United Nations

Department of Economic and Social Affairs

Fertility among Young Adolescents

at Ages 10-14 Years -

A global assessment

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New York, 2020

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The Population Division of the Department of Economic and Social Affairs provides the international community with timely and accessible population data and analysis of population trends and development outcomes for all countries and areas of the world. To this end, the Division undertakes regular studies of population size and characteristics and of all three components of population change (fertility, mortality and migration). Founded in 1946, the Population Division provides substantive support on population and development issues to the United Nations General Assembly, the Economic and Social Council and the Commission on Population and Development. It also leads or participates in various interagency coordination mechanisms of the United Nations system. The work of the Division also contributes to strengthening the capacity of Member States to monitor population trends and to address current and emerging population issues.

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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://unohrlls.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://unohrlls.org/about-lldcs/.

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 Surveys
SDG	Sustainable Development Goal
TFR	Total fertility rate
ABR	Adolescent birth rate
ASFR	Age-specific fertility rate

KEY FINDINGS

There are currently more than 641 million young adolescents aged 10 and 14 years, representing 8 per cent of the global population. Most of them, roughly 545 million, live in countries of the less developed regions.

In general, early adolescent childbearing in the age range from 10 to14 years has been more common in the less developed regions than in the more developed regions.

Childbirth among young adolescent girls has been much more common in sub-Saharan Africa and in Latin America and the Caribbean than in other parts of the world.

The fertility rate among girls aged 10 and 14 has been elevated (6 or more births per 1,000 girls per year) in 11 countries of sub-Saharan Africa (Angola, Cameroon, Chad, Gabon, Guinea, Madagascar, Mali, Mozambique, Niger, Nigeria and Sierra Leone) and in one country of Asia (Bangladesh).

Moderate levels of early adolescent childbearing (from 1 to 5 births per 1,000 girls per year) have been observed in 49 countries in sub-Saharan Africa, 3 in Asia (Nepal, Myanmar and Yemen), 2 in Europe (Bulgaria and Romania) and 20 in Latin America and the Caribbean.

In at least 89 countries, the birth rate among girls aged 10-14 years has been relatively low (less than one birth per 1,000 girls per year).

Early adolescent fertility is often, but not always, positively associated with early marriage.

Childbearing before age 15 is positively correlated with fertility in later adolescence (ages 15 - 19), with total lifetime fertility and with the population growth rate.

Most countries with elevated levels of the adolescent birth rate at ages 10-14 (6 or more births per 1,000 girls per year) recorded a reduction in this rate between 2000-2007 and 2010-2017.

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INTRODUCTION

The initiation of childbearing in early adolescence changes the lives of girls and young women in profound ways. Early adolescent childbearing limits the options of adolescents to decide how to lead the rest of their lives, including if, when and whom to marry, when to start a family and how many children to have. Early adolescent fertility[1] also entails heightened risks of morbidity and mortality for both mother and baby, and related complications affecting their well-being. Early adolescent pregnancies are often unplanned or unwanted; they are sometimes the result of forced or early marriages; and they lead almost inevitably to a pre-mature transition from childhood to motherhood. Very early motherhood also affects young girls' social and physical development and their ability to achieve high standards of health, education and economic well-being. While in some circumstances, parenthood may confer a perceived positive change in social status accompanied by new roles and responsibilities, early adolescent childbearing often reproduces an intergenerational cycle of poverty, low socioeconomic status and gender inequality.

While demographers and health experts recognize that the reproductive life span of a woman covers mainly the ages from 15 to 49 years, there is a growing interest in childbearing that occurs outside that range, in particular in early adolescence. Young adolescents differ in numerous ways, including biological and intellectual development, from older adolescents at ages 15-19 years. Understanding the causes and consequences of early adolescent fertility is important because of its lasting impacts on the socio-economic, physical and mental development of adolescent 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 topic makes it difficult to study it systematically. Another challenge derives from the low numbers of available observations, given that girls under age 15 are generally less sexually active than older adolescents or young women and that they rarely bear children at such ages. For reasons of ethics and cultural sensitivity, surveys that gather information about adolescent childbearing generally interview only older adolescents aged 15 years or over.[2] As a result, research and programs targeting the sexual and reproductive health of young adolescents are sparse in comparison to those focused on older adolescents.

However, given that the average age at onset of puberty and sexual maturation continues to fall — to as low as 12 years or even younger for girls in various settings (Finer and Philbin, 2014, Lee and others, 2016, Pathak, Tripathi and Subramanian, 2014; Song and others, 2015) — it has become increasingly important to have a clear understanding of the sexual and reproductive health and childbearing experiences of young adolescents. Chronological age provides a convenient basis to define adolescence, but age alone is often insufficient to fully capture the biological, cognitive and intellectual development of girls, which tends to vary not only as a function of age but also across socio-cultural environments.[3]

The increased interest of the global community in filling the knowledge gap about childbearing among young adolescents led to the inclusion of adolescent girls aged 10-14 in the indicator framework of the Sustainable Development Goals, which was adopted by the United Nations General Assembly in July

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[1] Early adolescent fertility is defined in this document as childbearing to girls under age 15.

[2] For DHS surveys (Pullum an. 2018) as well as MICS surveys (UNICEF, 2015) the age-range of eligibility for surveys of individual women has always been age 15-49.

[3] WHO: Available at: www.who.int/maternal_child_adolescent/topics/adolescence/development/en/, accessed on 10 December 2019

2017.[4] Sustainable Development Goal 3, which aims to "ensure healthy lives and promote well-being for all at all ages", includes target 3.7 on universal access to sexual and reproductive health-care services. As one measure of progress towards this target, indicator 3.7.2 was defined as the adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group.[5]

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[4] A/RES/71/313. Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development
[5] 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 10 to 14 years old, accounted for about half of the 1.2 billion people between ages 10 and 19 years worldwide in 2020[6] and for roughly 8 per cent of the total global population.[7] Around 9 out of 10 of these young adolescents resided in developing countries, where obtaining high-quality sexual and reproductive health-care services can be challenging for all women and where adolescents, especially girls, tend to face additional barriers in gaining access to such services and related information.

An estimated 545 million adolescents at ages 10-14 years were living in the developing regions in 2020, with the largest shares in Central and Southern Asia (29 per cent), Eastern and South-Eastern Asia (23 per cent) and sub-Saharan Africa (21 per cent), and smaller shares in Latin America and the Caribbean, and in Oceania excluding Australia and New Zealand.

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

Globally in 2020, there were nearly 310 million girls between ages 10 and 14. This number is expected to increase by 15 million from 2020 to 2030. Almost a quarter of all girls in this age group in 2020 lived in sub-Saharan Africa.

In developing countries, the number of girls at these ages is expected to grow by 5 per cent over the next decade, with the fastest increases foreseen for sub-Saharan Africa (22 per cent) and Northern Africa and Western Asia (16 per cent). All other regions will see considerably smaller increases or even declines in the population of this age group. Australia, New Zealand and other countries of Oceania, will see increases of almost 10 per cent, whereas Eastern and South-Eastern Asia will experience no change. All other regions, namely Central and Southern 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 girls ages 10 to 14 through 2030.

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[6] Adolescence is 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. The age range used by the WHO to define adolescence is 10 to 19 years (WHO 2014).
[7] 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 scarce, in part because childbirth at these ages is uncommon in most societies. In addition, childbearing at these ages, which often occurs outside marriage, is likely to be underreported or concealed to avoid shame and stigmatization (Maly and others, 2017). Data are particularly scarce in settings where birth registration is incomplete. Recent estimates by UNICEF[8] demonstrate that a child's birth had been registered with a civil authority for only about three quarters of all children who were under age 5 in 2019. In sub-Saharan Africa, it is estimated that less than half of such births were registered (45 per cent), whereas in South Asia, the proportion was roughly two-thirds (70 per cent). In all other regions of the world, the births of nearly all children under age 5 had been registered, with complete registration accomplished in Western Europe and Northern America (100 per cent), followed by Eastern Europe and Central Asia (99 per cent) and by Latin America and the Caribbean (94 per cent).

The least developed countries have the lowest proportion of registered births, estimated at around 40 per cent. In particular, birth registration is highly incomplete in many countries with high levels of early adolescent fertility, such as Chad (only 12 per cent of births are 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 for children born to mothers under age 15. In the context of the Sustainable Development Goals, the importance of registering all births has been recognized with the inclusion of indicator 16.9.1,[9] the proportion of children under 5 years of age whose births have been registered with a civil authority.[10]

For the present analysis of early adolescent fertility, the Population Division has drawn on two large collections of data: The United Nations *Demographic Yearbook* and the Demographic and Health Surveys.

A. THE UNITED NATIONS *DEMOGRAPHIC YEARBOOK*

One source of data on early adolescent fertility is the Demographic Yearbook of the United Nations,[11] which collects, compiles and disseminates official demographic and social statistics on a wide range of topics, such as population size and composition by age and sex, as well as numbers of births and death and numbers and rates of infant deaths, marriages and divorces. These data have been collected annually since 1948 from 230 national or territorial statistical offices; they are accessible via the Demographic Yearbook collection. A collection of 1,174 data points on early adolescent fertility for 118 countries between 2000 and 2018 was extracted from the *Demographic Yearbook* database and used for the present analysis.[12]

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[8] Available at https://data.unicef.org/topic/child-protection/birth-registration/: accessed on 23 November 2020 (data updated in February 2020). This dataset draws on household surveys, but also on national civil registration systems to monitor levels and trends in birth registration

[9] 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

[10] The most recent data on Indicator 16.9. 1 (as well as all other SDG Indicators) can be retrieved from the global SDG database, Available at https://unstats.un.org/sdgs/indicators/database/ (United Nations, 2019)

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

[12] The most recently accessed update was that of 26 July 2018.

B.   DEMOGRAPHIC AND HEALTH SURVEYS

Fertility indicators are seldom reported for very young adolescents; they are typically calculated for women aged 15-49 years 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 reaching sexual maturity.

To fill this data gap, the Demographic and Health Surveys (DHS) have recently begun to analyze retrospective birth-history data[13] of 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 years are typically not interviewed in DHS or other surveys. The potential gain in the 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 from 10 to 14 years. These research findings, including the methods employed, have been published in a series of recent reports that focus on sexual and reproductive health of young adolescents (Way, 2014; MacQuarrie, Mallick and Allen, 2017; Pullum, 2016; Pullum, Croft and MacQuarrie 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 years at the time of birth are included in the calculation of the age-specific fertility rate (ASFR) for ages 10-14 years. 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 and others, 2018).

Data collected in birth histories are certainly not error-free, and they may be subject to reporting errors that can affect the accuracy of fertility estimates derived from these data (Schoumaker, 2014). The omission of births causes 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 and Becker, 2014). DHS internal analyses of birth histories indicate that birth histories in most DHS surveys appear to be of sufficiently good quality (Pullam and Becker, 2014), although some surveys show signs of omission, displacement of events, or both. The omission or displacement of a child's date of birth is equivalent to misreporting a mother's age at the time of birth. Such errors tend to produce underestimates of fertility below age 15 and over-estimates for ages 15-19. Errors in the timing of births or in the mother's age have consequences for estimates of total fertility as well, since the TFR summarizes fertility levels between age 15 and age 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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[13] Birth history data include all live births ever born to adolescents age 15-19 by the time of the interview.

Research by Pullam and Becker (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, Croft and MacQuarrie, 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 and others, 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.[14] Age-specific fertility rates by single years 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 0.[15]

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14 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.
15 The preparation of the estimates of recent adolescent fertility of girls aged 10-14 by age in single years followed the methodology described in the Guide to DHS statistics (Croft and others, 2018). Computations were performed by Bruno Schoumaker using customized Stata ado codes.

III. LEVELS AND TRENDS OF EARLY ADOLESCENT FERTILITY AMONG GIRLS AGED 10-14 YEARS
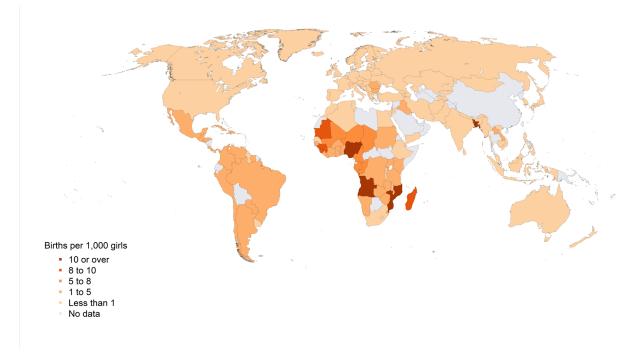
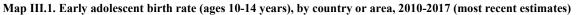### A. REGIONAL PATTERNS OF EARLY ADOLESCENT CHILDBEARING

The most recent data available for 151 countries (referring to the year 2010 or later) show elevated levels of early adolescent fertility in 11 countries in sub-Saharan Africa and one country in Asia (Bangladesh).[16]

Elevated levels of childbearing at ages 10-14 years (6 or more births per 1,000 girls) 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 or more 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, Madagascar and Sierra Leone, with rates from eight to nine births per 1,000 girls aged 10-14. Gabon, Cameroon, Chad, Mali and Niger have estimated rates between six and seven births per 1,000 girls in this age-group (table IV.1 and figure map III.1). Most countries in Africa (24 out of 38) have moderate levels of early adolescent fertility (1 to 5 births per 1,000), with Congo, Cote d'Ivoire and Liberia topping this group with five births per 1,000 in each country. 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 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.

Notably, even in countries with 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 these records is difficult to assess reliably.

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[16] Elevated levels of early adolescent fertility" in the context of this report means age-specific fertility rates of 6 births and more births per 1,000 girls of the respective age. Moderate levels are defined as falling between1 and up to less than 6 births per 1,000 girls, and low levels are defined as falling below 1 birth per 1,000 girls.

Map III.1. Early adolescent birth rate (ages 10-14 years), by country or area, 2010-2017 (most recent estimates)

Births per 1,000 girls
- 10 or over
- 8 to 10
- 5 to 8
- 1 to 5
- Less than 1
- No data

Source: DHS, *Demographic Yearbook*: several years.

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).

Figure III.1. Early adolescent birth rates by single years of age, from 10 to 15 years old, 2000 – 2017

Source: DHS, several years.

B. EARLY ADOLESCENT CHILDBEARING TRENDS SINCE 2000

The 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 experienced 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 adolescent fertility between 2000-2007 and 2010-2017 (red arrows in figure III.2). Very little change was observed for Bangladesh and Mauritania over that period.

Fertility among young adolescents at ages 10-14 years

Figure III.2. Changes in the early adolescent birth rate (ages 10-14 years) from 2000-2007 until 2010-2017

Note: Estimates shown in this figure are for countries with high levels of the adolescent birth rate at ages 15-19 years (of 110 or more births per 1,000 adolescents in that age group per year).

IV. EARLY ADOLESCENT CHILDBEARING AND DEMOGRAPHIC DYNAMICS

A. EARLY CHILDBEARING AS A COMPONENT OF TOTAL FERTILITY

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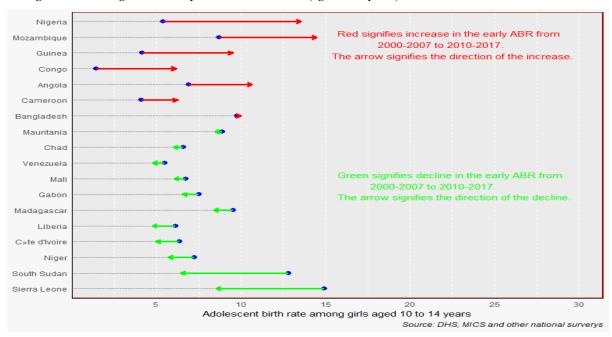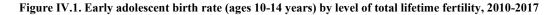re IV.1),[17] ranging from 7 births per woman in Niger to 4 in Gabon. In countries outside of Africa with measurable early adolescent fertility, total fertility rates were much lower, 2.1 births per woman in Bangladesh, 2.4 in the Dominican Republic and 2.3 in Venezuela.[18]

Figure IV.1. Early adolescent birth rate (ages 10-14 years) by level of total lifetime fertility, 2010-2017

Source: DHS, several years

B. CORRELATION WITH FERTILITY AMONG OLDER ADOLESCENTS

Levels of adolescent fertility are positively correlated across the adolescent age span. Early adolescent fertility is often high where fertility in later adolescence (between ages 15 and 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.

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[17] This is in line with findings from: i) United Nations, Department of Economic and Social Affairs, Population Division *World Fertility Report 2019* (2020a) 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
[18] United Nations (2019a)

Figure IV.2. Adolescent birth rate, ages 10-14 versus ages 15-19, 2010-2017

Source: DHS, MICS, and Demographic Yearbook

Adolescent birth rates at ages 10-14 years 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 positive correlation is not limited to the African region; all other countries with elevated early adolescent fertility (6 or more births per 1,000 girls), 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.   CONTRIBUTION TO POPULATION GROWTH

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 adolescent childbearing

Research has shown (United Nations, 2020b; Wong and Kågesten, 2017; MacQuarrie, Mallick and Allen, 2017) that key drivers of the onset of fertility at young ages include the level of economic

development, early or child marriage,[19] and low rates of use of modern contraception. Other factors underlying early adolescent 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, Mallick and Allen, 2017; Nove and others, 2014; UNFPA, 2016; United Nations 2020b; WHO, 2018; Wong and Kågesten, 2017).

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, 2020a).

2.   *Connections between early adolescent fertility, poverty and level of development*

High early adolescent birth rates 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).[20] 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."[21] According to the most recent data for SDG monitoring,[22] in most 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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[19] 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).

[20] 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.

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

[22] 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

TABLE IV.1. TOTAL FERTILITY RATE (TFR), ANNUAL POPULATION GROWTH RATE (r)
AND ADOLESCENT BIRTH RATES (ABR) BY AGE, COUNTRIES WITH ELEVATED EARLY ABR, 2010 – 2017

Region, country or area	TFR 2015-2020	r (per cent) 2015-2020	Adolescent birth rate (births per 1,000 girls/women per year), selected age groups, 2010-2017			
			10-14 years	15-17 years	18-19 years	15-19 years
Africa						
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	3.0	6	139.2	247.2	179.1
Côte d'Ivoire.......................	4.7	2.5	5	101.1	171.4	128.7
Gabon.................................	4.0	2.7	7	84.9	159.4	113.4
Guinea*..............................	4.8	2.8	9	113.5	201.0	146.2
Liberia*..............................	4.4	2.5	5	112.8	209.4	149.3
Mali*.................................	5.9	3.0	6	131.4	228.3	171.6
Mozambique*......................	4.9	2.9	10	123.0	240.0	166.6
Niger*................................	7.0	3.8	6	149.9	281.2	205.8
Nigeria...............................	5.4	2.6	10	82.0	180.6	121.6
Sierra Leone*.......................	4.3	2.1	9	81.2	81.2	125.0
Asia						
Bangladesh*.........................	2.1	1.1	10	83.9	162.4	113.4
Latin America and the Caribbean						
Venezuela	2.4	- 1.1	5	..	..	87.8

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).

* Least developed countries.

D. ROLE OF EARLY MARRIAGE AND CONTRACEPTIVE PREVALENCE

1. *Marriage and early adolescent fertility*

In most African countries, the proportion of women who were married before age 15 ranges from 1 per cent to 10 percent (Wong and Kågesten, 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),[23] 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

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[23] Data on marriage are generally reported only for women aged 15 years or over.

were married by age 19. Another indicator of the average age at marriage is the Singulate Mean Age at Marriage (SMAM).[24] 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 adolescent 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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[24] 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, 2019c).

TABLE IV.2. EARLY ADOLESCENT BIRTH RATE (ABR), PROPORTIONS OF OLDER ADOLESCENTS WHO ARE
MARRIED OR USING MODERN CONTRACEPTIVES AND AVERAGE AGE AT FIRST MARRIAGE,
COUNTRIES WITH ELEVATED EARLY ABR, 2000 – 2017

	Girls aged 10-14	*Adolescent women aged 15-19*			*Women (all ages)*
	Fertility	*Marriage*	*Contraceptive use*		*Marriage*
Region, country or area	*Adolescent birth rate (per 1,000 per year)*	*Currently married (per cent)*	*All methods (per cent)*	*Modern methods only (per cent)*	*Average age at first marriage (in years)*
Africa					
Angola............................	10	19.6	9.2	8.2	21.7
Cameroon........................	6	20.0	30.7	17.7	22.2
Chad................................	6	38.3	2.2	1.9	18.8
Côte d'Ivoire..................	5	17.6	15.5	11.9	23.0
Gabon.............................	7	13.5	30.1	24.2	22.1
Guinea............................	9	44.5	6.1	5.4	19.8
Liberia............................	5	14.5	25.1	24.5	22.6
Mali................................	6	44.2	6.6	6.3	18.8
Mozambique..................	10	38.7	16.9	15.7	18.7
Niger...............................	6	61.0	5.9	5.9	17.2
Nigeria............................	10	29.6	6.5	5.1	21.2
Sierra Leone...................	9	10.4	21.7	20.7	23.1
Asia					
Bangladesh*..................	10	44.2	51.2	46.7	18.8
Latin America and the Caribbean					
Venezuela..................	5	15.8	56.0	..	22.9

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

* Data on contraception only available for married/in-union women.

V.   CONCLUSIONS AND POLICY RECOMMENDATIONS

The present analysis indicates that elevated and moderate levels of early adolescent fertility have been observed in 62 countries (35 in Africa, 4 in Asia, 2 in Europe and 21 in Latin America and the Caribbean) out of 151 countries with available data. In another 89 countries (59 per cent of those with data), either childbirth among adolescent girls at ages 10-14 years occurs with such low frequency that it is difficult to reliably measure a rate, or there are no births occurring to girls in this age group.

Beyond the precise levels documented, improvements in the measurement of adolescent fertility at these young ages merit continued attention. These improvements are needed for several reasons. First, pertinent data on early adolescent fertility are not available for 81 countries or areas, including many that are likely to have moderate or high levels of early adolescent fertility. Second, as noted in this report, it is possible that many births to young adolescents go unreported, resulting in under-estimates of the level of early adolescent fertility. Third, there is little doubt that early adolescent childbearing has significant human rights and development implications, that affect one of the most vulnerable segments of the world's population.

As discussed here and documented elsewhere, the reduction or elimination of early adolescent fertility can contribute to breaking the cycle of deprivation seen among girls and young women in many countries. The experience of deprivation often begins at early ages by limiting access to early and continuing education, sexual and reproductive health care, and opportunities for better livelihoods. However, reducing early adolescent fertility is especially difficult because in many instances early adolescent childbearing takes place within arranged or forced child or early marriages. Young adolescent girls have little control over choices made on their behalf in contexts where early motherhood is viewed as a way for women to establish themselves in relevant roles in their communities, while adhering to 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 non-existent (Darrosch and others, 2016; United Nations, 1995; UNFPA, 2013, UNICEF, 2015).

To fulfil the pledge of the 2030 Agenda for Sustainable Development that no one will be left behind, Governments should collaborate with civil society and the international community to support the advancement of adolescent girls and young women. A first step is to eliminate early and forced marriages and to ensure that adolescent girls and young women can exercise the right to determine freely and responsibly the number and spacing of any children they may wish to have. A second step is to ensure that young girls are given the same opportunities as young boys to advance their education and to acquire the skills needed to participate effectively in the labour market and to adapt throughout life to a changing world. Healthier and better-educated adolescent girls and young women are likely to have greater success in the labour market and to earn higher incomes; they also are likely to marry later and to have fewer children. Such actions would empower individual women and girls and contribute to the achievement of better living conditions for future generations.

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