

Goal 3: Ensure healthy lives and promote well-being for all at all ages

Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes

Indicator 3.7.1: Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods

Institutional information

Organization(s):

Population Division, Department of Economic and Social Affairs (DESA)

United Nations Population Fund (UNFPA)

Concepts and definitions

Definition:

The percentage of women of reproductive age (15-49 years) who desire either to have no (additional) children or to postpone the next child and who are currently using a modern contraceptive method.

Rationale:

The proportion of demand for family planning satisfied with modern methods is useful in assessing overall levels of coverage for family planning programmes and services. Access to and use of an effective means to prevent pregnancy helps enable women and their partners to exercise their rights to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so. Meeting demand for family planning with modern methods also contributes to maternal and child health by preventing unintended pregnancies and closely spaced pregnancies, which are at higher risk for poor obstetrical outcomes. Levels of demand for family planning satisfied with modern methods of 75 per cent or more are generally considered high, and values of 50 per cent or less are generally considered as very low.

Concepts:

The percentage of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods is also referred to as the proportion of demand satisfied by modern methods. The components of the indicator are contraceptive prevalence (any method and modern methods) and unmet need for family planning.

Contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. Unmet need for family planning is defined as the percentage of women of reproductive age, either married or in a union, who want to stop or delay childbearing but are not using any method of contraception.

For analytical purposes, contraceptive methods are often classified as either modern or traditional. Modern methods of contraception include female and male sterilization, the intra-uterine device (IUD), the implant, injectables, oral contraceptive pills, male and female condoms, vaginal barrier methods (including the diaphragm, cervical cap and spermicidal foam, jelly, cream and sponge), lactational amenorrhea method (LAM), emergency contraception and other modern methods not reported separately (e.g., the contraceptive patch or vaginal ring). Traditional methods of contraception include rhythm (e.g., fertility awareness-based methods, periodic abstinence), withdrawal and other traditional methods not reported separately.

Comments and limitations:

Differences in the survey design and implementation, as well as differences in the way survey questionnaires are formulated and administered can affect the comparability of the data. The most common differences relate to the range of contraceptive methods included and the characteristics (age, sex, marital or union status) of the persons for whom contraceptive prevalence is estimated (base population). The time frame used to assess contraceptive prevalence can also vary. In most surveys there is no definition of what is meant by “currently using” a method of contraception.

In some surveys, the lack of probing questions, asked to ensure that the respondent understands the meaning of the different contraceptive methods, can result in an underestimation of contraceptive prevalence, in particular for traditional methods. Sampling variability can also be an issue, especially when contraceptive prevalence is measured for a specific subgroup (according to method, age-group, level of educational attainment, place of residence, etc.) or when analyzing trends over time.

When data on married or in-union women aged 15 to 49 are not available, information for the next most comparable group of persons is reported. Illustrations of base populations that are sometimes presented are: married or in-union women aged 15-44, sexually active women (irrespective of marital status), ever-married women, or men and women who are married or in a union. Notes in the data set indicate any differences between the data presented and the standard definitions of contraceptive prevalence or unmet need for family planning or where data pertain to populations that are not representative of all married or in-union women of reproductive age.

Methodology

Computation Method:

The numerator is the percentage of women of reproductive age (15-49 years old) who are currently using, or whose sexual partner is currently using, at least one modern contraceptive method. The denominator is the total demand for family planning (the sum of contraceptive prevalence (any method) and the unmet need for family planning). Estimates are with respect to women who are married or in a union.

Disaggregation:

Age, geographic location, marital status, socioeconomic status and other categories, depending on the data source and number of observations.

Treatment of missing values:

- **At country level**

There is no attempt to provide estimates for individual countries or areas when country or area data are not available.

- **At regional and global levels**

In order to generate regional and global estimates for any given reference year, the Population Division/DESA uses a Bayesian hierarchical model, described in detail in: Alkema L., V. Kantorova, C. Menozzi and A. Biddlecom (2013). National, regional and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: a systematic and comprehensive analysis. *The Lancet*. Vol. 381, Issue 9878, pp. 1642–1652.

Country-level, model-based estimates are only used for computing the regional and global averages and are not used for global SDG reporting of trends at the country level. The fewer the number of observations for the country of interest, the more its estimates are driven by the experience of other countries, whereas for countries with many observations the results are determined to a greater extent by those observations.

Regional aggregates:

The Bayesian hierarchical model is used to generate regional and global estimates and projections of the indicator. Aggregate estimates and projections are weighted averages of the model-based country estimates, using the number of married or in-union women aged 15-49 for the reference year in each country. Regional averages are provided only if data are available on contraceptive prevalence for at least 50 per cent of the women of reproductive age who are married or in union in the region. Details on the methodology are described in: Alkema L., V. Kantorova, C. Menozzi and A. Biddlecom (2013). National, regional and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: a systematic and comprehensive analysis. *The Lancet*. Vol. 381, Issue 9878, pp. 1642–1652.

Starting in 2017, the estimates presented are adjusted median values derived from the posterior distributions of the model. To perform the adjustments, the model-based medians of the Bayesian posteriors for total contraceptive prevalence (CPany), the ratio of modern contraceptive prevalence to total contraceptive prevalence (CPmod/CPany), and the ratio of unmet need to non-contraceptive users $UnmetNeed/(1-CPany)$, were retained as estimated in the model. These values were used to adjust all the other median values, namely, that of CPmod, traditional contraceptive prevalence (CPtrad), UnmetNeed, the total demand for family planning (TotalDemand), and most

importantly, indicator 3.7.1 itself, the ratio of prevalence of modern methods to the total demand for family planning (DemandSatbyMod). The mathematical operations performed were:

$$CPmod^* = CPany \times \left(\frac{CPmod}{CPany} \right)$$

$$CPtrad^* = CPany - CPmod^*$$

$$UnmetNeed^* = (1 - CPany) \times \left(\frac{UnmetNeed}{1 - CPany} \right)$$

$$TotalDemand^* = CPany + UnmetNeed^*$$

$$DemandSatbyMod^* = \left(\frac{CPmod^*}{TotalDemand^*} \right)$$

where the asterisked variable x^* represent the adjusted value of x . These adjustments ensure that the reported values conform to the identities required by their definitions, namely: $CPmod + CPtrad = CPany$; $CPany + UnmetNeed = TotalDemand$; and $DemandSatbyMod = CPmod/TotalDemand$.

Sources of discrepancies:

Generally, there is no discrepancy between data presented and data published in survey reports. However, some published national data have been adjusted by the Population Division to improve comparability. Notes are used in the data set to indicate when adjustments were made and where data differed from standard definitions.

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

N.A.

Quality assurance

N.A.

Consultation/validation process with countries for adjustments and estimates

The data are taken from published survey reports or, in exceptional cases, other published analytic reports. If clarification is needed, contact is made with the survey sponsors or authoring organization, which occasionally may supply corrected or adjusted estimates in response.

Data Sources

This indicator is calculated from nationally-representative household survey data. Multi-country survey programmes that include relevant data for this indicator are: Contraceptive Prevalence Surveys (CPS), Demographic and Health Surveys (DHS), Fertility and Family Surveys (FFS), Reproductive Health Surveys (RHS), Multiple Indicator Cluster Surveys (MICS), Performance Monitoring and Accountability 2020

surveys (PMA), World Fertility Surveys (WFS), other international survey programmes and national surveys.

For information on the source of each estimate, see United Nations, Department of Economic and Social Affairs, Population Division (2017). World Contraceptive Use 2017 (POP/DB/CP/Rev2017).

Data Availability

Data for the percentage of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods are available for 131 countries or areas for the 2000-2016 time period. For 86 countries or areas, there are at least two available data points.

The regional breakdown of data availability is as follows:

World and SDG regions	Between 2000 and 2016	
	At least one data point	Two or more data points
WORLD	131	86
Northern America and Europe	13	6
Northern America	1	1
Europe	12	5
Latin America and the Caribbean	23	17
Central Asia and Southern Asia	13	6
Central Asia	4	1
Southern Asia	9	5
Eastern Asia and South-eastern Asia	11	10
Eastern Asia	3	2
South-eastern Asia	8	8
Western Asia and Northern Africa	17	10
Western Asia	11	7
Northern Africa	6	3
Sub-Saharan Africa	45	36
Oceania	9	1
Oceania excluding Australia and New Zealand	9	1
Australia and New Zealand	0	0
Landlocked developing countries (LLDCs)	31	22
Least Developed Countries (LDCs)	46	34
Small island developing States (SIDS)	26	11

Calendar

Data collection:

Data are compiled and updated annually in the first quarter of the year.

Data release:

Updated data on the indicator are released by the Population Division in the second quarter of each year. The next release is expected in the second quarter of 2018. A comprehensive compilation of data is published annually by the Population Division. These data are currently with reference to married or in-union women of reproductive age (15-49 years). See: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Contraceptive Use 2017 (POP/DB/CP/Rev2017).

Data providers

Survey data are obtained from national household surveys that are internationally coordinated—such as the Demographic and Health Surveys (DHS), the Reproductive Health Surveys (RHS), and the Multiple Indicator Cluster Surveys (MICS)—and other nationally-sponsored surveys. Systematic searches of these international survey programmes, survey databases (e.g., the Integrated Household Survey Network (IHSN) database) and ad hoc queries in addition to utilization of the country-specific responses to questionnaires on data administered by UNICEF (Country Reporting on Indicators for the Goals (CRING)) and information from UNFPA field offices.

Data compilers

This indicator is produced at the global level by the Population Division, Department of Economic and Social Affairs, United Nations in collaboration with the United Nations Population Fund (UNFPA).

References

URL:

<http://www.un.org/en/development/desa/population/>; www.UnfpaOpendata.org

References:

World Contraceptive Use 2017 (POP/DB/CP/Rev2017), United Nations Publication, (<http://www.un.org/en/development/desa/population/publications/dataset/contraception/wcu2017.shtml>)

Alkema, LA and others (2013). National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: A systematic and comprehensive analysis. *The Lancet*, Volume 381, Issue 9878, pp. 1642-1652. See also webappendix with technical details available at <http://www.un.org/en/development/desa/population/theme/family-planning/index.shtml>

Bradley and others (2012). Revising Unmet Need for Family Planning. DHS Analytical Studies No. 25, Calverton, Maryland: ICF International. [http://dhsprogram.com/pubs/pdf/AS25/AS25\[12June2012\].pdf](http://dhsprogram.com/pubs/pdf/AS25/AS25[12June2012].pdf)

Handbook on Indicators for Monitoring the Millennium Development Goals, United Nations, <http://mdgs.un.org/unsd/mi/wiki/MainPage.ashx>

Monitoring progress in family planning. FP2020 core indicators. Glastonbury (CT): Track20
<http://www.track20.org/pages/data/indicators>

World Health Organization (2011). Monitoring maternal, newborn and child health: understanding key progress indicators. Geneva: WHO.
http://www.who.int/entity/healthmetrics/news/monitoring_maternal_newborn_child_health.pdf

World Health Organization (2015). Global Reference List of 100 Core Health Indicators, 2015: Metadata, http://www.who.int/healthinfo/indicators/2015/chi_2015_74_family_planning.pdf?ua=1

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http://www.who.int/entity/healthmetrics/news/monitoring_maternal_newborn_child_health.pdf

World Health Organization (2015). Global Reference List of 100 Core Health Indicators, 2015: Metadata, http://www.who.int/healthinfo/indicators/2015/chi_2015_74_family_planning.pdf?ua=1

Related indicators

This indicator is linked to Target 3.8 (Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all) because the provision of family planning information and methods to all individuals who want to prevent pregnancy is an important component of achieving universal health coverage.

This indicator is also linked to Target 5.6 (Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences) because meeting the demand for family planning is facilitated by increasing access to sexual and reproductive health-care services, and also improves sexual and reproductive health and the ability to exercise reproductive rights.