent international data set on marriage (United Nations, 2019c),<sup>23</sup> young girls who begun childbearing at very young ages also tend to be married very early (table IV.2). Two out of three adolescents aged 15-19 are currently married in Niger and almost each second adolescent is currently married in Guinea, Mali and Bangladesh. A much smaller proportion (less than 15 per cent) of young girls aged 15-19 are currently married in Gabon and Sierra Leone. In all other countries, one fifth to one third of all adolescent girls were married by age 19. Another indicator of the average age at marriage is the Singulate Mean Age at Marriage,<sup>24</sup> or SMAM. The most recent available estimates of the SMAM suggest that the mean age at first marriage was lowest in Niger and Bangladesh (less than 19 years) and highest in Sierra Leone and Gabon (23 years).

*2. Contraceptive prevalence and early fertility*

As is the case for the indicators of sexual and reproductive health discussed earlier, data on the use of contraception are generally collected only for women age 15-49. The most recent data available (United Nations 2019a, table IV.2) on adolescents age 15-19 for countries with measurable early adolescent fertility show generally low rates of contraceptive use, with the exception of Cameroon, Gabon, Liberia, Sierra Leone and the Dominican Republic, where at least one fifth of all adolescents reported using some type of contraceptive method. Amongst the countries with elevated levels of early adolescent fertility, contraceptive prevalence is reported to be highest in Bangladesh, where every second adolescent girl uses a method (traditional or modern) of contraception. The rates of contraceptive use are lowest (under 10 per cent) in Angola, Chad, Guinea, Mali, Niger and Nigeria. The levels of use of modern contraception range from almost half of all adolescents in Bangladesh to less than two per cent in Chad.

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<sup>23</sup> Data on marriage are generally reported only for women aged 15 years or over.

<sup>24</sup> The Singulate Mean Age at Marriage (SMAM) is the mean age at first marriage among persons who ever marry by a certain age limit, usually before the age of 50 years. It measures the average number of years lived as single or “never married” by a hypothetical cohort of individuals for which the proportions never married at each age are the same as those observed at a moment in time for a given population (United Nations, 2019d).

*Fertility among adolescents aged 10 to 14 years*

TABLE IV.2. ADOLESCENT BIRTH RATES, MARRIAGE AND CONTRACEPTIVE USE, 2000 – 2017

<i>Region, country or area</i>	<i>Fertility (girls aged 10-14)</i>	<i>Marriage (adolescents aged 15-19)</i>		<i>Contraceptive use (adolescents aged 15-19)</i>	
	<i>ABR 10-14 (per 1,000)</i>	<i>Currently married (%)</i>	<i>SMAM (years)</i>	<i>All methods (%)</i>	<i>Modern contraception (%)</i>
<b>Africa</b>					
Angola.....	10	19.6	21.7	9.2	8.2
Cameroon.....	6	20	22.2	30.7	17.7
Chad.....	6	38.3	18.8	2.2	1.9
Côte d'Ivoire.....	5	17.6	23.0	15.5	11.9
Gabon.....	7	13.5	22.1	30.1	24.2
Guinea.....	9	44.5	19.8	6.1	5.4
Liberia.....	5	14.5	22.6	25.1	24.5
Mali.....	6	44.2	18.8	6.6	6.3
Mozambique.....	10	38.7	18.7	16.9	15.7
Niger.....	6	61.0	17.2	5.9	5.9
Nigeria.....	10	29.6	21.2	6.5	5.1
Sierra Leone.....	9	10.4	23.1	21.7	20.7
<b>Asia</b>					
Bangladesh*.....	10	44.2	18.8	51.2	46.7
<b>Latin America and the Caribbean</b>					
Dominican Republic.....	2	18.1	21.5	20.3	19.8

\* data on contraception only available for married/in-union women;

Sources: DHS, MICS and other national surveys (various years), Contraceptive use data (United Nations, 2019a); Marriage data (United Nations, 2019c)

## **V. CONCLUSIONS AND POLICY RECOMMENDATIONS**

The data used for this analysis suggests that early adolescent fertility, which occurs between the ages of 10 and 14 years, appears to be currently prevalent in a relatively small number of countries in Africa, Asia and Latin America. However, this finding should reinforce rather than detract from the need to provide universal access to reproductive health care services, including family planning to all adolescents, including the youngest among them. This is and should remain a priority for national governments and the international community.

There are many reasons for this. First, pertinent data is not available for numerous countries, including many that are likely to have measurable to high levels of early adolescent fertility. Secondly, as noted in this report, it is possible that many births to young adolescents go unreported, which translates directly into under-estimates of early adolescent fertility. Thirdly, the human rights implications and development consequences of early adolescent childbearing are significant and affect one of the most vulnerable segments of the world population.

As discussed in this report and documented elsewhere, the reduction or elimination of early adolescent fertility can make a significant contribution to breaking the cycle of deprivation among girls and young women that often begins at very early ages by limiting their access to early and continued education, reproductive health care and opportunities for better livelihoods. Reducing early fertility is especially difficult because in many instances early childbearing take place within arranged or forced child and early marriages. Most young adolescent girls have little agency in the choices made in contexts where early motherhood is viewed as a way to establish themselves in relevant roles in their communities, following societal norms and traditions. Although most countries have national laws against under-age marriage, local customs and traditions often regulate in practice the lives of young girls, especially when law enforcement mechanisms are weak or nonexistent (United Nations, 1995; UNFPA, 2013, UNICEF, 2019).

To live up to the pledge of the 2030 Agenda for Sustainable Development that no one will be left behind, governments, in collaboration with civil society and the international community, should support the advancement of young girls and adolescent women by eliminating early and forced marriage and to ensure they can exercise the right to determine freely the number and spacing of the children they may wish to have. Young girls should also be given the same opportunities as young boys to advance their education and acquire the skills to participate effectively in the labor market, and to adapt to a changing world. Healthier and better educated adolescents and young women do better in the labor market and earn higher incomes; they also generally marry later and have fewer children, all of which contributes to generate better living conditions for the future generations.

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