United Nations
Department of Economic and Social Affairs

Population Division

Technical Paper
No. 2018/2

Methods for estimating and projecting key family planning indicators among all women of reproductive age

An updated and expanded version of this technical paper has been published in the following open access publication: Kantorová, V., Wheldon, M. C., Ueffing, P., & Dasgupta, A. N. Z. (2020). Estimating progress towards meeting women's contraceptive needs in 185 countries: A Bayesian hierarchical modelling study. *PLOS Medicine*, 17(2), e1003026. https://doi.org/10/ggk3cf

This page is intentionally left blank

Population Division

Technical Paper
No. 2018/2

Methods for estimating and projecting key family planning indicators among all women of reproductive age

Mark Wheldon, Vladimíra Kantorová, Philipp Ueffing and Aisha N. Z. Dasgupta

United Nations • New York, 2018

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

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.

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 paper also refers, as appropriate, to territories or areas.

This publication has been issued without formal editing.

This technical paper is available in electronic format on the Division's website at www.unpopulation.org. For further information about this technical paper, please contact the Population Division, Department of Economic and Social Affairs, United Nations, New York, 10017, USA, by fax: 1 212 963 2147 or by e-mail at population@un.org.

Suggested citation:
Mark Wheldon, Vladimíra Kantorová, Philipp Ueffing and Aisha N. Z. Dasgupta (2018). Methods for estimating and projecting key family planning indicators among all women of reproductive age. United Nations, Department of Economic and Social Affairs, Population Division, Technical Paper No. 2. New York: United Nations.

An updated and expanded version of this technical paper has been published in the following open access publication:
Kantorová, V., Wheldon, M. C., Ueffing, P., & Dasgupta, A. N. Z. (2020). Estimating progress towards meeting women's contraceptive needs in 185 countries: A Bayesian hierarchical modelling study. *PLOS Medicine*, 17(2), e1003026. https://doi.org/10/ggk3cf

PREFACE

This technical paper presents a method for producing annual estimates and projections of key family planning indicators for all countries and areas of the world based on observations of contraceptive use and unmet need for family planning from nationally-representative surveys included in the data compilations World Contraceptive Use 2018 and World Contraceptive Use by Marital Status and Age 2018 (United Nations 2018d, 2018e). The Bayesian hierarchical model introduced here expands an existing statistical model developed for estimating and projecting contraceptive use and unmet need for family planning for women who are married or in a union (Alkema and others, 2013) to all women irrespective of marital status. It also produces estimates and projections of these indicators for women who are not married and the model accounts for differences in the prevalence of sexual activity among unmarried women across countries through the application of hierarchical categories that account for these differences. The Bayesian hierarchical model combined with country-specific time trends provides an assessment of uncertainty around the estimates, which considers the availability and biases of survey observations. The methodology presented in this paper provides results needed for the global monitoring of Sustainable Development Goals (SDG) indicator 3.7.1. "Proportion of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods" that captures the family planning component for the global monitoring of the target 3.7. "to ensure universal access to sexual and reproductive health care services, including family planning, by 2030".

This work was supported, in part, by Grants No. OPP1110679 and OPP1183453, Making Family Planning Count, from the Bill & Melinda Gates Foundation. The authors gratefully acknowledge Ann Biddlecom, Jorge Bravo, Patrick Gerland, and John R. Wilmoth for their helpful comments on the technical paper. In addition, we thank Helena Cruz Castanheira, Stephen Kisambira, Kyaw-Kyaw Lay, Natalie Lin, and Nadia Soerjanto for their help with compiling the data sets of key family planning indicators, Leontine Alkema, Win Brown, Niamh Cahill, Emily Sonneveldt, John Stover, and Michelle Weinberger for their valuable contributions to discussions regarding model development.

The purpose of the Technical Paper series is to publish substantive and methodological research on population issues carried out by experts both within and outside of the United Nations system. The series promotes scientific understanding of population issues among Governments, national and international organizations, research institutions and individuals engaged in social and economic planning, research and training.

The Technical Paper series as well as other population information may be accessed on the Population Division's website at www.unpopulation.org. For further information concerning this publication, please contact the Population Division, Department of Economic and Social Affairs, United Nations, New York, 10017, USA, telephone +1-212-963-3209, fax +1-212- 963-2147, e-mail: population@un.org.

This page is intentionally left blank

CONTENTS

LIST OF TABLES

LIST OF FIGURES

This page is intentionally left blank

METHODS FOR ESTIMATING AND PROJECTING KEY FAMILY PLANNING INDICATORS FOR ALL COUNTRIES FROM 2000 TO 2030

*Mark C. Wheldon, Vladimíra Kantorová, Philipp Ueffing and Aisha N. Z. Dasgupta**

1. INTRODUCTION

The United Nations Population Division has extended the data compilations of family planning indicators to all women of reproductive age, disaggregated by marital status and age (United Nations, 2018e) in an effort to provide comprehensive data for the global monitoring of Sustainable Development Goal (SDG) indicator 3.7.1. "Proportion of women of reproductive age (15-49 years) who have their need for family planning satisfied with modern methods" which captures the family planning component for the global monitoring of the target 3.7. "to ensure universal access to sexual and reproductive health care services, including family planning, by 2030" (United Nations, 2015; United Nations, 2018c). Global monitoring of SDG indicator 3.7.1. at the country level for all women of reproductive age will be based on this data set. This technical paper presents a methodology developed for producing comprehensive annual estimates and projections of key family planning indicators at the national, regional and global level from 2000 to 2030. The results will be used for the global monitoring of the SDG indicator 3.7.1. at the regional and global level. Additionally, the data set forms a basis for comparative analyses of levels and trends in contraceptive use and unmet need for family planning worldwide.

Figure 1 illustrates the components of the data compilation and methodology development and describes how and at which stage other publications of the United Nations Population Division (UNPD) are used.

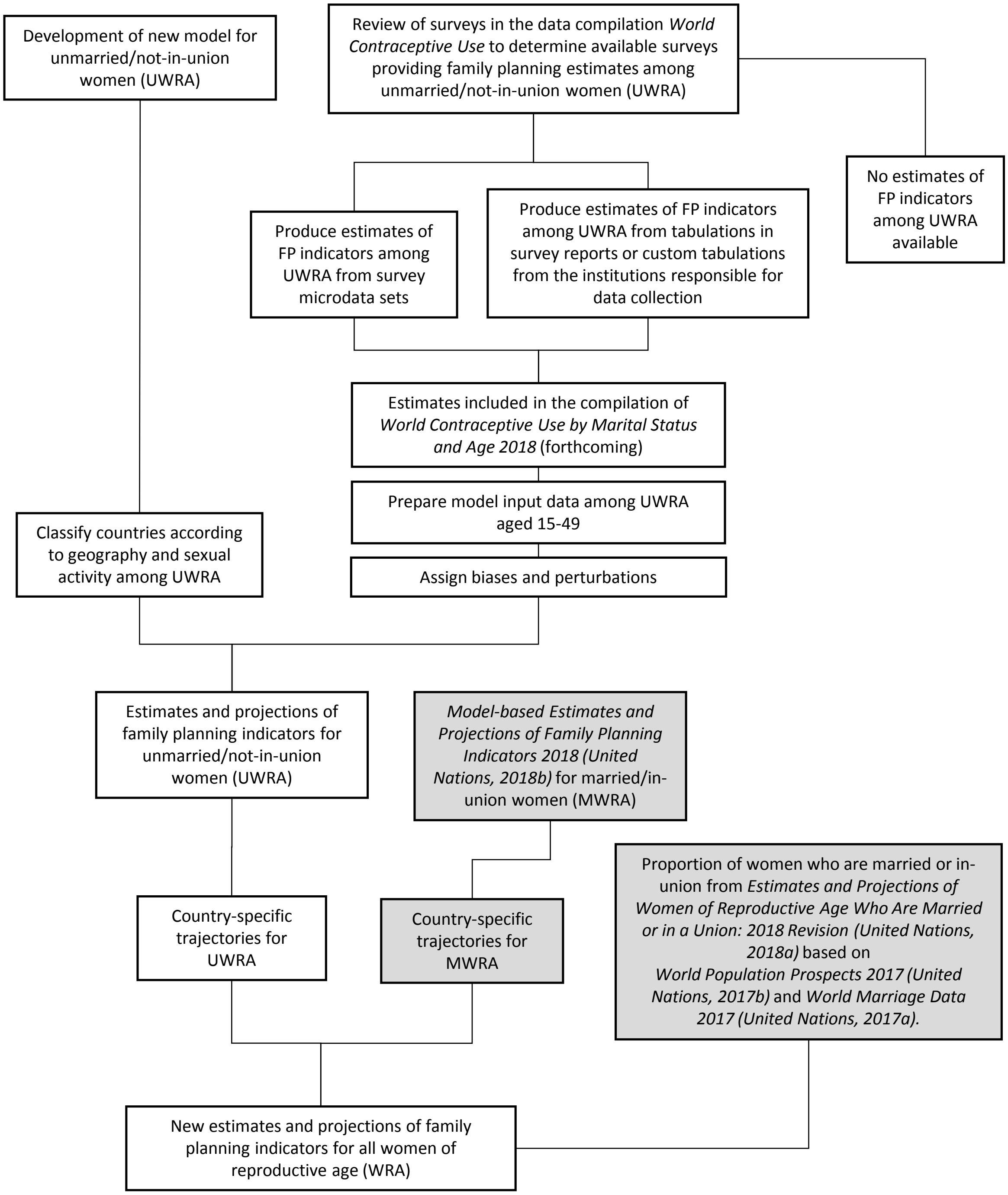
2. DATA SOURCES AND DEFINITIONS

Contraceptive prevalence is defined as the percentage of women who report themselves or their partners as currently using at least one contraceptive method. Unmet need for family planning is the percentage of women who want to stop or delay childbearing but are not using any contraceptive method. Total demand for family planning is the sum of contraceptive prevalence and unmet need. Demand for family planning satisfied by modern methods (SDG indicator 3.7.1) is modern contraceptive prevalence divided by total demand (detailed definitions and metadata available in United Nations 2018b and 2018c). All women of reproductive age are those in age group 15–49 years (referred to as WRA) and are classified to two groups: unmarried and not in a union (UWRA) and married or in a union (MWRA).

The data compilation used as the input file is World Contraceptive Use by Marital Status and Age 2018 (United Nations, 2018c; see also Figure 1). The input data set for UWRA contains 518 observations across 134 countries or areas for contraceptive prevalence, and 240 observations across 76 countries or areas for unmet need. For 361 surveys, mainly from Demographic and Health Surveys (DHSs), Multiple Indicator Cluster Surveys (MICSs), Performance Monitoring and Accountability

*United Nations Population Division

Figure 1. Diagram illustrating the components of the project, their interconnections and workflow



NOTE: The boxes in light grey indicate other publications of the Population Division, mentioned in the Data sources section.

2020s (PMAs) surveys and Generations and Gender Survey (GGS), estimates are obtained from micro data sets. For other surveys, estimates are derived from published tabulations or obtained from specific tabulations (for further details, see the methodology document of United Nations 2018c).

3. METHODS

A. *The model of Alkema and others (2013) for married women*

The model for contraceptive use among UWRA uses an approach based on that developed by Alkema and others (2013) for MWRA. Brief explanations or references to Alkema and others (2013) are provided where relevant. Unless otherwise specified, discussion of specific parameters or data characteristics throughout this Methods section refer to the treatment of UWRA only.

B. *Target of inference*

The goal of this study was the categorization of UWRA (the base population) as users of traditional contraceptive methods, users of modern contraceptive methods, having unmet need for contraceptive methods, and not having need any method. Thus the outcome of interest was the same compositional vector modelled by Alkema and others (2013): $p_{c,t} = (p_{c,t,1}, p_{c,t,2}, p_{c,t,3}, p_{c,t,4})$, where $p_{c,t,m}$ denotes the proportion of women in country c, in year t, who use traditional methods ($m = 1$), modern methods ($m = 2$), have unmet need for contraceptive methods ($m = 3$), or do not use and do not need contraceptive methods ($m = 4$), see Figure 2.

The vector $p_{c,t}$ was not observed, rather it is $y_i = y_{i,1:4}$, where $y_{i,m}$ denotes the proportion of women in category m (traditional, modern, unmet need, no need respectively) for observation $i = 1, \ldots, I$ for country $c[i]$ and year $t[i]$. The data model for an observation y_i given $p_{c[i],m[i]}$ is explained in detail in Section E of this document.

C. *Time trends in contraceptive prevalence and unmet need*

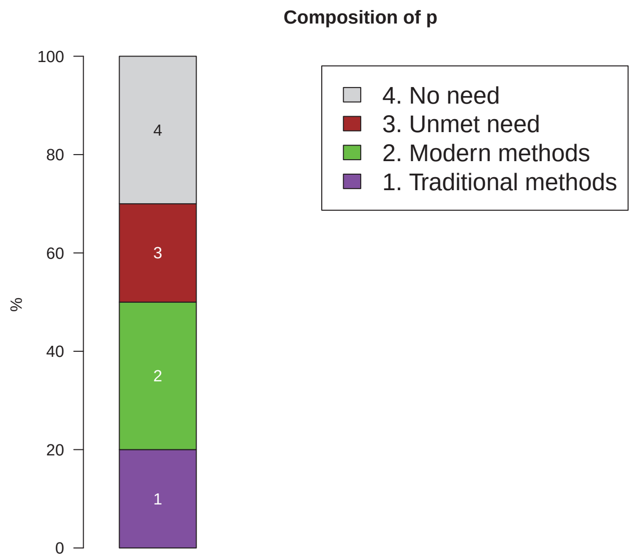
i. Modeling components of the compositional vector

To ensure that the components of $p_{c,t}$ sum to unity, as required, the following quantities were modelled:

$$P_{c,t} = p_{c,t,1} + p_{c,t,2}, \tag{3.1}$$
$$R_{c,t} = p_{c,t,2}/(p_{c,t,1} + p_{c,t,2}), \tag{3.2}$$
$$Z_{c,t} = p_{c,t,3}/(p_{c,t,3} + p_{c,t,4}), \tag{3.3}$$

where $0 \leq P_{c,t}, R_{c,t}, Z_{c,t} \leq 1$. $P_{c,t}$ is the total contraceptive prevalence, $R_{c,t}$ is the ratio of modern to total prevalence, and $Z_{c,t}$ is the ratio of unmet need to no contraceptive use, all in country c, year t. An

Figure 2. Illustration of composition vector of contraceptive prevalence



NOTE: Categorization of women who use traditional contraceptive methods, women who use modern contraceptive methods, women who have unmet need for contraceptive methods, and women who do not need any method (who are not avoiding a pregnancy).

expanded explanation is given in Section 2.1 of the Online Supplement to Alkema and others (2013). Briefly, these three equations completely specify all four elements of the compositional vector since

$$p_{c,t,1} = (1-R_{c,t}) \cdot P_{c,t}, \tag{3.4}$$
$$p_{c,t,2} = R_{c,t} \cdot P_{c,t}, \tag{3.5}$$
$$p_{c,t,3} = (1-P_{c,t}) \cdot Z_{c,t}, \tag{3.6}$$
$$p_{c,t,4} = (1-P_{c,t}) \cdot (1-Z_{c,t}). \tag{3.7}$$

Moreover, by substituting (3.4)–(3.7) for $p_{c,t,m}$, $\sum_{m=1}^{4} p_{c,t,m} = 1$ obtains.

$\{P_{c,\cdot}, R_{c,\cdot}, Z_{c,\cdot}\}$ were modelled on the logit-scale to restrict the outcomes to be between 0 and 1. Each of the quantities is modelled by systematic (latent) trends, with autocorrelated distortions added to it:

$$P_{c,t} = \text{logit}^{-1}\left(\text{logit}(P^*_{c,t}) + \varepsilon_{c,t}\right), \tag{3.8}$$
$$R_{c,t} = \text{logit}^{-1}\left(\text{logit}(R^*_{c,t}) + \eta_{c,t}\right), \tag{3.9}$$
$$Z_{c,t} = \text{logit}^{-1}\left(\text{logit}(Z^*_{c,t}) + \theta_{c,t}\right), \tag{3.10}$$

where the country-specific systematic trends are denoted by $\{P^*_{c,\cdot}, R^*_{c,\cdot}, Z^*_{c,\cdot}\}$ and the autocorrelated distortions by $\{\varepsilon_{c,\cdot}, \eta_{c,\cdot}, \theta_{c,\cdot}\}$ for $\{P_{c,\cdot}, R_{c,\cdot}, Z_{c,\cdot}\}$ respectively. The distortions were modelled by autoregressive processes of order 1 (AR(1)-models):

$$\varepsilon_{c,t} \sim N(\rho_\varepsilon \cdot \varepsilon_{c,t-1}, \tau_\varepsilon^2), \tag{3.11}$$
$$\eta_{c,t} \sim N(\rho_\eta \cdot \eta_{c,t-1}, \tau_\eta^2), \tag{3.12}$$
$$\theta_{c,t} \sim N(\rho_\theta \cdot \theta_{c,t-1}, \tau_\theta^2), \tag{3.13}$$

with autoregressive parameter $0 < \rho_{\cdot} < 1$ and variance $\tau_{\cdot}^2$. The distributions for the distortions in the first observation year $t_{c,1}$ in country c are given by:

$$\varepsilon_{c,t_{c,1}} \sim N\left(0, \frac{\sigma_\varepsilon^2}{1-\rho_\varepsilon^2}\right), \tag{3.14}$$
$$\eta_{c,t_{c,1}} \sim N\left(0, \frac{\sigma_\eta^2}{1-\rho_\eta^2}\right), \tag{3.15}$$
$$\theta_{c,t_{c,1}} \sim N\left(0, \frac{\sigma_\theta^2}{1-\rho_\theta^2}\right). \tag{3.16}$$

ii. Systematic trends in contraceptive use

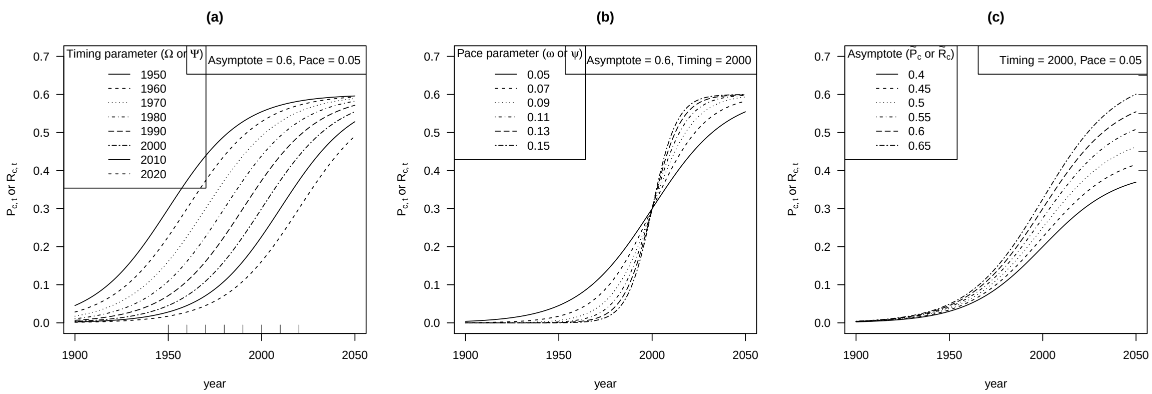
The systematic trends in total contraceptive prevalence P_c^* and the ratio of modern to total use R_c^* are given by logistic curves from 0 to asymptotes $\tilde{P}_c$ and $\tilde{R}_c$, increasing at pace ω_c and ψ_c and centred in year Ω_c and Ψ_c respectively:

$$P_{c,t}^* = \frac{\tilde{P}_c}{1+\exp(-\omega_c(t-\Omega_c))}, \tag{3.17}$$
$$R_{c,t}^* = \frac{\tilde{R}_c}{1+\exp(-\psi_c(t-\Psi_c))}. \tag{3.18}$$

Diffusion Process Among UWRA It is reasonable to expect that contraceptive prevalence among UWRA is driven by a similar diffusion of ideas as in MWRA, with an important exception. Among UWRA, a prerequisite stage is hypothesized in which sexual activity increases before contraceptive prevalence can become more prevalent. Following sufficient increase in sexual activity, contraceptive prevalence among UWRA follows a similar pattern as among MWRA, with a different asymptote, pace, and timing. As seen in Figure 3 (a), at low levels of total prevalence, the timing parameter has a particularly marked effect on the curve.

Illustration of logistic curve parameters The logistic family of curves is defined by three parameters: i) an asymptote that determines the eventual upper limit; ii) a timing parameter that determines the year at which the curve reaches 50 per cent of the asymptote; and iii) a pace parameter that determines the rate of increase at the year the curve reaches 50 per cent of the asymptote. In the logistic trend for total contraceptive prevalence ($P_{c,t}$) these parameters are denoted $\tilde{P}_c$, Ω_c, and ω_c, respectively. For the ratio of modern to total prevalence they are $\tilde{R}_c$, Ψ_c, and ψ_c. For each country the model produces posterior probability distributions for each of the parameters which represent the estimated values, including uncertainty. These, in turn, are transformed by the model into posterior distributions for $P_{c,t}^*$ and $R_{c,t}^*$. Stylized logistic curves under various parameter values are shown in Figure 3.

Figure 3. Stylized examples of logistic curves for contraceptive prevalence (any method)



NOTE: The curves are shown for various values of (a) timing, (b) pace, and (c) asymptote. They are "stylized" because they show the entire transition from low to high prevalence; in practice only a small portion of the full curve is observed for any country over the period of study.

Examples of systematic trends The systematic trends in total prevalence, its break-down into modern and traditional method use, and example trajectories after adding the autocorrelated distortion terms, are illustrated in Figure 4 (Panel (a)). Note that the trend in traditional method use (the inverted U-shape in the illustration) is not modelled explicitly, it follows from the logistic curves for total prevalence and for the ratio of modern to total prevalence. The actual trend in a country of interest depends on the timing, pace and asymptotes for total prevalence, and the uptake of modern methods as a ratio of any method. The asymptotes of total contraceptive use and the ratio of modern to total prevalence in a country may vary.

Examples of different segments of "contraceptive prevalence transitions" are given in Panels (b) and (c) for Colombia and Uganda, respectively.

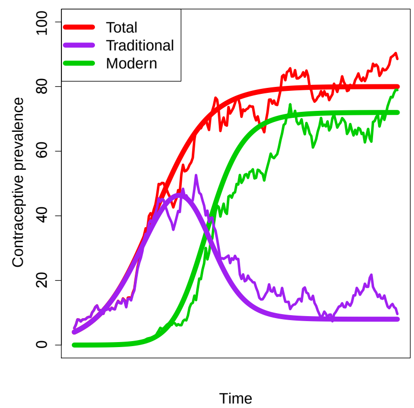
The same functional form was used for the systematic trends in prevalence for UWRA as Alkema and others (2013) used for MWRA. However, the two marital groups were modelled separately because, even within the same country, the timing and pace of the uptake can be very different among the two marital groups. As illustrated in Figure 5, prevalence has already begun to increase among UWRA in some countries (e.g., Ecuador), while in others it has not (e.g,. Bangladesh). Even in Ecuador, the timing of the increase is much later for UWRA.

iii. Systematic trends in unmet need

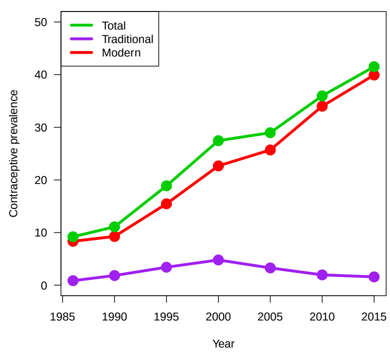
The country-specific systematic trend in the ratio of unmet need to no contraceptive use, $Z^*_{c,t}$, was modelled as a function of total prevalence $P_{c,t}$ using the same functional form as Alkema and others (2013) (Online Supplement, Section 2.1). This was done because it was expected that the systematic trend in unmet need as a function of total prevalence for UWRA would have the same characteristics as the trend for MWRA. The ratio was modelled as a function of total contraceptive prevalence, as opposed to unmet need as a function of total contraceptive prevalence, for two reasons. Firstly, modelling the ratio of unmet need to no contraceptive use guarantees that the percentage of women with unmet need does not exceed the percentage of women who do not use any methods. Secondly,

Figure 4. Theoretical model of contraceptive prevalence over time

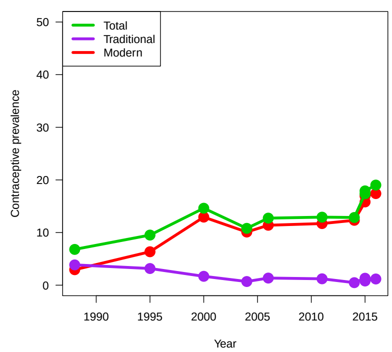
(a) Model representation



(b) Illustration: Colombia



(c) Illustration: Uganda



Source: United Nations (2018e) for (b) and (c).

NOTE: (a) Model representation: simulated examples of systematic trends (smooth lines, modelled by parametric functions on contraceptive prevalence and the ratio of modern use to any method use), and simulated trajectories (non-smooth lines, modelled by the systematic trends with autocorrelated distortions) of total, modern and traditional prevalence. (b) and (c): Trajectories of contraceptive prevalence for Colombia and Uganda among unmarried and not in a union women of reproductive age.

unmet need and total contraceptive use are dependent (because they refer to the elements of the same compositional vector), while the ratio is not dependent on total contraceptive use. The model for the ratio is given by:

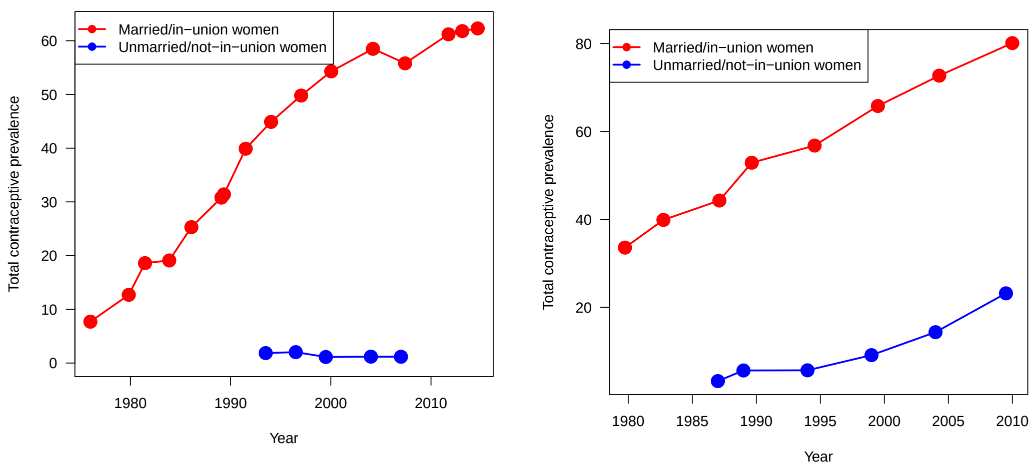
$$Z^*_{c,t} = \frac{1}{1+\exp(-z_c - \beta_1(P_{c,t}-0.4) - \beta_2 \cdot (P_{c,t}-0.4)^2)}, \quad (3.19)$$

with country-specific "intercept" z_c and world-level parameters $\{\beta_1, \beta_2\}$. (Note that 0.4 was subtracted from $P_{c,t}$ to reduce correlation between the z_c's and the β's; it does not affect the shape of the curve). This model was motivated by observed trends on the world and country level.

Figure 5. Available data on total contraceptive prevalence

(a) Illustration: Bangladesh

(b) Illustration: Ecuador



Source: United Nations (2018e)

D. Bayesian hierarchical model

Estimating the country-specific parameters of the systematic trends presented a challenge because of the limited number of observations for each country. A Bayesian hierarchical model (Lindley and Smith, 1972; Gelman and others, 2013) was used to estimate the parameters in each country, such that the estimates were based on the observations in the country of interest, as well as the experiences of other countries. As described by Wheldon and others (2017), the classification of countries based on estimated sexual activity (see Section iii) and United Nations (UN) (sub-)regional classifications was used.

i. Hierarchical modelling and estimation by pooling

Alkema and others's (2013) model for MWRA used a four-level hierarchy based on UN geographical aggregates to improve estimation for countries with few data points. The levels of the hierarchy were: i) country (e.g., Kenya), ii) sub-region (e.g., Eastern Africa), iii) region (e.g., Africa), and iv) world. Each country belonged to one of 22 sub-regions and each sub-region belonged to one of six regions. The world consisted of all regions. The imposition of such a hierarchy had the effect of clustering countries together in sub-regions and clustering sub-regions into regions.

Clustering countries into sub-regions meant that country-specific parameters were estimated by "pooling" data within sub-region; similarly, sub-regional parameters were estimated by pooling sub-regions within regions. This implied that results for countries in the same sub-region were *a priori* expected to be more strongly correlated with one another than with countries in different sub-regions (Bijak and Bryant, 2016; Gelman and others, 2013). Under the assumption that countries within a sub-region really are more similar to each other than to other countries, in general, point estimates for countries with few observations from a hierarchical model are more accurate (less biased) and uncertainty intervals are narrower (more precise) than under a model with no hierarchical structure. On the other hand, grouping dissimilar countries and sub-regions together can lead to biased parameter estimates and mis-estimation of precision.

ii. Hierarchical model with sexual activity for unmarried women

Per country, data for contraceptive use among MWRA were scarce or not recent but there was at least one data point for each of the countries (Alkema and others, 2013). Data for UWRA were more scarce and, in some cases, non-existent. A natural way to construct estimates and projections for these countries is to use the hierarchical structure of the model (described below). Using a hierarchical model results in estimation by pooling information among countries in the same cluster. In general, the impact of pooling on the results is greatest for countries with relatively few observations; results for countries with many observations are based primarily on those observations. Hence, the structure of the hierarchy is particularly important for UWRA.

Variation in contraceptive prevalence among UWRA in many cases is likely due to variation in sexual activity. Sexual activity was not included in Alkema and others's (2013) model because being married was taken as a reasonable proxy for being sexually active in all countries. A different approach was needed for UWRA. One approach to accounting for inter-country variation in sexual activity would be to enter them into the statistical model explicitly as parameters to be estimated. This, however, would require the specification of their functional relationships with prevalence and sufficient data to estimate and check it were not available. A different approach was taken and, instead, the hierarchical structure was modified to include information about sexual activity by using the sexual activity classification described in Section iii. A four-level hierarchy was retained:

1. country,
2. region / sub-region / India,
3. sexual activity group,
4. world

For countries in sexual activity group 0 (countries with very low levels of sexual activity), region was used at Level 2 for all countries except India which was treated as its own cluster. For countries in group 1 (all other countries), sub-region was used at Level 2. Group 0 had far fewer countries than group 1, making the use of sub-regions at Level 2 infeasible. The choice to model India separately was based on exploratory data analysis and expert knowledge. Careful attention to India is warranted because the country's large population means that small changes in prevalence estimates translate to large changes in absolute numbers and India is of particular interest to the family planning research community (e.g., FP2020 2016). The structure is illustrated in Figure 6.

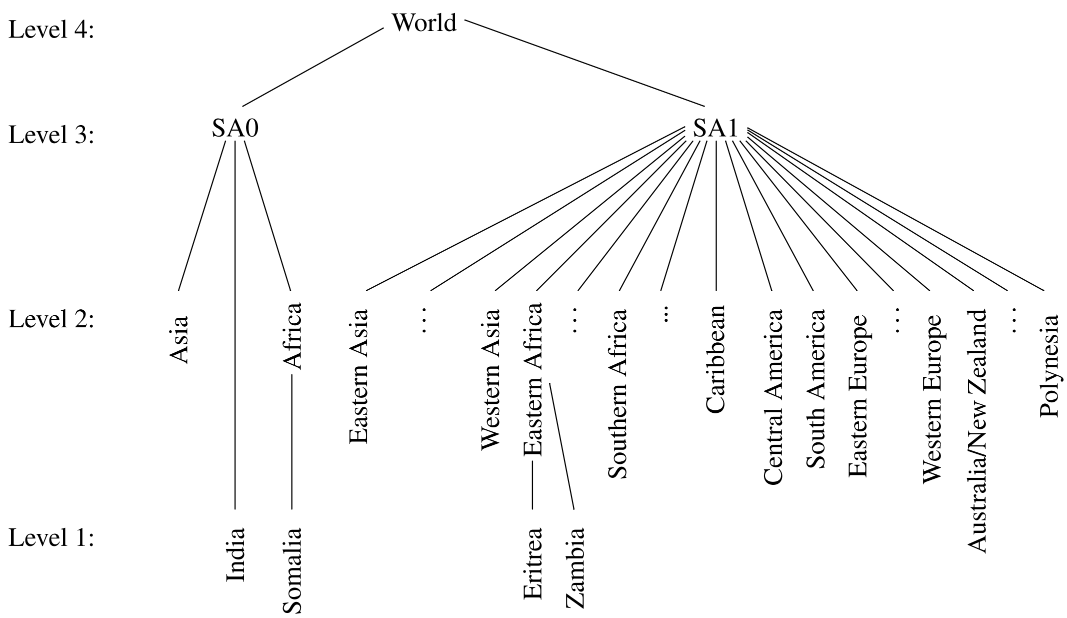
iii. Classification of countries based on data and information on sexual activity among UWRA

Models of reproductive behaviour among MWRA commonly assume that all MWRA are sexually active. This assumption cannot be applied to the UWRA model. There are large differences in the prevalence of sex among UWRA (Dasgupta and others, 2017) that needed to be accounted for in the hierarchical structure of the model of reproductive behaviour among UWRA (further explained

Table 1. Comparison of geographic and sexual activity inclusive classifications

	Classification Scheme	
	Geographic	Sexual Activity
Level 1	Country	Country
Level 2	Sub-region	Region / sub-region / India
Level 3	Major Region	Sexual activity among UWRA
Level 4	World	World

Figure 6. Nested structure of the sexual activity inclusive hierarchy



NOTE: Nested structure of Levels 2–4 of the sexual activity inclusive hierarchy used to model contraceptive prevalance among unmarried and not in a union women of reproductive age (UWRA). Level 1 consists of individual countries which, save the examples, are omitted due to lack of space. "SA0" and "SA1" are sexual activity groups 0 and 1, respectively.

in Section 3). Two groups of countries were classified: (Group 0) countries with very low levels of sexual activity and (Group 1) all other countries (Table 5).

Countries were classified as having very low prevalence of sex among UWRA when the proportion of UWRA reporting recent sexual activity (sexual intercourse in past four weeks) was less than 2%. These estimates were sourced from 81 DHS and MICS surveys.

For countries where no data on sexual activity were available from DHS or MICS, information on the acceptance of sex between unmarried adults was used as a proxy for sexual activity among UWRA. The Pew Research Center's (PEW) 2013 Global Attitudes survey asked 40,117 respondents in 40 countries if they "personally believe that sex between unmarried adults is morally acceptable, morally unacceptable, or is it not a moral issue?" (PEW, 2014). The World Values Survey (WVS) Wave 6 covered 86,274 between 2010 and 2014 and asked respondents in 51 countries how much they would agree with the statement that sex before marriage is justifiable on a scale from 1 "Never justifiable" to 10 "Always justifiable" (Inglehart and others, 2013). Both surveys find that countries with predominantly Muslim populations in Asia and Northern Africa are least accepting of sex between unmarried adults. More than 80 per cent of respondents in the PEW surveys in Egypt, Jordan, Lebanon, Malaysia, Pakistan, State of Palestine, Tunisia, and Turkey answered that sex between unmarried adults is morally unacceptable. In the WVS, respondents in Jordan, Qatar, Pakistan, Libya, Azerbaijan, Turkey, Morocco and Uzbekistan least agreed with the statement that sex before marriage is justifiable (average score of less than 2.0). The justifiability scores from WVS correlated highly with the proportion of the population regarding unmarried sex as acceptable from PEW (R-Square = 0.94, n = 22). Ten countries were assigned into sexual activity group 0 based on these two surveys and 33 into the group 1.

When neither data on sexual activity nor on the acceptance/justification of sex among unmarried adults were available, countries with predominantly Muslim populations in Asia and Northern Africa were added to the low sexual activity group. Data on religious affiliation were published for 228 countries in the Pew Research Center 2012 Study on the Global Religious Landscape (PEW, 2012). Thus, 18 countries with 70% or more of the population Muslim were assigned to the low sexual activity group. The 70% break was derived from the set of countries that were classified as low sexual activity countries based on one of the previous direct or indirect measures of sexual activity.

An additional two countries (Myanmar and Sri Lanka) that lacked data on the sexual activity among UWRA were classified as low sexual activity countries on the basis of cultural and geographical proximity. All other countries in South and South-Eastern Asia are low sexual activity countries, with the exception of Thailand and the Philippines.

In total, 44 countries (24 per cent) were classified as having low sexual activity among unmarried women. All of these countries are in either Africa or Asia, predominantly in the following subregions: Northern Africa, Western Asia, South-Central Asia and South-Eastern Asia (Figure 7).

iv. Parameter definitions and hierarchical structure

Different levels of hierarchy were used for different sets of country parameters to best incorporate expected differences and similarities across countries, geographical areas, and sexual activity groups. Country-specific asymptotes for total contraceptive prevalence (denoted $\tilde{P}_c$) and the ratio of modern to total contraceptive use (denoted $\tilde{R}_c$) were estimated with a hierarchical model with two levels (world and country):

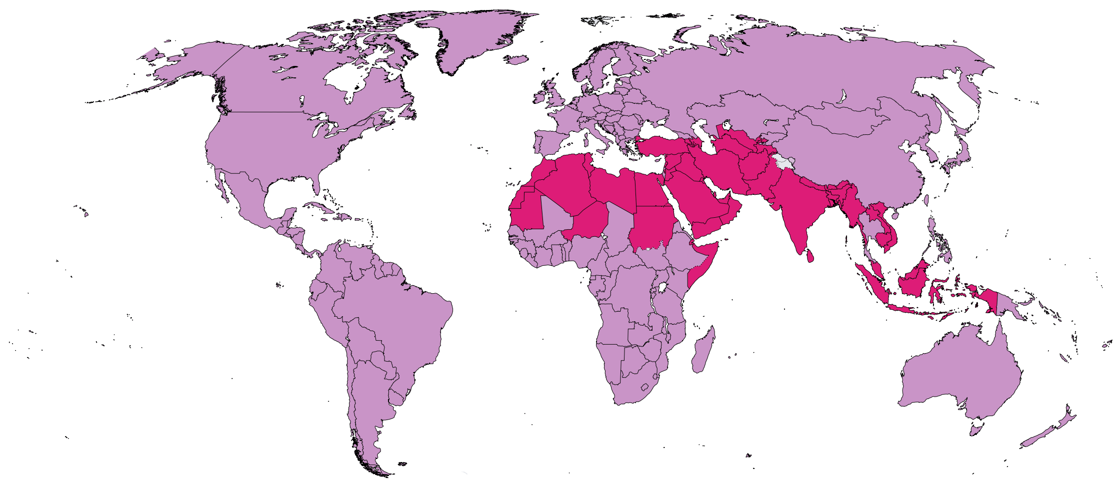
$$\log\left(\frac{\tilde{P}_c - 0.1}{1 - \tilde{P}_c}\right) \sim N(\tilde{P}_w, \kappa_P^{(c)}), \quad (3.20)$$

$$\log\left(\frac{\tilde{R}_c - 0.1}{1 - \tilde{R}_c}\right) \sim N(\tilde{R}_w, \kappa_R^{(c)}), \quad (3.21)$$

where both asymptotes were restricted to be between 10 per cent and 100 percent, and $\tilde{P}_w$ is the world mean and $\kappa_P^{(c)}$ the variance of the $\tilde{P}_c$'s, and $\tilde{R}_w$ is the world mean and $\kappa_R^{(c)}$ the variance of the $\tilde{R}_c$'s. Alkema and others (2013) restricted asymptotes to be above 50 per cent for MWRA but this was considered too high for UWRA given the very low levels of contraceptive prevalence expected in some countries.

For pace parameters ω_c and ψ_c, four-level hierarchical models were used because these parameters are expected to vary across countries, (sub-)regions, and sexual activity groups. For pace parameters

Figure 7. Classification of countries by level of sexual activity among unmarried and not in a union women of reproductive age.



NOTE: Classification of countries is based on the information about the level of, acceptence of, or justification for sexual activity among unmarried women.
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The dotted lines represent approximates. 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. The final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

ω_c, the uptake of any method, the transformation

$$\omega_c^* = \log\left(\frac{\omega_c - 0.01}{0.5 - \omega_c}\right)$$

was used, such that ω_c was restricted to be between 0.01 and 0.5. This range was chosen to be weakly informative; it corresponds to assuming the duration of the transition from 10% to 90% of $\tilde{P}_c$ is between 10 and 400 years. The hierarchical distributions for countries in sexual activity group 0 (denoted $c \in \text{SA0}$) were:

$$\text{Level 1:} \quad \omega_c^* \sim N(\omega_{r[c]}^*, \kappa_\omega^{(c)}),\ c \in \text{SA0} \tag{3.22}$$

$$\text{Level 2:} \quad \omega_r^* \sim N(\omega_{\text{SA0}}^*, \kappa_\omega^{(r)}), \tag{3.23}$$

$$\text{Level 3:} \quad \omega_{\text{SA0}}^* \sim N(\omega_w^*, \kappa_\omega^{(\text{SA})}). \tag{3.24}$$

(3.25)

ω_r^* (the Level 2 parameter) is the logistic trend for pace for region r, where India was considered a separate region. $r[c]$ is the region of country c. For countries in sexual activity group 1 (denoted

$c \in \text{SA1}$):

$$\text{Level 1:} \quad \omega_c^* \sim N(\omega_{s[c]}^*, \kappa_\omega^{(c)}),\ c \in \text{SA1} \tag{3.26}$$

$$\text{Level 2:} \quad \omega_s^* \sim N(\omega_{\text{SA1}}^*, \kappa_\omega^{(s)}), \tag{3.27}$$

$$\text{Level 3:} \quad \omega_{\text{SA1}}^* \sim N(\omega_w^*, \kappa_\omega^{(\text{SA})}). \tag{3.28}$$

ω_s^* (the Level 2 parameter) is the logistic trend for pace for sub-region s. $s[c]$ is the sub-region of country c. This structure meant that the (logit-transformed) ω_c's were distributed around (sub-)regional means; $\omega_{r[s]}^*$ for countries in sexual activity group 0 and $\omega_{s[c]}^*$ for countries in group 1. The variances on the country, sub-regional and regional level were $\kappa_\omega^{(c)}$, $\kappa_\omega^{(s)}$ and $\kappa_\omega^{(r)}$ respectively.

Similarly, for pace parameter ψ_c, the uptake of modern methods as a proportion of any method,

$$\psi_c^* = \log\left(\frac{\psi_c - 0.01}{0.5 - \psi_c}\right)$$

$$\text{Level 1:} \quad \psi_c^* \sim N(\psi_{r[c]}^*, \kappa_\psi^{(c)}),\ c \in \text{SA0} \tag{3.29}$$

$$\text{Level 2:} \quad \psi_r^* \sim N(\psi_{\text{SA0}}^*, \kappa_\psi^{(r)}), \tag{3.30}$$

$$\text{Level 3:} \quad \psi_{\text{SA0}}^* \sim N(\psi_w^*, \kappa_\psi^{(\text{SA})}), \tag{3.31}$$

and

$$\text{Level 1:} \quad \psi_c^* \sim N(\psi_{s[c]}^*, \kappa_\psi^{(c)}),\ c \in \text{SA1} \tag{3.32}$$

$$\text{Level 2:} \quad \psi_s^* \sim N(\psi_{\text{SA1}}^*, \kappa_\psi^{(s)}), \tag{3.33}$$

$$\text{Level 3:} \quad \psi_{\text{SA1}}^* \sim N(\psi_w^*, \kappa_\psi^{(\text{SA})}), \tag{3.34}$$

The same structure was used for the timing of the uptake of modern methods as a proportion of any method, Ψ_c:

$$\text{Level 1:} \quad \Psi_c \sim N_T(\Psi_{r[c]}, \kappa_\Psi^{(c)}),\ c \in \text{SA0} \tag{3.35}$$

$$\text{Level 2:} \quad \Psi_r \sim N(\Psi_{\text{SA0}}, \kappa_\Psi^{(r)}), \tag{3.36}$$

$$\text{Level 3:} \quad \Psi_{\text{SA0}} \sim N(\Psi_w, \kappa_\Psi^{(\text{SA})}), \tag{3.37}$$

and

$$\text{Level 1:} \quad \Psi_c \sim N_T(\Psi_{s[c]}, \kappa_\Psi^{(c)}),\ c \in \text{SA1} \tag{3.38}$$

$$\text{Level 2:} \quad \Psi_s \sim N(\Psi_{\text{SA1}}, \kappa_\Psi^{(s)}), \tag{3.39}$$

$$\text{Level 3:} \quad \Psi_{\text{SA1}} \sim N(\Psi_w, \kappa_\Psi^{(\text{SA})}), \tag{3.40}$$

where the country-specific timings were restricted to be later than 1800 (a non-informative lower bound).

For countries in sexual activity group 0, the timings of the uptake of any method, Ω_c, were modelled as distributed around a single mean:

$$\Omega_c \sim N_T(\Omega_{\text{SA0}}, \kappa_{\Omega}^{(\text{SA0})}),\ c \in \text{SA0}. \tag{3.41}$$

For countries in sexual activity group 1, the following hierarchical structure was used:

$$\text{Level 1:} \qquad \Omega_c \sim N_T(\Omega_{s[c]}, \kappa_{\Omega}^{(c)}),\ c \in \text{SA1} \tag{3.42}$$

$$\text{Level 2:} \qquad \Omega_s \sim N(\Omega_{\text{SA1}}, \kappa_{\Omega}^{(s)}), \tag{3.43}$$

There was no pooling between the sexual activity group parameters Ω_{SA0} and Ω_{SA1}. This is similar to what was done by Alkema and others (2013) for MWRA, except they classified countries as "developed" and "developing" instead of according to sexual activity group. The logistic curve is particularly sensitive to these parameters (see Figure 3) and the aim was to ensure that the model was flexible enough to capture the significant difference in prevalence between the two sexual activity group. Modeling the timing parameters at the sexual activity group level as if they were from a common world distribution would have undermined this.

The country-specific "intercept" z_c, the proportion of women with unmet need among all women who do not use any contraceptive methods, was modelled with a two-level model (given the variability across sub-regions within regions, sub-regional means were not assumed to be distributed around a regional mean):

$$z_c \sim N(z_{s[c]}, \kappa_z^{(c)}), \tag{3.44}$$

$$z_s \sim N(z_w, \kappa_z^{(r)}). \tag{3.45}$$

E. Data Model

Surveys which produced estimates of total prevalence greater than or equal to one per cent were modelled in the same way as Alkema and others (2013) modelled MWRA data, with one exception. Alkema and others (2013) rounded all direct estimates of prevalence less than one per cent up to one per cent to avoid computational difficulties due to numerical over/under-flow. This approach was not followed for UWRA because too many data points would have been affected, introducing bias. For these surveys, the approach described in Section ii was used.

i. Total prevalence greater than one percent

The data model for observations with total prevalence greater than or equal to 1 per cent was identical to that used by Alkema and others (2013, Online Supplement, Section 2.3). Briefly, observations which provided an estimate of prevalence broken down by modern/traditional status were modelled using a bivariate normal distribution on the logit scale

$$\begin{bmatrix} \log\left(\frac{y_{i,1}}{y_{i,3+4}}\right) \\ \log\left(\frac{y_{i,2}}{y_{i,3+4}}\right) \end{bmatrix} \sim N\left(\begin{bmatrix} \log\left(\frac{q_{i,1}}{q_{i,3+4}}\right) \\ \log\left(\frac{q_{i,2}}{q_{i,3+4}}\right) \end{bmatrix}, \Sigma_{S[i]}\right),$$

where $y_{i,3+4} = y_{i,3} + y_{i,4}$, the $q_{i,m}$ are the bias-adjusted and perturbed proportions (see Sections v and vi), and

$$\Sigma_S = \begin{bmatrix} \sigma^2_{S,1} & \rho_S \sigma_{S,1} \sigma_{S,2} \\ \rho_S \sigma_{S,1} \sigma_{S,2} & \sigma^2_{S,2} \end{bmatrix}.$$

In the above, $\sigma^2_{S,k}$ is the error variance of source S for the log-ratios $k = 1$ (traditional) and $k = 2$ (modern), and ρ_S is the correlation of the log-ratios.

Observations providing only an estimate of total prevalence were modelled similarly but with a univariate normal:

$$\log\left(\frac{y_{i,1+2}}{1 - y_{i,1+2}}\right) \sim N\left(\log\left(\tfrac{q_{i,1+2}}{1-q_{i,1+2}}\right), \sigma^2_T\right), \tag{3.46}$$

where σ^2_T is the error variance for total prevalence on the logit-transformed scale. A common error variance was assumed for all sources due to the small number of observations falling in this category.

For the remaining categories, unmet need and no contraceptive use, a logistic normal was again used:

$$\text{logit}\left(\frac{y_{i,3}}{y_{i,3+4}}\right) = \log\left(\frac{y_{i,3}}{y_{i,4}}\right) \sim N\left(\log\left(\tfrac{q_{i,3}}{q_{i,4}}\right), \sigma^2_{S[i],3}\right), \tag{3.47}$$

where $\sigma^2_{S,3}$ is the error variance of source S for the log-ratios of unmet need to no need.

ii. Total prevalence less than one percent

For 38 observations (7.3 per cent) estimated total prevalence was less than 1 per cent ($y_1 + y_2 < 0.01$). These observations were found to have a large influence on posterior estimates of source variances ($\sigma^2_{S,k}$). This appeared to be a side-effect of the transformation used. On the logistic scale a few small proportions become extreme outliers after transformation and the resulting set of transformed observations are not well-modelled by a single (source-specific) logistic-normal distribution. To account for this, results from all surveys reporting a total prevalence estimate of less than or equal to one per cent were assigned to the new source type. This was done irrespective of the original source type (DHS, MICS, etc.).

iii. Unmet Need

The data model for the break-down of women who do not use any method (categories 3 and 4) into the categories unmet/no need was the same as that used by Alkema and others (2013):

$$\text{logit}\left(\frac{y_{i,3}}{y_{i,3+4}}\right) = \log\left(\frac{y_{i,3}}{y_{i,4}}\right) \sim N\left(\log\left(\tfrac{q_{i,3}}{q_{i,4}}\right), \sigma^2_{S[i],3}\right), \tag{3.48}$$

where $\sigma^2_{S,3}$ is the error variance of source S for the log-ratios of unmet need to no need. This model was used irrespective of the estimate for total prevalence.

iv. Data categorization based on source types

The number of observations by data source category, estimate of total prevalence (less than, or greater than or equal to, 1 percent), and availability of modern-traditional breakdown are shown in Table 2. Separate variance-covariance matrices (Σ_S) were estimated for observations with a modern-traditional breakdown. The data model for unmet need grouped all non-DHS observations together in one category.

Table 2. Number of observations by source for contraceptive prevalence and unmet need

Data	Trad./Mod. Breakdown	DHS	MICS	PMA	National survey	Other	CP $< 1\%$	Total
Contraceptive use	Avail.	226	87	25	69	53	38	498
	Unavail.	—	1	—	16	3	—	20
	Total	226	88	25	85	56	38	518
Unmet	—	172	23	25	5	7	38	270

v. Data categorization based on characteristics of the population sampled and perturbation multipliers

As in Alkema and others (2013), perturbation multipliers were included to account for differences between the characteristics of sampled populations and the base population. Table 3 shows the seven categories of different characteristics that were summarized. The first two categories describe differences specific to sampled populations of UWRA. Category one comprises observations from surveys where questions on contraceptive use were only asked among UWRA who have a non-cohabiting partner. Women without a partner, while included in the samples, were not asked about contraceptive use and were therefore not counted in the numerator in the estimation of family planning indicators. As a result, observations of contraceptive use are expected to be too low. This concerns the majority of observations (10) from the first and second rounds of the Gender and Generation Program. Category two is given by observations (18) from DHS data that pertain to female sterilisation only (asked of formerly married women only). Other contraceptive methods were not reported for UWRA so that these samples under-estimate contraceptive use.

Categories three to seven are describe differences between characteristics for sampled populations and the base population. Category three refers to samples covering specific geographic regions or population groups with potentially different levels of contraceptive prevalence compared to the base population (14 observations). Category four includes observations that covered women living in a cohabiting union in the group of UWRA (4) because this was likely to have elevated the risk of pregnancy. This was the case for data from the German 1985 Survey on Family Planning Behaviour and from the Japan 2014 Biodemography Project Survey. Contraceptive prevalence among UWRA is expected to be higher for these two observations than for the base population due to the inclusion of women in cohabiting unions who tend to have higher levels of contraceptive use.

Categories five, six, and seven apply to observations from surveys which sampled of UWRA populations in age groups other than 15–49. Some flexibility was allowed by defining sampled age

Table 3. Categorisation of non-base population samples

No.	Label	Characteristics of sample population	# obs.	Contraceptive use compared to base population of UWRA
1	With partner only	Contraceptive use questions were asked only among women with a partner	10	Modern and traditional use expected to be lower
2	Sterilization only	Unmarried/Not-in-union data pertain to female sterilization only	18	Modern and traditional use expected to be lower
3	Geographical region	Specific geographical region or population group	14	Potentially different
4	Higher risk of pregnancy	Data pertain to women exposed to an elevated risk of pregnancy, e.g., recently sexually active or incl. women in cohabiting unions.	4	Modern and traditional use expected to be higher
5	Age group with - bias	Age group starts at ages 13-17 but ends after 51	1	Modern and traditional use expected to be lower
6	Age group with + bias	Age groups starts at ages 18-25 and ends before 51	30	Modern and traditional use expected to be higher
7	Age group different	Other age group (not described by groups 6 and 7)	39	Potentially different

NOTE: Categorisation of non-base population samples, number of observations in each category and comparison of the expected prevalence levels in the non-base category compared to the base category of unmarried and not in a union women of reproductive age.

groups starting at ages 13–17 and ending at ages 47–51 as "baseline". Age groups starting at ages between 13 and 17 (inclusive) and ending at ages of 51 or above (1 observation) were assumed to have lower contraceptive use than the baseline. Age groups starting at ages between 18 and 25 (inclusive) and ending at ages below 51 (30 observations) were expected to have higher contraceptive use relative to baseline. Sample populations with other age ranges (39 observations) were deemed to be potentially different, but with unknown direction.

Perturbation multipliers to model these expected differences in prevalence between non-baseline groups and UWRA were applied in the same way as in Alkema and others (2013). The perturbed compositional vector for observation i is denoted $\tilde{q}_i \equiv (\tilde{q}_{i,1}, \tilde{q}_{i,2}, \tilde{q}_{i,3}, \tilde{q}_{i,4})$.

vi. Misclassification biases

Bias parameters were included in the model to account for survey misclassification errors; that is, women who were classified as belonging to one contraceptive use component when they should have been classified as belonging to another. The same parameters as used by Alkema and others (2013, see Supplementary Appendix Section 2.3.3.) for MWRA were used here for UWRA. These were:

1. Exclusion of sterilization from modern method use, expected to have lead to under-reporting of total and modern method use (8 observations).
2. Inclusion of sterilization for non-contraceptive reasons in modern method use, expected to have led to over-reporting of total and modern method use (24 observations).
3. Inclusion of folk methods in traditional method use, expected to have lead to over-reporting of total and traditional method use (25 observations).
4. Absence of probing questions about knowledge of contraceptive methods, expected to have led to under-reporting of traditional method use (90 observations).

Misclassification biases were applied in the same was as in Alkema and others (2013, Supplementary Appendix Section 2.3.3.). The corrected (perturbed and bias adjusted) compositional vector for observation i is denoted $q_i \equiv (q_{i,1}, q_{i,2}, q_{i,3}, q_{i,4})$.

F. *Full model specification and prior distributions*

i. List of main symbols

$p_{c,t,m}$	Unobserved proportion of UWRA in country c, year t in category m (referring to traditional and modern use, unmet need and no need respectively)
$n_{c,t,m}$	Unobserved number of UWRA in country c, year t in category m (referring to traditional and modern use, unmet need and no need respectively)
$P_{c,t}$	Total contraceptive prevalence in country c, year t
$R_{c,t}$	Ratio of modern to total prevalence in country c, year t
$Z_{c,t}$	Ratio of unmet need to no method in country c, year t
$B_{c,t}$	Demand satisfied, $B_{c,t} = \frac{p_{c,t,1+2}}{p_{c,t,1+2+3}}$
$P^*_{c,t}$	Systematic trend in $P_{c,t}$
$R^*_{c,t}$	Systematic trend in $R_{c,t}$
$Z^*_{c,t}$	Systematic trend in $Z_{c,t}$
$\tilde{P}_c$	Asymptote of $P^*_{c,t}$
$\tilde{R}_c$	Asymptote of $R^*_{c,t}$
ψ_c	Pace parameter for increase in $R^*_{c,t}$
ω_c	Pace parameter for increase in $P^*_{c,t}$
Ψ_c	Midpoint for increase in $R^*_{c,t}$
Ω_c	Midpoint for increase in $P^*_{c,t}$
z_c	"Intercept" parametric model for $Z^*_{c,t}$
$\{\beta_1, \beta_2\}$	Coefficients of parametric model for $Z^*_{c,t}$
$\varepsilon_{c,t}$	AR(1) distortion for $P_{c,t}$
$\eta_{c,t}$	AR(1) distortion for $R_{c,t}$
$\theta_{c,t}$	AR(1) distortion for $Z_{c,t}$
$\{\rho_\varepsilon, \rho_\eta, \rho_\theta\}$	Autoregressive coefficients for the AR(1) distortions
$\{\tau_\varepsilon, \tau_\eta, \tau_\theta\}$	Variance parameters of the AR(1) distortions
$q_{i,m}$	Perturbed and bias-adjusted proportion of women for observation i
$y_{i,m}$	Observed proportion of women in observation i
$\gamma_{n,m}$	Misclassification bias parameter (from category n to m)
$\{\delta^2_m, \lambda^2_m\}$	Variance parameters for perturbation multipliers for $m = 1, 2$
μ_p	Mean of (transformed) perturbation multipliers (that are expected to be different from 1)
$\sigma^2_{S,k}$	Error variance for source S, for traditional/total use, modern/total use and unmet need/no use ($k = 1, 2, 3$)
$V^{(g)}_{j,m}$	j-th Multiplier for perturbation category g, contraceptive use category m

ii. List of indices

These symbols index the following quantities when used as indices of the main symbols.

c	country
g	perturbation category
i	observation (i.e,. one survey data point)
j	perturbation multiplier for a given perturbation category, g
k	data model (traditional/total use, modern/total use and unmet need/no use ($k = 1,2,3$)
m	contraceptive prevalence category (referring to traditional and modern use, unmet need and no need respectively)
r, $r[s]$, $r[c]$	r indicates region (e.g., Africa), $r[s]$ or $r[c]$ indicates the region the sub-region or country belongs to
$s, s[c]$	s indicates sub-region (e.g., Eastern Africa), $s[c]$ indicates sub-region country c belongs to
S	observation source (e.g., DHS, MICS, etc.)
SA, $SA[c]$,	SA indicates sexual activity group (0 or 1), $SA[c]$ indicates the sexual activity group country c belongs to
t	time (in years)
w	world

iii. Full model specification

$$
\begin{aligned}
p_{c,t,1} &= (1 - R_{c,t}) \cdot P_{c,t}, && (3.49)\\
p_{c,t,2} &= R_{c,t} \cdot P_{c,t}, && (3.50)\\
p_{c,t,3} &= (1 - P_{c,t}) \cdot Z_{c,t}, && (3.51)\\
p_{c,t,4} &= (1 - P_{c,t}) \cdot (1 - Z_{c,t}), && (3.52)\\
P_{c,t} &= \text{logit}^{-1}\left(\text{logit}(P^*_{c,t}) + \varepsilon_{c,t}\right), && (3.53)\\
R_{c,t} &= \text{logit}^{-1}\left(\text{logit}(R^*_{c,t}) + \eta_{c,t}\right), && (3.54)\\
Z_{c,t} &= \text{logit}^{-1}\left(\text{logit}(Z^*_{c,t}) + \theta_{c,t}\right), && (3.55)\\
\varepsilon_{c,t} &\sim N(\rho_\varepsilon \cdot \varepsilon_{c,t-1}, \tau^2_\varepsilon), && (3.56)\\
\eta_{c,t} &\sim N(\rho_\eta \cdot \eta_{c,t-1}, \tau^2_\eta), && (3.57)\\
\theta_{c,t} &\sim N(\rho_\theta \cdot \theta_{c,t-1}, \tau^2_\theta), && (3.58)\\
\varepsilon_{c,t_{c,1}} &\sim N\left(0, \frac{\tau^2_\varepsilon}{1-\rho^2_\varepsilon}\right), && (3.59)\\
\eta_{c,t_{c,1}} &\sim N\left(0, \frac{\tau^2_\eta}{1-\rho^2_\eta}\right), && (3.60)\\
\theta_{c,t_{c,1}} &\sim N\left(0, \frac{\tau^2_\theta}{1-\rho^2_\theta}\right), && (3.61)\\
& && (3.62)
\end{aligned}
$$

$$P^*_{c,t} = \frac{\tilde{P}_c}{1+\exp(-\omega_c(t-\Omega_c))}, \tag{3.63}$$

$$R^*_{c,t} = \frac{\tilde{R}_c}{1+\exp(-\psi_c(t-\Psi_c))}, \tag{3.64}$$

$$Z^*_{c,t} = \frac{1}{1+\exp(z_c+\beta_1(P_{c,t}-0.4)+\beta_2\cdot(P_{c,t}-0.4)^2)}, \tag{3.65}$$

$$\log\left(\frac{\tilde{P}_c-0.1}{1-\tilde{P}_c}\right) \sim N(\tilde{P}_w, \kappa_P^{(c)}), \tag{3.66}$$

$$\log\left(\frac{\tilde{R}_c-0.1}{1-\tilde{R}_c}\right) \sim N(\tilde{R}_w, \kappa_R^{(c)}), \tag{3.67}$$

$$\tag{3.68}$$

$$\omega^*_c = \log\left(\frac{\omega_c-0.01}{0.5-\omega_c}\right), \tag{3.69}$$

$$\omega^*_c \sim \begin{cases} N(\omega_{r[c]}, \kappa_\Omega^{(r)}), & c \in SA0, \\ N(\omega_{s[c]}, \kappa_\Omega^{(c)}), & c \in SA1, \end{cases} \tag{3.70}$$

$$\omega^*_s \sim N(\omega^*_{SA1}, \kappa_\omega^{(s)}), \tag{3.71}$$

$$\omega^*_r \sim N(\omega^*_{SA0}, \kappa_\omega^{(r)}), \tag{3.72}$$

$$\omega^*_{SA0} \sim N(\omega^*_w, \kappa_\omega^{(SA)}), \tag{3.73}$$

$$\omega^*_{SA1} \sim N(\omega^*_w, \kappa_\omega^{(SA)}), \tag{3.74}$$

$$\psi^*_c = \log\left(\frac{\psi_c-0.01}{0.5-\psi_c}\right), \tag{3.75}$$

$$\psi^*_c \sim \begin{cases} N(\psi_{r[c]}, \kappa_\psi^{(r)}), & c \in SA0, \\ N(\psi_{s[c]}, \kappa_\psi^{(c)}), & c \in SA1, \end{cases} \tag{3.76}$$

$$\psi^*_s \sim N(\psi^*_{SA1}, \kappa_\psi^{(s)}), \tag{3.77}$$

$$\psi^*_r \sim N(\psi^*_{SA0}, \kappa_\psi^{(r)}), \tag{3.78}$$

$$\psi^*_{SA0} \sim N(\psi^*_w, \kappa_\psi^{(SA)}), \tag{3.79}$$

$$\psi^*_{SA1} \sim N(\psi^*_w, \kappa_\psi^{(SA)}), \tag{3.80}$$

$$\tag{3.81}$$

$$\Psi_c \sim \begin{cases} N_T(\Psi_{r[c]}, \kappa_\Psi^{(c)}), & c \in SA0, \\ N_T(\Psi_{s[c]}, \kappa_\Psi^{(c)}), & c \in SA1, \end{cases} \tag{3.82}$$

$$\Psi_s \sim N(\Psi_{SA1}, \kappa_\Psi^{(s)}), \tag{3.83}$$

$$\Psi_r \sim N(\Psi_{SA0}, \kappa_\Psi^{(r)}), \tag{3.84}$$

$$\Psi_{SA0} \sim N(\Psi_w, \kappa_\Psi^{(SA)}, \tag{3.85}$$

$$\Psi_{SA1} \sim N(\Psi_w, \kappa_\Psi^{(SA)}, \tag{3.86}$$

$$\Omega_c \sim \begin{cases} N_T(\Omega_{SA0}, \kappa_\Omega^{(SA0)}), & c \in SA0, \\ N_T(\Omega_{s[c]}, \kappa_\Omega^{(c)}), & c \in SA1, \end{cases} \tag{3.87}$$

$$\Omega_s \sim N(\Omega_{SA1}, \kappa_\Omega^{(s)}), \tag{3.88}$$

$$z_c \sim N(z_{s[c]}, \kappa_z^{(c)}), \tag{3.89}$$

$$z_s \sim N(z_w, \kappa_z^{(r)}). \tag{3.90}$$

Data Model

$$\begin{bmatrix} \log\left(\frac{y_{i,1}}{y_{i,3+4}}\right) \\ \log\left(\frac{y_{i,2}}{y_{i,3+4}}\right) \end{bmatrix} \sim N\left(\begin{bmatrix} \log\left(\frac{q_{i,1}}{q_{i,3+4}}\right) \\ \log\left(\frac{q_{i,2}}{q_{i,3+4}}\right) \end{bmatrix}, \Sigma_{S[i]}\right), \tag{3.91}$$

$$\Sigma_S = \begin{bmatrix} \sigma_{S,1}^2 & \rho_S \sigma_{S,1} \sigma_{S,2} \\ \rho_S \sigma_{S,1} \sigma_{S,2} & \sigma_{S,2}^2 \end{bmatrix}, \tag{3.92}$$

$$\log\left(\frac{y_{i,1+2}}{1-y_{i,1+2}}\right) \sim N\left(\log\left(\frac{q_{i,1+2}}{1-q_{i,1+2}}\right), \sigma_T^2\right) \text{ (for observations without break-down)}, \tag{3.93}$$

$$\log\left(\frac{y_{i,3}}{y_{i,4}}\right) \sim N\left(\log\left(\frac{q_{i,3}}{q_{i,4}}\right), \sigma_{S[i],3}^2\right), \tag{3.94}$$

$$\tag{3.95}$$

Perturbation multipliers

$$\tilde{q}_{i,m} = \frac{p_{c[i],t[i],m} \cdot v_{i,m}}{\sum_{n=1}^{4} p_{i,n} \cdot v_{i,n}}, \tag{3.96}$$

$$v_{i,m} = \prod_{g=1}^{G} V_{i,m}^{(g)}, \tag{3.97}$$

$$\tilde{V}_{i,m}^{(g)} = \begin{cases} 1 & \text{if } m = 3,4 \text{ or if } i \notin S^{(g)}, \\ V_{j[i,g],m}^{(g)} & \text{if } m = 1,2 \text{ and if } i \in S^{(g)}, \end{cases} \tag{3.98}$$

$$V_{j,m}^{(g)} \begin{cases} \sim \text{logN}(0, \delta_m^2), & \text{for } g = 1,2,3,6,\ m = 1,2 \text{ and for } g = 4, m = 1, \\ = 1/(1 + W_{j,m}^{(g)}), & \text{for } g = 8, m = 1,2, \\ = 1 + W_{j,m}^{(g)}, & \text{otherwise}, \end{cases} \tag{3.99}$$

$$\log(W_{j,m}^{(g)}) \begin{cases} = \mu_1, & \text{for } m = 1, \\ \sim N(\mu_2, \lambda_2^2), & \text{for } m = 2, \end{cases} \tag{3.100}$$

Misclassification biases

$$q_{i,1} = \tilde{q}_{i,1}(1 - \gamma_{1,3}) + \tilde{q}_{i,3}\gamma_{3,1}, \tag{3.101}$$

$$q_{i,2} = \tilde{q}_{i,2}(1 - \gamma_{2,4}) + \tilde{q}_{i,4}\gamma_{4,2}, \tag{3.102}$$

$$q_{i,3} = \tilde{q}_{i,3}(1 - \gamma_{3,1}) + \tilde{q}_{i,1}\gamma_{1,3}, \tag{3.103}$$

$$q_{i,4} = \tilde{q}_{i,4}(1 - \gamma_{4,2}) + \tilde{q}_{i,2}\gamma_{2,4}. \tag{3.104}$$

iv. Prior distributions

Spread-out prior distributions were used for the world-level mean parameters of the logistic curves and parametric function for unmet need (some centred at least-squares estimates):

$$\tilde{P}_w \sim N(0, 10^2), \tag{3.105}$$

$$\tilde{R}_w \sim N(0, 10^2), \tag{3.106}$$

$$\omega_w^* \sim N(-1, 10^2), \tag{3.107}$$

$$\psi_w^* \sim N(-1, 10^2), \tag{3.108}$$

$$\Psi_w \sim N(1980, 50^2), \tag{3.109}$$

$$\Omega_{SA0} \sim N(2070, 50^2), \tag{3.110}$$

$$\Omega_{SA1} \sim N(1970, 50^2), \tag{3.111}$$

$$z_w \sim N(-2, 1), \tag{3.112}$$

$$\beta_1 \sim N(-6, 5^2), \tag{3.113}$$

$$\beta_2 \sim U(-35, 0). \tag{3.114}$$

The remaining prior distributions were the same as those used by Alkema and others (2013):

$$\tau_{\cdot}^{-1/2} \sim U(0.01, 1), \tag{3.115}$$
$$\rho_{\cdot} \sim U(0, 1), \tag{3.116}$$
$$1/\kappa_{\cdot}^{(c)} \sim \text{Gamma}(\nu_{\cdot 0}/2, \nu_{\cdot 0}/2 \cdot \kappa_{\cdot 0}), \tag{3.117}$$
$$\sqrt{\kappa_{\cdot}^{(s,r,SA0,SA1)}} \sim U\left(0, K_{\kappa,\cdot}^{(s,r,SA0,SA1)}\right), \tag{3.118}$$
$$\Sigma_S \sim IW(\text{Diag}(0.1), 3), \quad S = 1, \ldots, 4, \tag{3.119}$$
$$\sigma_T^2 \sim \text{IGamma}(0.5, 0.5 \cdot 0.15^2), \tag{3.120}$$
$$\sigma_{S,3} \sim U(0.01, 2), \text{ for } S = 1, 2, \sigma_{3,3} = \sigma_{4,3} = \sigma_{2,3}, \tag{3.121}$$
$$\gamma_{m,n} \sim U(0, 1), \tag{3.122}$$
$$\mu_m \sim N(-2, 1.25^2), \tag{3.123}$$
$$\delta_m \sim U(0, 2), \tag{3.124}$$
$$\lambda_2 \sim U(0.01, 2). \tag{3.125}$$

$K_{\kappa,\cdot}^{(s,r,SA0,SA1)}$ was set large enough to ensure the prior did not restrict the posterior.

G. *Computation and Inference*

Samples from the joint posterior distribution of the model parameters (e.g., $\tilde{P}_{c,t}$, $\omega_{c,t}$, $\varepsilon_{c,t}$, etc.) were obtained via Markov chain Monte Carlo (MCMC) sampling implemented in the statistical software packages *R 3.4.3* (R Core Team, 2016) and *JAGS 4.2.0* (Plummer, 2003; Plummer, 2015), and *R*-packages *R2jags 0.5-7* (Su and Yajima, 2015) and *rjags 4-6* (Plummer and others, 2016). Four chains, each for 100, 000 iterations, were run. Every 30th iteration was kept and the first 20, 000 were discarded as burn-in. Convergence of the MCMC algorithm and the sufficiency of the number of samples obtained was checked through visual inspection of trace plots and convergence diagnostics of Raftery and Lewis (Raftery and Lewis, 1992a; Raftery and Lewis, 1992b; Raftery and Lewis, 1996), and Gelman and Rubin (1992), both implemented in the *coda* package (Plummer and others, 2006).

The trajectories of contraceptive prevalence and unmet need for each country were obtained from the MCMC sample by transforming the vector of country-specific model parameters into the indicators in exactly the same way as done by Alkema and others (2013, Supplementary Appendix, Section 2.5). The joint posterior distribution was summarized with 2.5, 50 (median) and 97.5 percentiles of each parameter for each country, for each year from 2000 to 2030. The preferred point estimates (the "best" estimates) are the median outcomes in each year.

i. Countries and parameters without data

Sixty-one countries had no data on contraceptive prevalence among UWRA. Fifty-eight countries had data on prevalence, but not on unmet need (all countries with data on unmet need also had data on prevalence). Estimates of prevalence and unmet need in these cases were based on samples from the respective hierarchical distributions as described below.

For countries without data on unmet need, the country-specific parameter $z_c^{(j)}$ in the ratio $Z_{c,t}^{*(j)}$ was sampled from its hierarchical distribution,

$$z_c^{(j)} \sim N(z_{s[c]}^{(j)}, \kappa_z^{(c)(j)}),$$

using the j-th posterior sample $\{z_{s[c]}^{(j)}, \kappa_z^{(c)(j)}\}$ for the subregional mean and the variance parameter. The distortion term in the first observation year $t_{c,1}$ for contraceptive prevalence was sampled from its respective distribution:

$$\theta_{c,t_{c,1}} \sim N\left(0, \frac{\tau_\theta^{2(j)}}{1-\rho_\theta^{2(j)}}\right),$$

and the distortions for the remaining years were obtained in the same way as discussed for the $\varepsilon_{c,t}^{(j)}$'s.

For countries without data on contraceptive prevalence, the same idea was applied. For example, the jth sample $P_{c,t}^{*(j)}$ for a country c with no prevalence data was defined as

$$P_{c,t}^{*(j)} = \frac{\tilde{P}_c^{(j)}}{1+\exp(-\omega_c^{(j)}(t-\Omega_c^{(j)}))} \tag{3.126}$$

where the component parameters are sampled from their hierarchical distributions. For example,

$$\log\left(\frac{\tilde{P}_c^{(j)}-0.1}{1-\tilde{P}_c^{(j)}}\right) \sim N(\tilde{P}_w^{(j)}, \kappa_P^{(c),(j)}) \tag{3.127}$$

$$\omega_c^{*(j)} = \log\left(\frac{\omega_c^{(j)}-0.01}{0.5-\omega_c^{(j)}}\right), \tag{3.128}$$

$$\omega_c^{*(j)} \sim \begin{cases} N(\omega_{r[c]}^{(j)}, \kappa_\Omega^{(r),(j)}), & c \in SA0, \\ N(\omega_{s[c]}^{(j)}, \kappa_\Omega^{(c),(j)}), & c \in SA1, \end{cases} \tag{3.129}$$

$$\omega_s^{*(j)} \sim N(\omega_{SA1}^{*(j)}, \kappa_\omega^{(s),(j)}), \tag{3.130}$$

$$\omega_r^{*(j)} \sim N(\omega_{SA0}^{*(j)}, \kappa_\omega^{(r),(j)}), \tag{3.131}$$

$$\omega_{SA0}^{*(j)} \sim N(\omega_w^{*(j)}, \kappa_\omega^{(SA),(j)}), \tag{3.132}$$

$$\omega_{SA1}^{*(j)} \sim N(\omega_w^{*(j)}, \kappa_\omega^{(SA),(j)}). \tag{3.133}$$

(3.134)

ii. Estimates and projections for women of reproductive age

Estimates and projections for women of reproductive age (WRA) were derived as follows. A posterior distribution of counts was constructed by summing MCMC sample trajectories of numbers of users and numbers experiencing unmet need among UWRA and MWRA, within country, within year. The counts for UWRA were obtained by multiplying trajectories of proportions by the estimated number of UWRA for each country and year (United Nations, 2018a). Sample trajectories of counts for MWRA were obtained from the latest model-based estimates and projections of family planning indicators (United Nations, 2018d). For country c, year t, denote the jth count trajectory for WRA, MWRA, and UWRA as $n_{c,t}^{[\text{AWRA}],(j)}$, $n_{c,t}^{[\text{MWRA}],(j)}$, $n_{c,t}^{[\text{UWRA}],(j)}$, respectively. Then,

$$n_{c,t}^{[\text{AWRA}],(j)} = n_{c,t}^{[\text{MWRA}],(j)} + n_{c,t}^{[\text{UWRA}],(j)},\ j = 1, \dots, J \tag{3.135}$$

where J is the number of trajectories in the smaller of the two sets ([UWRA] and [MWRA]). Note that, since the MCMC samples for UWRA and MWRA are random samples, hence in a random order, a random sample is obtained for WRA regardless of which UWRA trajectory is paired with, and added to, which MWRA (as long as each trajectory is used only once). For convenience, they were added in the order they appear in the dataset. The $n_{c,t}^{[\text{AWRA}],(j)}$ can be summarized by sample quantiles in the usual way. They can also be converted to proportions for WRA using the numbers of WRA (United Nations, 2017b). This approach assumes that the [UWRA] and [MWRA] trajectories are conditionally independent, given the data.

iii. Aggregate median adjustments

The estimates and projections include adjusted median values derived from the posterior distributions of the Bayesian hierarchical model. To perform the adjustments, the medians of the Bayesian posterior distributions for total contraceptive prevalence, P, for the ratio of modern contraceptive prevalence to total contraceptive prevalence, R, and for the ratio of the unmet need for family planning to the proportion of non-users of contraception, Z, were retained as estimated using the model. These values were used to compute adjusted median values for the other indicators, namely, traditional contraceptive prevalence, p_1, modern contraceptive prevalence, p_2, the unmet need for family planning, p_3, total demand for family planning, $D \equiv p_1 + p_2 + p_3$, and the ratio of modern contraceptive prevalence to total demand for family planning $M \equiv p_2/(p_1 + p_2 + p_3)$. The last of these measures serves as SDG indicator 3.7.1.

The mathematical operations performed to obtain the adjusted indicators were as follows:

$$p_1^* = \tilde{P} - p_2^* \tag{3.136}$$
$$p_2^* = \tilde{P}\tilde{R} \tag{3.137}$$
$$p_3^* = (1 - \tilde{P})\tilde{Z} \tag{3.138}$$
$$D^* = \tilde{P} + p_3^* \tag{3.139}$$
$$M^* = \frac{p_1^*}{D^*} \tag{3.140}$$
$$\tag{3.141}$$

where the notation x^* signifies the adjusted value of variable x and $\tilde{y}$ signifies the posterior median of the variable y. These adjustments ensure that the reported values conform to the identities required by their definitions, namely: $p_1^* + p_2^* = \tilde{P}$; $\tilde{P} + p_3^* = D^*$; and $M^* = p_2^*/D^*$.

The adjustments described here were used to derive adjusted median values only. A similar adjustment was not applied to other percentiles of the posterior distributions, and therefore the identities mentioned above do not hold, in general, for the endpoints of the uncertainty ranges.

H. Model validation

i. Method

Model performance was assessed using a set of cross-validation exercises like those employed by Alkema and others (2013, Supplementary Appendix, Section 2.6), but repeated ten times using using different random subsets of left-out observations:

Exercise 1 Leave out 20 per cent of the observations within each country at random. This exercise was repeated five times and the results averaged.

Exercise 2 Leave out all data with observation years after (and including) 2011 (28 per cent of all observations).

Exercise 3 Leave out a randomly chosen 20 per cent of the observations on unmet need for countries with unmet need data. This exercise was repeated five times and the results averaged.

Exercise 1 assesses general out-of-sample performance, Exercise 2 assesses forecast performance, and Exercise 3 assesses the fit to the unmet need data.

The following measures were used to summarize the results:

1. Median prediction error and median absolute prediction error.
   E.g., the error in predicting total prevalence for left-out observation i was computed as

$$e_{i,1+2} = y_{i,1+2} - \hat{y}_{i,1+2},$$

   where $\hat{y}_{i,1+2}$ is the predictive posterior median of $y_{i,1+2}$ (taking into account perturbations and biases).
2. Proportion of the left-out observations less than their posterior predictive median. If the model is well calibrated, this should be around 50 percent.
3. Coverage of 95 per cent prediction intervals with respect to the left-out observations.
   This was defined as the proportion of the left-out observations that fell inside the respective posterior predictive intervals. If the model is well calibrated, and if the left-out observations are independent from one another, this was expected to be the nominal level (e.g,. for 95 per cent intervals, this should be close to 0.95).

Only one left-out observation per country was used to calculate the above measures so as to reduce bias due to dependence among observations within country.

ii. Results

Results of the out-of-sample validations are in Table 4. For Exercise 1 the proportions of left-out observations falling inside the 80% and 95% prediction intervals are close to the nominal amounts for all components of contraceptive prevalence. Proportions of left-out observations falling below the lower limit of the prediction intervals, and below the posterior predictive median are higher than the nominal amounts but the median errors (MEs) and median absolute errors (MAEs) are small (less than 3 percent).

Coverage of posterior predictive intervals under Exercise 2 is similar to that under Exercise 1. Prediction intervals and medians based the test set tend to be a little higher than the left-out observations, but the errors are small.

The estimated coverages of the posterior predictive intervals under Exercise 3 are lower than the nominal amounts. However, there were very few observations (15) available for this exercise which means the results are subject to significant variability.

Table 4. Summary of model validation results based on out-of-sample validation experiments

Component	# Obs (per repl.)	80% prediction interval %Below	80% prediction interval %Within	80% prediction interval %Above	95% prediction interval %Below	95% prediction interval %Within	95% prediction interval %Above	Median % Below	Errors (%) ME	Errors (%) MAE
Exercise 1 (leave out 20% of obs.)										
Traditional	63	11.0	80.8	8.0	3.8	93.8	2.4	53.5	-0.0	0.4
Modern	63	9.0	85.4	6.0	4.6	93.8	2.0	43.6	0.2	1.6
Total	63	9.2	84.2	6.6	4.2	94.6	1.4	46.8	0.1	1.8
Unmet	33	8.0	88.2	3.8	4.6	94.2	1.2	38.9	0.3	1.2
Exercise 2 (end)										
Traditional	60	8.0	80.0	12.0	5.0	90.0	5.0	50.0	-0.0	0.4
Modern	60	3.0	85.0	12.0	3.0	93.0	3.0	35.0	1.2	3.4
Total	60	3.0	85.0	12.0	3.0	92.0	5.0	38.3	1.1	3.7
Unmet	49	12.0	86.0	2.0	8.0	92.0	0.0	42.9	0.5	1.7
Exercise 3 (unmet)										
Unmet	15	9.2	77.2	13.2	6.8	90.4	2.6	41.3	0.8	1.8
Nominal Values										
		10.0	80.0	10.0	2.5	95.0	2.5	50.0		

NOTE: For each exercise and component, the values are the proportion of left-out observations that fall outside, or inside, the respective 80% and 95% prediction intervals, and below their posterior predictive median estimate, and their median error (ME) and median absolute error (MAE). The '# Obs' column gives the number of observations in the test set in each replication of each exercise. Exercises 1 and 2 were repeated five times with different test sets of size '# Obs'. The effective number of observations was, therefore, between '# Obs' and 5× '# Obs' because the same observation may have been in the test sets of multiple replicates.

REFERENCES

Alkema, L. 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* 381 (9878), pp. 1642–1652.

Bijak, J. and J. Bryant (2016). Bayesian demography 250 years after Bayes. *Population Studies* 70 (1), pp. 1–19.

Dasgupta, A. N. Z., P. Ueffing, and V. Kantorová (2017). *Sexual Activity by Marital Status and Age: A Comparative Perspective*. United Nations, Department of Economic and Social Affairs, Population Division, Technical Paper 2017/11. New York: United Nations, Department of Economic and Social Affairs, Population Division.
URL: `http://www.un.org/en/development/desa/population/publications/pdf/technical/TP2017-11.pdf`.

FP2020 (2016). *Family Planning 2020*.
URL: `http://www.familyplanning2020.org/`.

Gelman, A. and D. Rubin (1992). Inference from iterative simulation using multiple sequences. *Statistical Science* (7), pp. 457–511.

Gelman, A. and others (2013). *Bayesian Data Analysis, Third Edition*. CRC Press: Boca Raton.

Inglehart, R. and others (2013). *World Values Survey: Round 6*. JD Systems Institute.
URL: `http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp`.

Lindley, D. V. and A. F. M. Smith (1972). Bayes Estimates for the Linear Model. *Journal of the Royal Statistical Society, Series B* (34), pp. 1–41.

PEW (2012). *The Global Religious Landscape: A Report on the Size and Distribution of the World's Major Religious Groups*. Pew Research Centere.
URL: `http://www.pewforum.org/2012/12/18/global-religious-landscape-exec/`.

——— (2014). *Global Attitudes Survey Spring 2013*. Pew Research Centere.
URL: `http://www.pewglobal.org/2014/04/15/global-morality/table/premarital-sex/`.

Plummer, M. (2003). "JAGS: A Program for Analysis of Bayesian Graphical Models Using Gibbs Sampling." In: *Proceedings of the 3rd International Workshop on Distributed Statistical Computing (DSC 2003)* (Vienna, Austria, Mar. 20–22, 2003).

——— (2015). *JAGS: Just Another Gibbs Sampler v. 4.2.0*.
URL: `http://mcmc-jags.sourceforge.net/`.

Plummer, M., A. Stukalov, and M. Denwood (2016). *rjags v. 4-6*.
URL: `http://mcmc-jags.sourceforge.net`.

Plummer, M. and others (2006). CODA: Convergence Diagnosis and Output Analysis for MCMC. *R News* 6 (1), pp. 7–11.
URL: `https://journal.r-project.org/archive/`.

R Core Team (2016). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing. Vienna, Austria.
URL: https://www.R-project.org/.

Raftery, A. E. and S. M. Lewis (1992a). "How Many Iterations in the Gibbs Sampler?" In: *Bayesian Statistics 4. Proceedings of the Fourth Valencia International Meeting*. Ed. by J. M. Bernardo and others. Oxford University Press: Oxford.

——— (1992b). One long run with diagnostics: Implementation strategies for Markov chain Monte Carlo. *Statistical Science* (7), pp. 493–497.

——— (1996). "Implementing MCMC." In: *Markov Chain Monte Carlo in Practice*. Ed. by W. R. Gilks, D. J. Spiegelhalter, and S. Richardson. Chapman and Hall: London, pp. 115–130.

Su, Y.-S. and M. Yajima (2015). *R2jags v. 0.5-7*.
URL: https://CRAN.R-project.org/package=R2jags.

United Nations (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. Resolution adopted by the General Assembly on 25 September 2015 A/RES/70/1. New York: United Nations, Department of Economic and Social Affairs, Population Division.
URL: https://sustainabledevelopment.un.org/post2015/transformingourworld/publication.

——— (2017a). *World Marriage Data 2017*. United Nations, Department of Economic and Social Affairs, Population Division.
URL: https://www.un.org/en/development/desa/population/theme/marriage-unions/WMD2017.shtml.

——— (2017b). *World Population Prospects 2017*. United Nations, Department of Economic and Social Affairs, Population Division.
URL: https://population.un.org/wpp/ (visited on 01/03/2019).

——— (2018a). *Estimates and Projections of Women of Reproductive Age Who Are Married or in a Union: 2018 Revision.* United Nations, Department of Economic and Social Affairs, Population Division.
URL: http://www.un.org/en/development/desa/population/theme/marriage-unions/marriage_estimates.shtml.

——— (2018b). *Model-based Estimates and Projections of Family Planning Indicators 2018*. United Nations, Department of Economic and Social Affairs, Population Division.
URL: http://www.un.org/en/development/desa/population/theme/family-planning/cp_model.shtml.

——— (2018c). *The Sustainable Development Goals Report 2018*. United Nations: New York.

——— (2018d). *World Contraceptive Use 2018*. United Nations, Department of Economic and Social Affairs, Population Division.
URL: https://www.un.org/en/development/desa/population/publications/dataset/contraception/wcu2018.shtml.

United Nations (2018e). *World Contraceptive Use by Marital Status and Age 2018*. United Nations, Department of Economic and Social Affairs, Population Division.
URL: https://www.un.org/en/development/desa/population/publications/dataset/contraception/wcuma2018.shtml.

Wheldon, M. C. and others (2017). "The Role of Hierarchies in a Bayesian Hierarchical Model for Estimating and Projecting Contraceptive Prevalence Among Unmarried Women when Data are Limited and Deficient, or Absent." In: XXVIII International Population Conference. International Union for the Scientific Study of Population: Cape Town, South Africa.
URL: https://iussp.confex.com/iussp/ipc2017/meetingapp.cgi/Paper/6386.

World Bank (2017). *World Development Indicators, GNI per capita, Atlas method (current US$)*. World Bank.
URL: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.

SUPPLEMENTARY TABLES

These tables contain results for selected years from a systematic and comprehensive set of annual, model-based estimates and projections of key indicators of the practice of family planning in a population, including the prevalence of contraceptive use in the population, the need for family planning that exists in the population but is not being met, and the demand for family planning that is being satisfied by use of modern contraception.

Estimates based on medians, as well 95 per cent uncertainty intervals, are provided for 185 countries or areas, sub-regions, regions, and the world. The results are based on data available as of February 2018.

Results are given here for all women and UWRA only. Comparable model-based estimates and projections for MWRA are available at:

> United Nations (2018b). *Model-based Estimates and Projections of Family Planning Indicators 2018*. United Nations, Department of Economic and Social Affairs, Population Division.
> URL: `http://www.un.org/en/development/desa/population/theme/family-planning/cp_model.shtml`.

Note: The designations employed and the material presented in this publication 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 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. Countries or aggregates listed individually are only those with 90,000 inhabitants or more in 2017.

Table 5. Classification of countries by geographical area, income and sexual activity groups, and data sources used to determine sexual activity group

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
Afghanistan	Asia	South-Central Asia	Low	0	PEW GRL
Albania	Europe	Southern Europe	Upper-middle	1	DHS/MICS
Algeria	Africa	Northern Africa	Upper-middle	0	PEW GRL
Angola	Africa	Middle Africa	Lower-middle	1	PEW GRL
Antigua and Barbuda	LAC	Caribbean	High	1	PEW GRL
Argentina	LAC	South America	Upper-middle	1	PEW GAS
Armenia	Asia	Western Asia	Lower-middle	0	DHS/MICS
Australia	Oceania	Australia/New Zealand	High	1	PEW GAS
Austria	Europe	Western Europe	High	1	PEW GRL
Azerbaijan	Asia	Western Asia	Upper-middle	0	DHS/MICS
Bahamas	LAC	Caribbean	High	1	PEW GRL
Bahrain	Asia	Western Asia	High	0	PEW GRL
Bangladesh	Asia	South-Central Asia	Lower-middle	0	PEW GRL
Barbados	LAC	Caribbean	High	1	DHS/MICS
Belarus	Europe	Eastern Europe	Upper-middle	1	DHS/MICS
Belgium	Europe	Western Europe	High	1	PEW GRL
Belize	LAC	Central America	Upper-middle	1	DHS/MICS
Benin	Africa	Western Africa	Low	1	DHS/MICS
Bhutan	Asia	South-Central Asia	Lower-middle	0	DHS/MICS
Bolivia, Plurinational State of	LAC	South America	Lower-middle	1	DHS/MICS
Bosnia and Herzegovina	Europe	Southern Europe	Upper-middle	1	DHS/MICS
Botswana	Africa	Southern Africa	Upper-middle	1	DHS/MICS
Brazil	LAC	South America	Upper-middle	1	DHS/MICS
Bulgaria	Europe	Eastern Europe	Upper-middle	1	PEW GRL
Burkina Faso	Africa	Western Africa	Low	1	DHS/MICS

continued

Table 5. Classification of countries by World Bank income group and sexual activity group, and data sources for sexual activity group (cont'd).

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
Burundi	Africa	Eastern Africa	Low	1	DHS/MICS
Cabo Verde	Africa	Western Africa	Lower-middle	1	PEW GRL
Cambodia	Asia	South-Eastern Asia	Lower-middle	0	DHS/MICS
Cameroon	Africa	Middle Africa	Lower-middle	1	DHS/MICS
Canada	N. America	Northern America	High	1	PEW GAS
Central African Republic	Africa	Middle Africa	Low	1	DHS/MICS
Chad	Africa	Middle Africa	Low	1	DHS/MICS
Chile	LAC	South America	High	1	PEW GAS
China	Asia	Eastern Asia	Upper-middle	1	PEW GAS
China, Hong Kong SAR	Asia	Eastern Asia	High	1	World Values Survey
Colombia	LAC	South America	Upper-middle	1	DHS/MICS
Comoros	Africa	Eastern Africa	Low	1	DHS/MICS
Congo	Africa	Middle Africa	Lower-middle	1	DHS/MICS
Costa Rica	LAC	Central America	Upper-middle	1	PEW GRL
Côte d'Ivoire	Africa	Western Africa	Lower-middle	1	DHS/MICS
Croatia	Europe	Southern Europe	Upper-middle	1	PEW GRL
Cuba	LAC	Caribbean	Upper-middle	1	PEW GRL
Czechia	Europe	Eastern Europe	High	1	PEW GAS
Democratic People's Rep. of Korea	Asia	Eastern Asia	Low	1	PEW GRL
Democratic Rep. of the Congo	Africa	Middle Africa	Low	1	DHS/MICS
Denmark	Europe	Northern Europe	High	1	PEW GRL
Djibouti	Africa	Eastern Africa	Lower-middle	0	PEW GRL
Dominican Republic	LAC	Caribbean	Upper-middle	1	DHS/MICS
Ecuador	LAC	South America	Upper-middle	1	World Values Survey
Egypt	Africa	Northern Africa	Lower-middle	0	PEW GAS
El Salvador	LAC	Central America	Lower-middle	1	PEW GAS
Equatorial Guinea	Africa	Middle Africa	Upper-middle	1	PEW GRL
Eritrea	Africa	Eastern Africa	Low	1	DHS/MICS
Estonia	Europe	Northern Europe	High	1	World Values Survey
Ethiopia	Africa	Eastern Africa	Low	1	DHS/MICS

continued

Table 5. Classification of countries by World Bank income group and sexual activity group, and data sources for sexual activity group (cont'd).

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
Fiji	Oceania	Melanesia	Upper-middle	1	PEW GRL
Finland	Europe	Northern Europe	High	1	PEW GRL
France	Europe	Western Europe	High	1	PEW GAS
Gabon	Africa	Middle Africa	Upper-middle	1	DHS/MICS
Gambia	Africa	Western Africa	Low	1	DHS/MICS
Georgia	Asia	Western Asia	Lower-middle	1	World Values Survey
Germany	Europe	Western Europe	High	1	PEW GAS
Ghana	Africa	Western Africa	Lower-middle	1	DHS/MICS
Greece	Europe	Southern Europe	High	1	PEW GAS
Grenada	LAC	Caribbean	Upper-middle	1	PEW GRL
Guadeloupe[b]	LAC	Caribbean		1	PEW GRL
Guam	Oceania	Micronesia	High	1	PEW GRL
Guatemala	LAC	Central America	Lower-middle	1	DHS/MICS
Guinea	Africa	Western Africa	Low	1	DHS/MICS
Guinea-Bissau	Africa	Western Africa	Low	1	DHS/MICS
Guyana	LAC	South America	Upper-middle	1	DHS/MICS
Haiti	LAC	Caribbean	Low	1	DHS/MICS
Honduras	LAC	Central America	Lower-middle	1	DHS/MICS
Hungary	Europe	Eastern Europe	High	1	PEW GRL
India	Asia	South-Central Asia	Lower-middle	0	DHS/MICS
Indonesia	Asia	South-Eastern Asia	Lower-middle	0	DHS/MICS
Iran, Islamic Republic of	Asia	South-Central Asia	Upper-middle	0	PEW GRL
Iraq	Asia	Western Asia	Upper-middle	0	PEW GRL
Ireland	Europe	Northern Europe	High	1	PEW GRL
Israel	Asia	Western Asia	High	1	PEW GAS
Italy	Europe	Southern Europe	High	1	PEW GAS
Jamaica	LAC	Caribbean	Upper-middle	1	PEW GRL
Japan	Asia	Eastern Asia	High	1	PEW GAS
Jordan	Asia	Western Asia	Lower-middle	0	PEW GAS
Kazakhstan	Asia	South-Central Asia	Upper-middle	1	DHS/MICS

continued

Table 5. **Classification of countries by World Bank income group and sexual activity group, and data sources for sexual activity group (cont'd).**

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
Kenya	Africa	Eastern Africa	Lower-middle	1	DHS/MICS
Kiribati	Oceania	Micronesia	Lower-middle	1	PEW GRL
Kuwait	Asia	Western Asia	High	0	PEW GRL
Kyrgyzstan	Asia	South-Central Asia	Lower-middle	1	DHS/MICS
Lao People's Dem. Republic	Asia	South-Eastern Asia	Lower-middle	0	DHS/MICS
Latvia	Europe	Northern Europe	High	1	PEW GRL
Lebanon	Asia	Western Asia	Upper-middle	0	PEW GAS
Lesotho	Africa	Southern Africa	Lower-middle	1	DHS/MICS
Liberia	Africa	Western Africa	Low	1	DHS/MICS
Libya	Africa	Northern Africa	Upper-middle	0	World Values Survey
Lithuania	Europe	Northern Europe	High	1	PEW GRL
Madagascar	Africa	Eastern Africa	Low	1	DHS/MICS
Malawi	Africa	Eastern Africa	Low	1	DHS/MICS
Malaysia	Asia	South-Eastern Asia	Upper-middle	0	PEW GAS
Maldives	Asia	South-Central Asia	Upper-middle	0	PEW GRL
Mali	Africa	Western Africa	Low	1	DHS/MICS
Malta	Europe	Southern Europe	High	1	PEW GRL
Martinique[b]	LAC	Caribbean		1	PEW GRL
Mauritania	Africa	Western Africa	Lower-middle	0	DHS/MICS
Mauritius	Africa	Eastern Africa	Upper-middle	1	PEW GRL
Mexico	LAC	Central America	Upper-middle	1	PEW GAS
Mongolia	Asia	Eastern Asia	Lower-middle	1	PEW GRL
Montenegro	Europe	Southern Europe	Upper-middle	1	DHS/MICS
Morocco	Africa	Northern Africa	Lower-middle	0	DHS/MICS
Mozambique	Africa	Eastern Africa	Low	1	DHS/MICS
Myanmar	Asia	South-Eastern Asia	Lower-middle	0	PEW GRL
Namibia	Africa	Southern Africa	Upper-middle	1	DHS/MICS
Nepal	Asia	South-Central Asia	Low	0	DHS/MICS
Netherlands	Europe	Western Europe	High	1	World Values Survey
New Zealand	Oceania	Australia/New Zealand	High	1	World Values Survey

continued

Table 5. Classification of countries by World Bank income group and sexual activity group, and data sources for sexual activity group (cont'd).

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
Nicaragua	LAC	Central America	Lower-middle	1	PEW GRL
Niger	Africa	Western Africa	Low	0	DHS/MICS
Nigeria	Africa	Western Africa	Lower-middle	1	DHS/MICS
Norway	Europe	Northern Europe	High	1	PEW GRL
Oman	Asia	Western Asia	High	0	PEW GRL
Pakistan	Asia	South-Central Asia	Lower-middle	0	PEW GAS
Panama	LAC	Central America	Upper-middle	1	PEW GRL
Papua New Guinea	Oceania	Melanesia	Lower-middle	1	PEW GRL
Paraguay	LAC	South America	Upper-middle	1	DHS/MICS
Peru	LAC	South America	Upper-middle	1	DHS/MICS
Philippines	Asia	South-Eastern Asia	Lower-middle	1	DHS/MICS
Poland	Europe	Eastern Europe	High	1	PEW GAS
Portugal	Europe	Southern Europe	High	1	PEW GRL
Puerto Rico	LAC	Caribbean	High	1	PEW GRL
Qatar	Asia	Western Asia	High	0	World Values Survey
Republic of Korea	Asia	Eastern Asia	High	1	PEW GAS
Republic of Moldova	Europe	Eastern Europe	Lower-middle	1	DHS/MICS
Réunion[b]	Africa	Eastern Africa		1	PEW GRL
Romania	Europe	Eastern Europe	Upper-middle	1	World Values Survey
Russian Federation	Europe	Eastern Europe	Upper-middle	1	PEW GAS
Rwanda	Africa	Eastern Africa	Low	1	DHS/MICS
St. Lucia	LAC	Caribbean	Upper-middle	1	DHS/MICS
St. Vincent and the Grenadines	LAC	Caribbean	Upper-middle	1	PEW GRL
Samoa	Oceania	Polynesia	Upper-middle	1	PEW GRL
Sao Tome and Principe	Africa	Middle Africa	Lower-middle	1	DHS/MICS
Saudi Arabia	Asia	Western Asia	High	0	PEW GRL
Senegal	Africa	Western Africa	Low	1	DHS/MICS
Serbia	Europe	Southern Europe	Upper-middle	1	DHS/MICS
Sierra Leone	Africa	Western Africa	Low	1	DHS/MICS
Singapore	Asia	South-Eastern Asia	High	1	World Values Survey

continued

Table 5. Classification of countries by World Bank income group and sexual activity group, and data sources for sexual activity group (cont'd).

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
Slovakia	Europe	Eastern Europe	High	1	PEW GRL
Slovenia	Europe	Southern Europe	High	1	World Values Survey
Solomon Islands	Oceania	Melanesia	Lower-middle	1	PEW GRL
Somalia	Africa	Eastern Africa	Low	0	PEW GRL
South Africa	Africa	Southern Africa	Upper-middle	1	DHS/MICS
South Sudan	Africa	Eastern Africa	Low	1	DHS/MICS
Spain	Europe	Southern Europe	High	1	PEW GAS
Sri Lanka	Asia	South-Central Asia	Lower-middle	0	PEW GRL
State of Palestine	Asia	Western Asia	Lower-middle	0	PEW GAS
Sudan	Africa	Northern Africa	Lower-middle	0	PEW GRL
Suriname	LAC	South America	Upper-middle	1	DHS/MICS
Swaziland	Africa	Southern Africa	Lower-middle	1	DHS/MICS
Sweden	Europe	Northern Europe	High	1	World Values Survey
Switzerland	Europe	Western Europe	High	1	PEW GRL
Syrian Arab Republic	Asia	Western Asia	Lower-middle	0	PEW GRL
Tajikistan	Asia	South-Central Asia	Lower-middle	0	DHS/MICS
TFYR Macedonia	Europe	Southern Europe	Upper-middle	1	DHS/MICS
Thailand	Asia	South-Eastern Asia	Upper-middle	1	World Values Survey
Timor-Leste	Asia	South-Eastern Asia	Lower-middle	0	DHS/MICS
Togo	Africa	Western Africa	Low	1	DHS/MICS
Tonga	Oceania	Polynesia	Upper-middle	1	PEW GRL
Trinidad and Tobago	LAC	Caribbean	High	1	DHS/MICS
Tunisia	Africa	Northern Africa	Lower-middle	0	PEW GAS
Turkey	Asia	Western Asia	Upper-middle	0	PEW GAS
Turkmenistan	Asia	South-Central Asia	Upper-middle	0	DHS/MICS
Uganda	Africa	Eastern Africa	Low	1	DHS/MICS
Ukraine	Europe	Eastern Europe	Lower-middle	1	DHS/MICS
United Arab Emirates	Asia	Western Asia	High	0	PEW GRL
United Kingdom	Europe	Northern Europe	High	1	PEW GAS
United Rep. of Tanzania	Africa	Eastern Africa	Low	1	DHS/MICS

continued

Table 5. Classification of countries by World Bank income group and sexual activity group, and data sources for sexual activity group (cont'd).

Country or aggregate	Region	Sub-region	World Bank income group[a]	Sexual activity group	Source data for sexual activity group
United States of America	N. America	Northern America	High	1	PEW GAS
United States Virgin Islands	LAC	Caribbean	High	1	PEW GRL
Uruguay	LAC	South America	High	1	World Values Survey
Uzbekistan	Asia	South-Central Asia	Lower-middle	0	DHS/MICS
Vanuatu	Oceania	Melanesia	Lower-middle	1	PEW GRL
Venezuela, Bolivarian Republic of	LAC	South America	Upper-middle	1	PEW GAS
Viet Nam	Asia	South-Eastern Asia	Lower-middle	0	DHS/MICS
Yemen	Asia	Western Asia	Lower-middle	0	PEW GRL
Zambia	Africa	Eastern Africa	Lower-middle	1	DHS/MICS
Zimbabwe	Africa	Eastern Africa	Low	1	DHS/MICS

[a] World Bank (2017). *World Development Indicators, GNI per capita, Atlas method (current US$)*. World Bank. URL: `https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups`

[b] World Bank income groups are not available for Guadeloupe, Martinique, and Réunion.

Source: Source data for sexual activity group: 'DHS/MICS' = Demographic and Health Survey or Multiple Indicator Cluster Survey; 'PEW GRL' = Pew Global Religious Landscape Survey (PEW, 2012); 'PEW GAS' = Pew Global Attitudes Survey PEW, 2014.

NOTE: *Key.* Regions: 'LAC' = Latin America and the Caribbean; 'N. America' = Northern America. Sexual activity group: '0' = Low sexual activity among unmarried and not in a union women of reproductive age; '1' = All other countries.

J. Unmarried/not-in-union women

i. Any contraceptive use in 185 countries or areas

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	1.4 (0.1-8.9)	1.7 (0.1-10.1)	1.9 (0.1-11.4)	2.4 (0.2-13.8)
Albania	8	2.8 (1.1-6.4)	5.5 (3.5-8.8)	8.2 (3.4-20.3)	13.2 (4.4-38.9)
Algeria	12	1.5 (0.0-10.2)	1.8 (0.0-11.6)	2.1 (0.0-12.9)	2.5 (0.1-15.1)
Angola	24	9.2 (5.1-16.2)	14.2 (8.2-23.1)	14.5 (8.4-23.8)	18.5 (8.0-38.4)
Antigua and Barbuda	28	18.5 (0.5-62.6)	23.5 (1.3-67.1)	27.1 (2.3-69.7)	32.2 (5.1-73.3)
Argentina	32	26.2 (5.4-59.9)	33.7 (12.8-61.0)	38.1 (16.1-65.4)	41.6 (16.6-72.7)
Armenia	51	0.7 (0.3-1.5)	0.8 (0.4-1.8)	1.1 (0.4-2.9)	1.4 (0.4-4.5)
Australia	36	31.5 (10.4-56.8)	35.8 (14.0-54.9)	36.8 (14.4-60.1)	38.4 (14.9-67.2)
Austria	40	43.1 (18.3-70.1)	46.5 (24.0-66.8)	46.9 (23.9-69.6)	46.9 (21.0-73.6)
Azerbaijan	31	0.5 (0.2-1.8)	0.7 (0.2-2.8)	0.9 (0.2-3.5)	1.2 (0.3-4.7)
Bahamas	44	19.1 (0.5-63.4)	23.9 (1.3-67.1)	27.6 (2.4-70.0)	32.5 (5.3-72.3)
Bahrain	48	1.4 (0.1-8.9)	1.7 (0.1-10.1)	1.9 (0.1-11.7)	2.4 (0.2-14.0)
Bangladesh	50	2.3 (1.4-4.4)	2.6 (1.2-5.7)	3.2 (1.2-8.4)	4.0 (1.4-11.6)
Barbados	52	21.0 (9.4-40.4)	26.8 (15.6-42.2)	30.1 (15.2-51.6)	34.1 (14.3-61.8)
Belarus	112	28.8 (15.2-47.3)	36.4 (24.8-50.5)	43.4 (28.5-58.2)	41.8 (21.1-66.4)
Belgium	56	37.1 (16.5-62.1)	39.1 (23.8-56.8)	44.1 (23.7-67.0)	43.1 (20.1-70.6)
Belize	84	15.8 (7.4-31.0)	21.0 (12.8-32.4)	24.0 (11.7-43.8)	28.1 (11.5-54.4)
Benin	204	16.0 (11.0-22.7)	17.0 (11.5-24.5)	18.0 (9.7-30.8)	21.1 (9.4-41.4)
Bhutan	64	2.7 (1.0-7.1)	3.4 (2.0-5.7)	3.7 (1.5-9.0)	4.3 (1.4-12.0)
Bolivia, Plurinational State of	68	8.0 (5.3-12.0)	13.2 (8.5-19.9)	17.5 (10.2-28.8)	25.8 (10.7-50.8)
Bosnia and Herzegovina	70	8.8 (3.0-20.7)	13.1 (7.6-21.6)	17.3 (8.3-34.2)	22.3 (8.8-49.9)
Botswana	72	27.9 (12.0-59.5)	31.7 (12.1-67.7)	34.5 (12.5-71.6)	37.3 (13.5-73.9)

continued

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Brazil	76	29.6 (18.4-44.2)	42.1 (25.1-60.6)	43.6 (23.1-67.2)	46.5 (20.9-75.4)
Bulgaria	100	37.5 (16.7-64.5)	38.0 (15.1-68.7)	39.3 (15.9-70.0)	41.7 (16.5-73.5)
Burkina Faso	854	12.9 (9.3-17.7)	11.5 (9.3-14.2)	13.9 (8.7-21.8)	16.6 (7.5-33.8)
Burundi	108	2.4 (1.5-3.7)	2.0 (1.5-2.6)	3.2 (1.4-7.2)	5.4 (2.0-13.9)
Cabo Verde	132	24.0 (15.6-34.7)	29.0 (16.5-45.8)	29.1 (13.8-51.1)	30.8 (13.6-56.7)
Cambodia	116	0.5 (0.3-0.9)	0.7 (0.4-1.2)	1.2 (0.6-2.3)	1.3 (0.5-3.6)
Cameroon	120	29.1 (20.3-40.3)	28.2 (20.7-37.0)	35.8 (21.3-53.9)	37.7 (18.3-61.8)
Canada	124	59.7 (37.0-75.7)	57.3 (30.5-79.5)	57.2 (28.5-80.8)	57.0 (27.8-82.0)
Central African Republic	140	12.1 (6.1-22.7)	11.4 (6.9-19.5)	15.1 (6.5-30.8)	19.5 (7.5-41.9)
Chad	148	2.3 (1.4-3.7)	3.4 (2.3-5.0)	5.0 (2.8-8.9)	8.0 (3.2-19.6)
Chile	152	33.7 (8.4-66.7)	42.7 (18.6-68.7)	47.2 (24.3-71.1)	48.7 (22.1-76.9)
China	156	19.5 (1.5-60.0)	22.4 (2.5-62.9)	24.8 (3.6-65.0)	27.9 (5.4-67.5)
China, Hong Kong SAR	344	19.3 (1.6-59.6)	22.5 (2.7-63.2)	24.8 (3.8-65.5)	27.8 (5.5-67.7)
Colombia	170	26.7 (22.0-31.8)	35.5 (30.0-41.3)	41.0 (27.3-56.2)	44.4 (21.9-70.6)
Comoros	174	8.3 (5.2-12.3)	5.3 (3.2-8.7)	6.7 (3.2-13.4)	10.3 (3.9-24.0)
Congo	178	35.6 (20.4-54.4)	42.6 (32.7-53.4)	42.8 (25.0-62.7)	44.4 (21.7-69.2)
Costa Rica	188	41.4 (18.8-65.7)	54.9 (35.6-63.7)	48.6 (26.3-70.1)	50.3 (24.3-75.4)
Côte d'Ivoire	384	26.8 (18.0-38.0)	24.3 (16.6-34.2)	25.4 (13.8-41.9)	28.8 (12.9-51.7)
Croatia	191	18.1 (0.7-57.6)	22.3 (1.8-62.3)	25.2 (3.1-65.2)	29.4 (5.6-68.8)
Cuba	192	50.5 (25.2-74.3)	60.8 (46.1-73.3)	61.2 (42.3-77.1)	60.4 (35.0-81.9)
Czechia	203	27.6 (15.0-45.6)	27.3 (13.6-47.9)	30.5 (13.7-54.9)	34.0 (14.3-61.6)
Democratic People's Rep. of Korea	408	19.4 (1.6-59.6)	22.3 (2.7-63.4)	24.6 (3.8-64.5)	28.1 (5.7-67.6)
Democratic Rep. of the Congo	180	18.2 (10.6-29.8)	16.3 (11.3-23.2)	19.7 (10.7-34.2)	24.0 (10.5-46.8)
Denmark	208	25.9 (1.5-67.2)	29.1 (3.2-70.0)	31.2 (4.9-72.3)	34.2 (7.2-74.1)
Djibouti	262	1.6 (0.0-10.2)	1.9 (0.0-11.7)	2.1 (0.0-13.2)	2.6 (0.1-15.4)
Dominican Republic	214	21.7 (16.4-28.0)	31.8 (22.8-42.6)	36.2 (22.1-53.4)	39.8 (18.8-66.3)
Ecuador	218	10.2 (6.6-15.5)	20.2 (11.3-33.8)	25.8 (11.2-50.5)	32.8 (12.5-64.8)
Egypt	818	0.4 (0.2-1.5)	0.5 (0.2-1.9)	0.7 (0.2-2.6)	0.9 (0.3-3.6)

continued

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
El Salvador	222	16.3 (9.8-26.1)	22.3 (14.0-33.7)	24.5 (13.4-41.1)	29.0 (12.6-54.7)
Equatorial Guinea	226	13.1 (5.1-28.4)	15.3 (10.4-22.1)	18.1 (8.9-33.3)	22.1 (9.2-44.8)
Eritrea	232	1.7 (1.0-2.6)	1.9 (1.0-3.5)	3.0 (1.2-7.2)	4.9 (1.7-14.0)
Estonia	233	26.3 (1.6-67.9)	29.1 (3.3-70.0)	31.5 (5.1-72.1)	34.1 (7.8-73.7)
Ethiopia	231	2.2 (1.7-2.9)	4.1 (2.9-5.9)	6.1 (3.7-9.7)	8.4 (3.4-20.4)
Fiji	242	8.2 (0.3-40.0)	10.4 (0.4-44.9)	12.4 (0.8-48.7)	15.9 (1.5-55.0)
Finland	246	25.7 (1.4-68.0)	29.1 (3.2-70.9)	31.2 (4.8-71.8)	34.1 (7.5-74.1)
France	250	38.4 (21.3-58.7)	47.9 (33.3-62.1)	48.5 (29.0-69.0)	47.7 (24.2-72.1)
Gabon	266	36.5 (29.0-45.1)	36.5 (25.8-48.7)	38.0 (22.1-56.5)	40.7 (19.7-65.3)
Gambia	270	4.9 (2.1-11.1)	4.2 (2.3-7.5)	5.1 (2.6-10.2)	8.2 (3.2-19.5)
Georgia	268	0.7 (0.3-1.6)	1.1 (0.5-2.0)	1.8 (0.6-5.3)	3.5 (0.9-15.2)
Germany	276	35.0 (17.9-58.5)	34.8 (17.5-59.0)	37.9 (17.2-64.8)	40.1 (17.3-69.4)
Ghana	288	12.6 (8.5-18.3)	15.4 (10.9-21.5)	18.7 (11.5-28.8)	20.6 (9.4-39.9)
Greece	300	17.8 (0.8-59.4)	21.9 (1.9-63.3)	24.9 (3.1-65.6)	28.9 (5.7-69.3)
Grenada	308	18.8 (0.5-62.0)	23.6 (1.2-65.9)	27.4 (2.2-68.8)	32.2 (5.2-72.5)
Guadeloupe	312	18.4 (0.5-62.3)	23.5 (1.2-66.5)	27.4 (2.4-69.0)	32.1 (5.2-72.3)
Guam	316	17.9 (1.6-57.1)	20.6 (2.6-60.2)	22.6 (3.4-61.7)	25.6 (4.9-65.5)
Guatemala	320	4.4 (3.1-6.3)	8.1 (5.3-12.1)	11.0 (6.3-18.8)	15.4 (6.3-34.2)
Guinea	324	13.4 (9.4-18.7)	16.3 (10.9-23.7)	17.7 (9.1-31.4)	19.9 (8.5-40.5)
Guinea-Bissau	624	14.3 (9.1-23.7)	31.8 (19.8-46.9)	34.8 (20.0-53.5)	32.8 (15.2-58.0)
Guyana	328	11.5 (4.5-25.2)	18.6 (13.0-25.7)	15.2 (7.6-27.9)	22.4 (9.2-46.9)
Haiti	332	6.9 (5.4-8.7)	10.5 (6.9-15.5)	14.7 (7.1-28.0)	22.3 (8.4-48.0)
Honduras	340	11.6 (7.0-18.7)	15.5 (10.5-22.4)	19.0 (9.8-33.6)	23.3 (9.7-46.7)
Hungary	348	14.1 (4.7-33.2)	15.5 (6.9-31.6)	18.5 (7.1-40.3)	21.9 (8.2-49.0)
India	356	5.4 (2.6-10.9)	6.2 (3.6-10.2)	6.2 (3.5-10.8)	6.9 (2.8-16.2)
Indonesia	360	0.8 (0.4-1.7)	1.1 (0.7-1.7)	1.6 (0.8-2.9)	1.8 (0.7-4.6)
Iran, Islamic Republic of	364	1.4 (0.1-9.3)	1.7 (0.1-10.4)	2.0 (0.1-11.5)	2.4 (0.1-13.7)
Iraq	368	1.4 (0.1-9.0)	1.7 (0.1-10.3)	1.9 (0.1-11.8)	2.4 (0.2-13.4)

continued

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Ireland	372	25.7 (1.6-67.9)	29.0 (3.2-69.9)	31.4 (4.8-71.1)	34.3 (7.5-73.5)
Israel	376	3.0 (0.0-39.6)	4.5 (0.0-46.3)	6.2 (0.0-50.1)	9.6 (0.1-56.5)
Italy	380	30.3 (9.1-62.0)	37.6 (15.3-63.7)	40.5 (17.4-67.6)	42.5 (16.7-73.1)
Jamaica	388	18.8 (11.9-28.3)	23.6 (14.3-36.5)	27.3 (13.0-48.8)	31.2 (12.9-59.1)
Japan	392	23.3 (6.2-55.5)	27.1 (9.8-56.3)	29.8 (11.3-58.8)	32.6 (11.5-65.4)
Jordan	400	0.4 (0.2-0.8)	0.4 (0.2-0.8)	0.5 (0.2-1.3)	0.8 (0.3-2.2)
Kazakhstan	398	15.8 (11.2-21.7)	15.1 (10.6-21.4)	19.2 (10.8-32.0)	22.1 (9.5-43.7)
Kenya	404	14.3 (9.9-20.5)	15.6 (10.6-22.2)	22.2 (14.1-33.3)	24.7 (11.4-46.0)
Kiribati	296	20.0 (9.7-25.7)	12.0 (5.5-23.6)	16.0 (6.3-34.6)	20.5 (7.4-44.5)
Kuwait	414	1.4 (0.1-9.2)	1.7 (0.1-10.8)	1.9 (0.1-12.1)	2.4 (0.1-14.2)
Kyrgyzstan	417	4.6 (2.7-7.7)	4.1 (2.6-6.4)	4.7 (2.4-9.1)	7.8 (3.1-19.3)
Lao People's Dem. Republic	418	1.1 (0.3-4.0)	1.3 (0.5-3.8)	1.5 (0.5-5.0)	2.0 (0.6-7.1)
Latvia	428	25.6 (1.5-67.9)	28.9 (3.1-70.4)	30.8 (5.0-71.2)	33.9 (7.5-74.2)
Lebanon	422	1.4 (0.1-8.8)	1.7 (0.1-10.6)	1.9 (0.1-12.0)	2.4 (0.1-14.1)
Lesotho	426	18.3 (13.0-25.7)	26.5 (19.9-34.4)	33.0 (20.1-49.4)	34.4 (15.9-60.6)
Liberia	430	16.3 (8.7-28.9)	20.3 (13.7-28.9)	23.2 (13.0-38.4)	24.8 (11.2-46.6)
Libya	434	1.5 (0.0-10.3)	1.9 (0.0-12.0)	2.1 (0.1-13.1)	2.6 (0.1-15.0)
Lithuania	440	15.4 (4.8-40.4)	18.0 (7.8-41.5)	21.5 (8.2-49.1)	25.5 (9.3-56.2)
Madagascar	450	11.1 (6.9-17.6)	13.1 (9.0-18.9)	15.1 (7.1-29.8)	18.8 (7.4-40.4)
Malawi	454	10.1 (8.1-12.4)	13.2 (10.7-16.1)	18.3 (10.8-29.0)	20.1 (8.6-41.1)
Malaysia	458	1.4 (0.1-9.0)	1.7 (0.1-10.0)	2.0 (0.1-11.3)	2.4 (0.2-13.6)
Maldives	462	1.3 (0.5-3.2)	1.5 (1.0-2.4)	1.8 (0.8-4.3)	2.3 (0.8-6.5)
Mali	466	10.2 (7.1-14.3)	6.8 (4.9-9.3)	11.0 (6.1-19.5)	13.3 (5.7-29.0)
Malta	470	18.0 (0.9-59.5)	22.2 (2.0-63.8)	25.3 (3.3-66.9)	29.6 (5.9-69.5)
Martinique	474	18.3 (0.5-62.3)	23.4 (1.2-66.4)	27.3 (2.4-68.9)	32.2 (5.4-72.7)
Mauritania	478	1.5 (0.0-10.3)	1.8 (0.0-11.6)	2.1 (0.0-12.7)	2.6 (0.1-15.3)
Mauritius	480	2.2 (1.1-4.7)	3.1 (1.5-6.3)	4.1 (1.9-8.7)	6.3 (2.3-17.2)
Mexico	484	11.9 (5.6-23.8)	19.8 (11.7-31.7)	25.8 (14.7-42.0)	29.2 (12.6-55.5)

continued

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Mongolia	496	14.4 (10.1-20.7)	17.1 (12.2-23.7)	18.8 (9.7-33.3)	22.6 (9.7-45.3)
Montenegro	499	14.3 (6.0-28.8)	19.1 (11.2-31.0)	23.3 (12.0-41.0)	27.4 (11.5-53.8)
Morocco	504	1.5 (0.0-10.3)	1.8 (0.0-11.5)	2.1 (0.0-12.9)	2.5 (0.1-15.1)
Mozambique	508	13.9 (9.1-20.6)	15.0 (10.9-20.4)	16.4 (8.1-30.2)	20.3 (8.5-41.7)
Myanmar	104	0.6 (0.2-2.6)	0.7 (0.2-2.5)	0.8 (0.3-2.5)	1.2 (0.3-4.3)
Namibia	516	33.0 (27.5-38.8)	43.0 (31.8-54.7)	43.9 (27.7-61.8)	44.3 (21.7-69.8)
Nepal	524	1.9 (0.9-4.1)	2.1 (1.4-3.0)	1.8 (1.1-3.0)	2.5 (1.0-6.3)
Netherlands	528	34.1 (18.0-50.1)	42.8 (24.4-58.4)	44.2 (23.4-64.5)	43.6 (20.7-69.2)
New Zealand	554	31.8 (9.9-66.0)	34.3 (11.0-68.7)	35.8 (11.8-70.8)	38.0 (12.5-72.7)
Nicaragua	558	14.4 (10.6-19.2)	9.9 (6.4-15.2)	11.4 (5.6-22.0)	17.2 (7.0-36.9)
Niger	562	4.3 (3.0-6.1)	2.1 (1.4-3.4)	3.7 (2.1-6.6)	4.6 (1.9-10.9)
Nigeria	566	11.9 (8.4-16.6)	17.7 (12.8-24.0)	16.8 (10.2-26.6)	19.6 (8.8-38.6)
Norway	578	26.0 (1.6-67.9)	29.1 (3.3-70.0)	31.4 (5.2-71.7)	34.1 (7.7-73.4)
Oman	512	1.4 (0.1-9.1)	1.7 (0.1-10.1)	1.9 (0.1-11.7)	2.3 (0.2-13.7)
Pakistan	586	1.4 (0.1-8.9)	1.7 (0.1-10.1)	1.9 (0.1-11.4)	2.4 (0.2-13.4)
Panama	591	21.1 (7.5-44.4)	26.5 (14.4-43.6)	29.9 (15.9-49.1)	33.5 (14.7-60.0)
Papua New Guinea	598	4.3 (1.8-9.9)	6.1 (2.4-14.9)	8.0 (2.7-22.2)	11.1 (3.4-33.6)
Paraguay	600	22.3 (13.4-35.6)	37.4 (23.7-53.7)	36.5 (23.0-53.1)	42.2 (19.9-69.2)
Peru	604	12.0 (9.6-14.8)	18.1 (15.4-21.2)	23.5 (15.4-34.3)	30.6 (13.9-56.0)
Philippines	608	1.3 (0.9-2.0)	2.8 (1.8-4.4)	4.1 (2.0-8.5)	7.0 (2.3-20.9)
Poland	616	12.1 (3.4-30.9)	12.1 (5.9-24.7)	15.4 (6.0-35.2)	19.2 (7.0-45.1)
Portugal	620	26.5 (7.9-54.3)	33.0 (13.5-53.7)	36.5 (16.3-57.6)	38.6 (16.0-66.5)
Puerto Rico	630	18.8 (0.5-62.7)	24.0 (1.3-67.0)	27.6 (2.5-69.9)	32.5 (5.3-72.9)
Qatar	634	1.4 (0.1-9.2)	1.7 (0.1-10.7)	1.9 (0.1-11.7)	2.4 (0.2-14.0)
Republic of Korea	410	19.4 (1.5-59.1)	22.5 (2.5-62.4)	24.6 (3.6-64.6)	28.0 (5.4-67.5)
Republic of Moldova	498	14.5 (8.4-23.6)	18.0 (11.4-27.6)	20.8 (10.4-37.3)	23.5 (10.1-46.8)
Réunion	638	27.3 (10.3-55.1)	29.2 (10.4-59.9)	31.4 (11.0-63.7)	35.0 (12.3-67.7)
Romania	642	21.8 (3.9-58.1)	24.4 (5.3-61.4)	26.6 (6.4-63.0)	29.3 (8.1-66.9)

continued

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Russian Federation	643	16.6 (7.3-34.6)	23.8 (12.0-43.7)	25.1 (10.5-50.7)	27.6 (10.8-56.5)
Rwanda	646	2.0 (1.6-2.8)	5.2 (4.1-6.5)	7.0 (4.0-12.1)	9.4 (3.9-21.8)
St. Lucia	662	22.5 (7.3-47.2)	28.3 (15.9-44.9)	31.9 (16.3-53.4)	36.0 (15.6-63.5)
St. Vincent and the Grenadines	670	18.4 (0.5-62.9)	23.5 (1.2-66.7)	27.2 (2.4-70.0)	31.8 (5.2-73.0)
Samoa	882	1.4 (0.5-4.0)	2.2 (1.4-3.4)	3.2 (1.4-7.4)	6.2 (2.0-20.1)
Sao Tome and Principe	678	14.4 (6.5-28.7)	17.5 (11.6-25.5)	21.9 (12.0-36.6)	25.3 (11.0-48.8)
Saudi Arabia	682	1.4 (0.1-8.7)	1.7 (0.1-10.4)	1.9 (0.1-11.5)	2.4 (0.1-13.9)
Senegal	686	4.8 (3.3-6.9)	2.9 (2.0-4.2)	4.5 (2.7-7.2)	7.6 (3.2-17.0)
Serbia	688	31.5 (16.4-50.8)	42.9 (30.7-53.9)	36.0 (20.6-55.3)	39.9 (18.8-65.6)
Sierra Leone	694	12.6 (8.5-19.3)	23.1 (17.6-29.5)	27.4 (15.5-43.4)	27.1 (12.2-50.1)
Singapore	702	3.9 (0.0-36.4)	5.9 (0.0-44.4)	7.9 (0.1-50.2)	12.0 (0.2-55.5)
Slovakia	703	22.0 (3.9-58.6)	24.6 (5.4-61.7)	26.8 (6.6-63.7)	30.0 (8.2-66.7)
Slovenia	705	17.9 (0.8-58.5)	22.1 (1.9-62.1)	25.1 (3.1-65.2)	29.6 (5.9-68.9)
Solomon Islands	90	5.8 (1.9-15.5)	7.5 (3.4-15.7)	9.4 (4.0-21.0)	12.9 (4.5-33.0)
Somalia	706	1.6 (0.0-10.6)	1.8 (0.0-11.8)	2.1 (0.1-13.1)	2.6 (0.1-15.1)
South Africa	710	44.0 (33.4-55.6)	43.9 (26.4-63.0)	45.6 (23.6-69.4)	47.2 (22.2-73.6)
South Sudan	728	7.8 (0.5-33.9)	9.9 (0.9-39.1)	11.9 (1.2-43.2)	15.3 (2.1-48.9)
Spain	724	28.9 (14.3-49.0)	31.2 (12.9-59.9)	33.4 (13.1-65.3)	36.3 (13.8-70.6)
Sri Lanka	144	1.4 (0.5-3.5)	1.6 (0.6-4.8)	1.9 (0.6-5.8)	2.4 (0.7-7.4)
State of Palestine	275	1.4 (0.1-9.0)	1.6 (0.1-10.4)	1.9 (0.1-11.8)	2.4 (0.2-13.6)
Sudan	729	1.6 (0.0-10.2)	1.9 (0.0-11.5)	2.1 (0.0-12.5)	2.6 (0.1-14.8)
Suriname	740	10.8 (6.9-17.1)	21.7 (14.8-30.5)	26.8 (12.8-48.9)	32.7 (13.2-63.7)
Swaziland	748	22.5 (11.8-38.1)	36.1 (27.2-45.4)	38.8 (23.0-57.8)	40.3 (18.6-68.0)
Sweden	752	25.9 (1.6-66.5)	29.2 (3.4-69.7)	31.3 (5.2-71.5)	34.0 (7.9-73.7)
Switzerland	756	56.5 (27.4-81.5)	61.9 (37.4-81.3)	60.9 (33.7-82.5)	59.2 (29.7-84.4)
Syrian Arab Republic	760	1.4 (0.1-8.7)	1.7 (0.1-10.4)	1.9 (0.1-11.6)	2.4 (0.1-13.5)
Tajikistan	762	1.2 (0.5-2.7)	1.4 (0.6-3.4)	1.7 (0.6-4.8)	2.1 (0.7-6.6)
Thailand	764	2.6 (1.3-5.3)	4.4 (2.5-7.5)	6.4 (2.8-14.3)	9.8 (3.3-27.5)

continued

Table 6. Any contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
TFYR Macedonia	807	17.2 (5.5-39.0)	20.9 (11.8-33.8)	24.2 (11.3-45.3)	28.6 (11.6-56.3)
Timor-Leste	626	0.6 (0.2-2.3)	0.7 (0.3-2.1)	0.9 (0.3-3.0)	1.2 (0.3-4.6)
Togo	768	24.4 (16.3-35.2)	19.7 (14.2-27.2)	21.4 (12.3-34.5)	26.7 (11.9-47.9)
Tonga	776	1.5 (0.2-7.5)	2.4 (0.8-7.5)	3.9 (1.2-12.0)	7.3 (1.8-26.3)
Trinidad and Tobago	780	11.1 (7.2-16.8)	19.7 (10.0-35.9)	24.1 (10.1-49.5)	30.4 (11.3-62.3)
Tunisia	788	1.6 (0.0-10.7)	1.9 (0.0-11.8)	2.1 (0.0-13.0)	2.6 (0.1-15.0)
Turkey	792	1.3 (0.5-3.0)	2.0 (1.1-3.6)	2.4 (1.2-5.0)	2.7 (1.0-7.0)
Turkmenistan	795	2.6 (2.0-3.5)	3.0 (1.2-7.0)	3.3 (1.2-8.9)	4.0 (1.3-11.4)
Uganda	800	13.6 (10.8-16.5)	13.2 (9.5-18.1)	17.4 (10.9-26.8)	20.1 (8.8-39.8)
Ukraine	804	24.8 (15.9-36.9)	28.1 (19.5-38.9)	30.1 (16.3-49.4)	32.4 (14.8-58.3)
United Arab Emirates	784	1.4 (0.1-9.1)	1.7 (0.1-10.7)	2.0 (0.1-11.8)	2.4 (0.2-14.1)
United Kingdom	826	59.4 (37.3-72.8)	57.6 (34.2-75.6)	56.7 (30.1-78.6)	56.8 (27.6-81.0)
United Rep. of Tanzania	834	15.5 (11.3-21.1)	19.0 (15.6-23.0)	21.9 (13.3-33.9)	24.1 (10.8-46.2)
United States of America	840	47.5 (29.1-65.9)	45.7 (28.1-63.0)	47.1 (26.1-68.7)	47.9 (23.4-73.3)
United States Virgin Islands	850	18.7 (0.5-62.7)	23.5 (1.1-66.2)	27.4 (2.2-69.2)	32.4 (4.9-73.2)
Uruguay	858	17.1 (0.1-64.8)	23.7 (0.4-68.8)	27.9 (1.0-71.5)	33.5 (3.4-74.4)
Uzbekistan	860	3.8 (2.2-6.3)	3.3 (1.6-6.6)	3.8 (1.5-9.2)	4.6 (1.6-12.4)
Vanuatu	548	8.1 (3.3-18.5)	10.5 (6.1-17.5)	12.9 (6.2-25.3)	16.5 (6.3-37.8)
Venezuela, Bolivarian Republic of	862	17.9 (7.1-36.9)	24.9 (9.2-52.0)	29.5 (10.6-60.7)	34.4 (12.5-69.2)
Viet Nam	704	1.5 (0.6-3.9)	2.0 (1.2-3.1)	1.8 (0.8-3.7)	2.4 (0.9-6.4)
Yemen	887	1.4 (0.1-9.2)	1.7 (0.1-10.9)	1.9 (0.1-11.8)	2.4 (0.1-13.7)
Zambia	894	9.4 (6.7-13.1)	12.9 (8.5-19.2)	14.6 (7.7-26.1)	17.8 (7.4-37.7)
Zimbabwe	716	12.8 (9.1-17.7)	13.4 (10.9-16.5)	18.6 (11.3-29.1)	22.1 (9.9-42.1)

ii. Modern contraceptive use in 185 countries or areas

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	1.2 (0.1-7.7)	1.5 (0.1-8.9)	1.8 (0.1-10.3)	2.2 (0.1-12.8)
Albania	8	1.1 (0.4-2.5)	3.0 (1.9-4.7)	5.7 (2.2-14.1)	10.7 (3.4-32.0)
Algeria	12	1.2 (0.0-8.3)	1.6 (0.0-9.9)	1.9 (0.0-11.2)	2.3 (0.1-13.6)
Angola	24	6.0 (3.2-10.3)	12.5 (7.1-20.5)	13.8 (7.9-22.7)	18.0 (7.7-37.2)
Antigua and Barbuda	28	17.6 (0.5-58.6)	22.5 (1.2-63.5)	26.1 (2.2-66.1)	31.2 (4.8-70.0)
Argentina	32	25.4 (5.1-57.8)	33.2 (12.4-59.9)	37.7 (15.7-64.5)	41.1 (16.3-71.8)
Armenia	51	0.6 (0.3-1.4)	0.7 (0.3-1.7)	0.9 (0.3-2.7)	1.3 (0.4-4.1)
Australia	36	31.2 (10.1-56.3)	35.5 (13.7-54.5)	36.5 (14.1-59.8)	38.1 (14.5-66.6)
Austria	40	40.9 (16.3-67.0)	44.6 (22.2-64.7)	45.2 (22.5-67.3)	45.4 (19.8-71.3)
Azerbaijan	31	0.4 (0.1-1.6)	0.6 (0.2-2.4)	0.8 (0.2-3.1)	1.1 (0.2-4.3)
Bahamas	44	18.1 (0.5-59.2)	23.0 (1.2-62.8)	26.6 (2.2-66.5)	31.4 (4.9-69.3)
Bahrain	48	1.2 (0.0-7.7)	1.5 (0.1-9.0)	1.7 (0.1-10.4)	2.2 (0.1-12.8)
Bangladesh	50	2.2 (1.3-4.3)	2.5 (1.2-5.5)	3.1 (1.2-8.1)	3.9 (1.3-11.2)
Barbados	52	19.3 (8.5-36.9)	24.1 (13.9-37.8)	27.4 (13.7-46.8)	31.4 (13.0-56.8)
Belarus	112	24.3 (12.2-40.1)	32.7 (22.0-45.2)	39.7 (25.3-53.7)	39.1 (19.3-61.8)
Belgium	56	36.7 (16.2-61.5)	38.8 (23.5-56.5)	43.8 (23.4-66.5)	42.8 (19.9-70.0)
Belize	84	14.9 (6.9-29.1)	19.7 (11.9-30.3)	22.7 (10.9-41.3)	26.5 (10.8-51.3)
Benin	204	5.7 (3.6-8.5)	10.6 (6.7-15.7)	13.9 (7.3-23.7)	18.8 (7.9-36.8)
Bhutan	64	2.5 (0.9-6.6)	3.3 (1.9-5.4)	3.5 (1.4-8.6)	4.2 (1.4-11.5)
Bolivia, Plurinational State of	68	4.8 (3.0-7.2)	9.5 (5.9-14.5)	14.2 (8.0-23.1)	22.5 (8.9-44.4)
Bosnia and Herzegovina	70	5.3 (1.5-12.5)	9.7 (5.6-15.5)	14.2 (6.6-27.6)	19.8 (7.5-43.8)
Botswana	72	27.5 (11.7-58.4)	31.3 (11.9-66.7)	34.1 (12.3-70.3)	36.8 (13.2-72.8)
Brazil	76	28.3 (17.4-42.2)	41.0 (24.3-59.1)	42.7 (22.3-65.5)	45.6 (20.4-73.9)
Bulgaria	100	29.1 (11.6-51.6)	32.6 (12.1-59.4)	35.3 (13.3-63.2)	38.6 (14.5-67.9)

continued

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Burkina Faso	854	10.5 (7.4-14.5)	10.8 (8.6-13.5)	13.1 (8.2-20.5)	16.0 (7.1-32.2)
Burundi	108	1.9 (1.2-2.9)	1.8 (1.4-2.5)	3.1 (1.3-6.9)	5.3 (1.9-13.6)
Cabo Verde	132	22.6 (14.6-32.6)	28.1 (15.9-44.4)	28.4 (13.5-49.7)	30.2 (13.1-55.3)
Cambodia	116	0.4 (0.2-0.8)	0.6 (0.3-1.1)	1.0 (0.5-1.9)	1.2 (0.4-3.2)
Cameroon	120	12.7 (8.0-18.8)	20.6 (14.5-27.7)	29.9 (17.0-45.1)	34.7 (16.2-56.9)
Canada	124	57.8 (35.0-73.2)	55.7 (28.9-77.0)	55.6 (27.3-78.3)	55.5 (26.5-79.5)
Central African Republic	140	5.4 (2.4-10.7)	6.9 (4.3-11.1)	11.2 (4.6-23.1)	16.7 (6.1-35.4)
Chad	148	1.4 (0.8-2.4)	3.0 (2.0-4.3)	4.8 (2.6-8.4)	7.8 (3.0-18.8)
Chile	152	30.3 (7.0-60.1)	40.1 (16.9-64.8)	45.0 (22.8-67.6)	46.8 (21.0-73.6)
China	156	17.3 (0.9-52.8)	20.8 (2.0-57.8)	23.4 (3.2-60.4)	26.7 (5.0-63.7)
China, Hong Kong SAR	344	17.1 (1.0-52.1)	20.8 (2.1-56.9)	23.4 (3.3-60.6)	26.6 (5.0-63.8)
Colombia	170	23.3 (18.8-28.2)	33.2 (27.6-38.9)	39.0 (25.7-53.7)	42.5 (20.6-67.2)
Comoros	174	6.0 (3.7-8.6)	3.9 (2.3-6.5)	5.4 (2.5-10.8)	8.9 (3.3-20.7)
Congo	178	11.0 (3.6-22.0)	23.7 (16.4-31.8)	31.5 (16.4-48.5)	38.7 (17.3-61.4)
Costa Rica	188	41.0 (18.5-64.8)	54.4 (35.3-63.0)	48.2 (26.0-69.4)	49.8 (24.0-74.5)
Côte d'Ivoire	384	14.9 (9.4-22.0)	18.1 (11.8-25.9)	21.2 (11.0-35.2)	26.1 (11.3-46.3)
Croatia	191	13.2 (0.4-44.9)	18.8 (1.3-52.8)	22.5 (2.5-58.2)	27.3 (4.8-63.4)
Cuba	192	49.3 (24.4-72.4)	59.6 (45.2-71.9)	60.1 (41.4-75.6)	59.4 (34.2-80.4)
Czechia	203	24.2 (12.4-40.8)	25.4 (12.1-44.8)	29.0 (12.6-51.8)	32.6 (13.4-59.0)
Democratic People's Rep. of Korea	408	17.2 (1.0-51.8)	20.7 (2.2-57.6)	23.3 (3.4-59.4)	26.8 (5.3-63.3)
Democratic Rep. of the Congo	180	5.5 (3.0-9.2)	6.9 (4.8-9.8)	12.1 (5.9-21.8)	18.9 (7.5-37.7)
Denmark	208	24.4 (1.3-63.0)	27.8 (2.8-65.8)	30.0 (4.4-68.3)	33.1 (6.7-70.8)
Djibouti	262	1.2 (0.0-8.3)	1.6 (0.0-9.9)	1.9 (0.0-11.5)	2.4 (0.1-13.7)
Dominican Republic	214	20.8 (15.6-26.8)	30.5 (21.7-40.8)	34.8 (21.2-51.1)	38.2 (17.9-63.7)
Ecuador	218	8.7 (5.6-13.3)	18.1 (9.9-30.3)	23.6 (10.1-46.1)	30.4 (11.3-59.8)
Egypt	818	0.3 (0.1-1.4)	0.4 (0.1-1.7)	0.5 (0.2-2.4)	0.8 (0.2-3.3)
El Salvador	222	15.7 (9.4-25.2)	21.5 (13.4-32.5)	23.6 (12.8-39.6)	28.0 (12.1-52.7)
Equatorial Guinea	226	8.3 (2.3-19.7)	12.7 (8.2-18.4)	16.3 (7.7-29.9)	20.8 (8.5-42.0)

continued

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Eritrea	232	1.4 (0.8-2.2)	1.7 (0.9-3.2)	2.8 (1.1-6.7)	4.7 (1.6-13.2)
Estonia	233	24.8 (1.4-63.5)	27.9 (3.0-66.2)	30.3 (4.6-68.2)	32.9 (7.3-70.1)
Ethiopia	231	1.9 (1.4-2.5)	3.9 (2.6-5.5)	5.8 (3.5-9.3)	8.2 (3.3-19.7)
Fiji	242	7.0 (0.2-32.7)	9.5 (0.4-39.7)	11.5 (0.7-44.5)	15.1 (1.4-51.7)
Finland	246	24.3 (1.3-63.4)	27.8 (2.9-66.6)	29.9 (4.5-68.1)	32.9 (6.9-70.4)
France	250	37.3 (20.5-57.1)	46.5 (32.1-60.6)	47.3 (28.1-67.2)	46.5 (23.6-70.3)
Gabon	266	18.8 (14.1-23.9)	27.4 (18.2-37.8)	32.4 (18.0-49.0)	37.5 (17.5-60.1)
Gambia	270	4.5 (1.9-10.1)	4.0 (2.2-7.2)	5.0 (2.5-10.0)	8.0 (3.1-19.1)
Georgia	268	0.6 (0.2-1.4)	1.0 (0.4-1.8)	1.6 (0.5-5.0)	3.2 (0.8-14.0)
Germany	276	34.0 (17.0-57.1)	34.2 (16.9-57.8)	37.3 (16.7-63.6)	39.5 (16.8-68.2)
Ghana	288	7.6 (4.8-11.3)	11.4 (7.9-16.0)	15.5 (9.4-23.7)	18.5 (8.0-35.7)
Greece	300	13.0 (0.4-45.7)	18.4 (1.4-53.1)	22.2 (2.5-58.3)	26.9 (4.9-63.7)
Grenada	308	17.9 (0.5-57.9)	22.7 (1.1-62.2)	26.4 (2.1-65.6)	31.1 (4.9-69.0)
Guadeloupe	312	17.5 (0.5-58.4)	22.6 (1.2-62.6)	26.4 (2.3-65.2)	31.1 (4.9-69.0)
Guam	316	16.9 (1.4-52.6)	19.7 (2.3-56.9)	21.8 (3.1-58.8)	24.8 (4.6-62.2)
Guatemala	320	4.2 (2.9-6.0)	7.6 (4.9-11.4)	10.3 (5.9-17.6)	14.5 (5.9-32.1)
Guinea	324	8.7 (5.8-12.4)	13.0 (8.3-19.2)	15.3 (7.6-27.2)	18.2 (7.5-36.3)
Guinea-Bissau	624	10.0 (6.3-15.8)	28.0 (17.2-40.6)	32.2 (18.2-49.3)	31.3 (14.2-54.7)
Guyana	328	9.6 (3.6-21.1)	16.4 (11.2-22.9)	13.5 (6.6-24.7)	20.5 (8.1-42.6)
Haiti	332	5.7 (4.4-7.2)	9.4 (6.0-13.9)	13.5 (6.3-25.6)	20.7 (7.6-44.4)
Honduras	340	10.9 (6.4-17.6)	14.4 (9.6-21.0)	17.8 (9.1-31.4)	21.9 (9.0-43.5)
Hungary	348	12.4 (3.7-29.3)	14.3 (6.0-29.5)	17.4 (6.4-38.2)	21.0 (7.6-46.7)
India	356	5.3 (2.5-10.6)	6.1 (3.5-10.0)	6.1 (3.4-10.6)	6.8 (2.7-15.9)
Indonesia	360	0.7 (0.4-1.5)	1.0 (0.6-1.5)	1.4 (0.7-2.7)	1.7 (0.7-4.4)
Iran, Islamic Republic of	364	1.2 (0.0-7.9)	1.5 (0.1-9.2)	1.8 (0.1-10.4)	2.3 (0.1-12.6)
Iraq	368	1.2 (0.1-7.8)	1.5 (0.1-9.2)	1.8 (0.1-10.5)	2.2 (0.1-12.4)
Ireland	372	24.2 (1.4-62.9)	27.7 (2.9-65.9)	30.2 (4.4-67.6)	33.0 (7.1-70.5)
Israel	376	2.7 (0.0-33.8)	4.1 (0.0-41.2)	5.8 (0.0-46.0)	9.2 (0.1-52.7)

continued

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Italy	380	22.1 (4.8-48.7)	31.7 (11.4-55.5)	36.2 (14.3-61.4)	39.5 (14.7-68.1)
Jamaica	388	18.1 (11.5-27.3)	22.7 (13.7-35.3)	26.4 (12.5-46.9)	30.2 (12.4-57.0)
Japan	392	19.4 (3.9-47.6)	24.0 (8.0-51.0)	27.1 (9.6-54.2)	30.3 (10.3-60.9)
Jordan	400	0.3 (0.1-0.6)	0.3 (0.1-0.7)	0.4 (0.2-1.1)	0.6 (0.2-1.9)
Kazakhstan	398	14.0 (9.8-19.4)	14.4 (10.1-20.3)	18.5 (10.3-30.8)	21.4 (9.1-42.3)
Kenya	404	11.2 (7.5-16.1)	14.1 (9.5-20.0)	20.8 (13.1-31.1)	23.7 (10.9-43.6)
Kiribati	296	19.4 (9.2-24.9)	11.7 (5.4-23.0)	15.6 (6.1-33.7)	20.1 (7.2-43.4)
Kuwait	414	1.2 (0.1-8.0)	1.5 (0.1-9.6)	1.8 (0.1-10.9)	2.2 (0.1-13.1)
Kyrgyzstan	417	4.4 (2.6-7.4)	3.9 (2.5-6.1)	4.5 (2.3-8.8)	7.6 (2.9-18.6)
Lao People's Dem. Republic	418	0.9 (0.2-3.5)	1.1 (0.4-3.4)	1.3 (0.4-4.5)	1.8 (0.5-6.5)
Latvia	428	24.2 (1.3-62.9)	27.6 (2.9-66.2)	29.6 (4.6-67.6)	32.7 (7.0-70.4)
Lebanon	422	1.2 (0.0-7.6)	1.5 (0.1-9.3)	1.8 (0.1-10.8)	2.3 (0.1-12.8)
Lesotho	426	17.9 (12.7-25.1)	26.0 (19.5-33.8)	32.5 (19.8-48.6)	33.8 (15.7-59.4)
Liberia	430	14.2 (7.4-25.3)	18.6 (12.4-26.6)	21.8 (12.1-36.0)	23.6 (10.5-44.4)
Libya	434	1.2 (0.0-8.2)	1.6 (0.0-10.1)	1.9 (0.1-11.3)	2.4 (0.1-13.5)
Lithuania	440	13.9 (4.0-38.1)	16.6 (6.7-39.5)	20.0 (7.3-46.9)	24.0 (8.3-53.5)
Madagascar	450	4.4 (2.5-7.3)	9.6 (6.2-13.8)	13.2 (5.9-25.7)	17.7 (6.7-37.5)
Malawi	454	9.2 (7.3-11.4)	12.8 (10.3-15.7)	18.0 (10.6-28.5)	19.9 (8.5-40.4)
Malaysia	458	1.2 (0.1-7.7)	1.5 (0.1-8.9)	1.8 (0.1-10.1)	2.3 (0.1-12.5)
Maldives	462	1.2 (0.5-2.9)	1.4 (0.9-2.3)	1.7 (0.7-4.0)	2.2 (0.8-6.2)
Mali	466	6.9 (4.6-9.9)	6.2 (4.4-8.5)	10.6 (5.8-18.7)	13.0 (5.5-28.3)
Malta	470	13.2 (0.5-45.0)	18.7 (1.5-54.1)	22.6 (2.8-59.2)	27.6 (5.2-63.8)
Martinique	474	17.4 (0.4-57.9)	22.5 (1.1-62.8)	26.3 (2.2-65.6)	31.1 (5.1-69.5)
Mauritania	478	1.2 (0.0-8.2)	1.6 (0.0-10.0)	1.9 (0.0-11.2)	2.4 (0.1-13.9)
Mauritius	480	2.0 (0.9-4.2)	2.8 (1.3-5.6)	3.6 (1.7-7.8)	5.8 (2.1-15.5)
Mexico	484	11.6 (5.4-23.0)	19.3 (11.3-30.9)	25.1 (14.3-40.9)	28.5 (12.2-54.1)
Mongolia	496	12.2 (8.5-17.4)	15.8 (11.2-21.6)	17.5 (8.9-30.8)	21.3 (9.0-42.5)
Montenegro	499	9.7 (3.5-19.6)	15.8 (9.2-25.2)	20.8 (10.5-36.2)	25.6 (10.5-49.6)

continued

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Morocco	504	1.2 (0.0-8.1)	1.6 (0.0-9.9)	1.9 (0.0-11.5)	2.3 (0.1-13.6)
Mozambique	508	12.4 (8.0-18.4)	14.7 (10.6-19.9)	16.1 (7.9-29.7)	20.1 (8.4-41.0)
Myanmar	104	0.5 (0.1-2.2)	0.6 (0.2-2.3)	0.7 (0.2-2.3)	1.1 (0.3-4.0)
Namibia	516	32.5 (26.9-38.2)	42.6 (31.4-54.2)	43.5 (27.3-61.2)	43.9 (21.4-69.1)
Nepal	524	1.8 (0.8-3.8)	1.9 (1.3-2.8)	1.7 (1.0-2.8)	2.4 (0.9-5.9)
Netherlands	528	32.1 (16.0-47.5)	40.7 (22.3-55.9)	42.2 (21.5-61.6)	41.8 (19.0-66.1)
New Zealand	554	31.3 (9.5-64.6)	33.7 (10.6-67.2)	35.2 (11.4-69.3)	37.3 (12.1-71.5)
Nicaragua	558	14.0 (10.3-18.7)	9.7 (6.3-14.9)	11.2 (5.5-21.5)	16.9 (6.8-35.9)
Niger	562	3.8 (2.6-5.3)	2.0 (1.3-3.2)	3.6 (2.0-6.3)	4.5 (1.8-10.5)
Nigeria	566	7.3 (5.0-10.3)	13.5 (9.6-18.4)	14.0 (8.4-21.9)	17.6 (7.7-34.3)
Norway	578	24.6 (1.4-62.9)	27.8 (2.9-65.5)	30.2 (4.7-67.9)	32.9 (7.3-69.6)
Oman	512	1.2 (0.1-7.8)	1.5 (0.1-9.0)	1.8 (0.1-10.4)	2.2 (0.1-12.6)
Pakistan	586	1.2 (0.0-7.6)	1.5 (0.1-8.9)	1.8 (0.1-10.2)	2.2 (0.1-12.3)
Panama	591	20.1 (7.1-41.7)	25.3 (13.6-41.4)	28.5 (15.0-46.6)	32.1 (13.8-57.1)
Papua New Guinea	598	2.8 (1.1-6.3)	4.7 (1.8-11.2)	6.6 (2.1-18.1)	9.7 (2.9-29.1)
Paraguay	600	18.7 (10.8-30.5)	34.9 (21.8-50.7)	35.1 (21.9-50.7)	40.9 (19.2-66.6)
Peru	604	8.4 (6.6-10.3)	13.9 (11.6-16.4)	19.3 (12.3-28.4)	26.6 (11.5-49.0)
Philippines	608	1.1 (0.8-1.7)	2.2 (1.4-3.4)	3.4 (1.5-7.0)	5.9 (1.9-17.4)
Poland	616	11.0 (2.8-28.1)	11.5 (5.3-23.8)	14.8 (5.6-34.0)	18.6 (6.7-43.7)
Portugal	620	19.4 (3.3-43.2)	27.8 (9.1-47.0)	32.7 (13.0-52.0)	36.1 (13.9-61.8)
Puerto Rico	630	17.9 (0.5-58.8)	23.1 (1.2-63.2)	26.7 (2.4-66.2)	31.4 (5.0-69.3)
Qatar	634	1.2 (0.1-7.8)	1.5 (0.1-9.3)	1.8 (0.1-10.5)	2.2 (0.1-12.7)
Republic of Korea	410	17.2 (0.9-52.2)	20.9 (2.2-56.6)	23.3 (3.2-59.9)	26.9 (5.0-63.8)
Republic of Moldova	498	11.1 (6.1-18.4)	15.1 (9.4-23.2)	18.3 (9.0-32.4)	21.5 (8.8-42.5)
Réunion	638	26.2 (9.7-52.2)	28.4 (9.9-57.9)	30.7 (10.5-61.4)	34.3 (11.9-65.7)
Romania	642	18.7 (2.7-50.1)	22.3 (4.3-55.2)	24.9 (5.6-58.5)	27.9 (7.4-62.7)
Russian Federation	643	13.4 (5.0-29.9)	21.1 (9.8-40.0)	22.9 (9.1-46.7)	25.8 (9.6-52.9)
Rwanda	646	1.3 (1.0-1.8)	4.4 (3.4-5.5)	6.5 (3.6-11.2)	8.9 (3.6-20.5)

continued

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
St. Lucia	662	21.1 (6.6-44.0)	26.8 (14.9-42.2)	30.4 (15.4-50.5)	34.4 (14.7-60.3)
St. Vincent and the Grenadines	670	17.5 (0.5-58.6)	22.6 (1.1-63.3)	26.2 (2.2-66.7)	30.8 (4.9-70.0)
Samoa	882	1.3 (0.4-3.5)	2.0 (1.3-3.1)	3.0 (1.3-6.9)	5.8 (1.8-18.7)
Sao Tome and Principe	678	12.7 (5.2-25.2)	16.6 (11.0-24.3)	21.1 (11.4-35.0)	24.6 (10.5-47.1)
Saudi Arabia	682	1.2 (0.0-7.5)	1.5 (0.1-9.2)	1.8 (0.1-10.4)	2.2 (0.1-12.6)
Senegal	686	4.1 (2.8-5.9)	2.7 (1.8-4.0)	4.3 (2.6-6.9)	7.3 (3.1-16.4)
Serbia	688	24.4 (11.7-40.0)	37.2 (26.3-46.7)	32.5 (18.2-50.2)	37.2 (17.2-61.1)
Sierra Leone	694	11.0 (7.3-16.6)	21.3 (16.0-27.1)	25.9 (14.6-40.9)	26.0 (11.6-47.9)
Singapore	702	3.8 (0.0-34.1)	5.7 (0.0-42.0)	7.6 (0.1-47.8)	11.6 (0.2-53.1)
Slovakia	703	18.9 (2.7-50.5)	22.4 (4.4-55.6)	25.1 (5.7-59.0)	28.5 (7.5-62.8)
Slovenia	705	13.0 (0.4-44.8)	18.5 (1.3-52.0)	22.4 (2.5-58.1)	27.6 (5.2-63.5)
Solomon Islands	90	4.2 (1.2-11.3)	6.0 (2.7-12.5)	8.0 (3.3-17.7)	11.5 (3.9-29.2)
Somalia	706	1.3 (0.0-8.4)	1.6 (0.0-10.1)	1.9 (0.0-11.4)	2.4 (0.1-13.7)
South Africa	710	43.7 (33.1-55.3)	43.7 (26.2-62.7)	45.4 (23.4-68.9)	47.0 (22.1-73.3)
South Sudan	728	6.5 (0.3-27.7)	9.0 (0.7-34.5)	11.1 (1.1-39.6)	14.7 (2.0-46.1)
Spain	724	26.4 (12.6-44.6)	29.5 (11.9-56.2)	32.0 (12.2-61.9)	35.0 (13.0-67.6)
Sri Lanka	144	1.2 (0.5-3.2)	1.5 (0.5-4.5)	1.8 (0.6-5.4)	2.3 (0.7-7.0)
State of Palestine	275	1.2 (0.1-7.7)	1.5 (0.1-9.2)	1.7 (0.1-10.5)	2.2 (0.1-12.4)
Sudan	729	1.3 (0.0-8.1)	1.6 (0.0-9.8)	1.9 (0.0-10.9)	2.4 (0.1-13.4)
Suriname	740	10.6 (6.8-16.8)	21.5 (14.6-30.1)	26.5 (12.6-48.2)	32.4 (13.0-62.8)
Swaziland	748	21.5 (11.2-36.3)	35.5 (26.7-44.7)	38.5 (22.8-57.2)	39.9 (18.5-67.3)
Sweden	752	24.4 (1.4-62.2)	27.9 (3.1-65.6)	30.0 (4.9-67.9)	32.8 (7.4-70.1)
Switzerland	756	53.7 (25.0-77.6)	59.5 (35.2-78.3)	58.8 (32.1-79.7)	57.4 (28.1-81.6)
Syrian Arab Republic	760	1.2 (0.0-7.5)	1.5 (0.1-9.2)	1.8 (0.1-10.5)	2.2 (0.1-12.5)
Tajikistan	762	0.9 (0.4-2.2)	1.2 (0.5-2.7)	1.5 (0.5-4.0)	1.9 (0.6-5.7)
Thailand	764	2.5 (1.2-5.0)	4.3 (2.4-7.2)	6.2 (2.7-13.8)	9.5 (3.1-26.4)
TFYR Macedonia	807	11.3 (2.8-26.4)	16.2 (9.1-25.6)	20.6 (9.3-37.9)	25.8 (10.1-50.3)
Timor-Leste	626	0.5 (0.1-2.0)	0.6 (0.2-1.9)	0.7 (0.2-2.8)	1.0 (0.3-4.2)

continued

Table 7. Modern contraceptive use among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Togo	768	13.7 (8.5-20.5)	17.1 (12.2-23.5)	19.7 (11.1-31.6)	25.6 (11.2-45.5)
Tonga	776	1.5 (0.2-6.9)	2.3 (0.7-7.1)	3.8 (1.1-11.5)	7.1 (1.8-25.4)
Trinidad and Tobago	780	8.8 (5.7-13.1)	16.3 (8.2-29.5)	20.4 (8.2-41.8)	26.2 (9.4-53.7)
Tunisia	788	1.2 (0.0-8.3)	1.6 (0.0-10.1)	1.9 (0.0-11.6)	2.4 (0.1-13.7)
Turkey	792	1.1 (0.5-2.8)	1.8 (1.0-3.4)	2.2 (1.1-4.7)	2.5 (0.9-6.7)
Turkmenistan	795	2.5 (1.8-3.3)	2.8 (1.1-6.8)	3.2 (1.1-8.5)	3.8 (1.3-11.0)
Uganda	800	11.6 (9.1-14.3)	12.1 (8.7-16.7)	16.4 (10.2-25.1)	19.2 (8.5-38.0)
Ukraine	804	20.5 (12.6-31.1)	25.1 (17.2-34.6)	27.5 (14.6-45.1)	30.4 (13.7-54.0)
United Arab Emirates	784	1.2 (0.1-7.9)	1.5 (0.1-9.5)	1.8 (0.1-10.8)	2.3 (0.1-12.8)
United Kingdom	826	55.3 (31.5-69.4)	53.8 (29.8-71.4)	53.4 (27.0-74.6)	53.8 (24.8-76.9)
United Rep. of Tanzania	834	12.6 (8.9-17.2)	16.7 (13.4-20.4)	19.7 (11.7-30.5)	22.4 (9.8-42.5)
United States of America	840	43.3 (24.4-61.1)	42.6 (24.8-59.5)	44.2 (23.4-64.9)	45.3 (21.4-69.6)
United States Virgin Islands	850	17.8 (0.4-58.3)	22.6 (1.1-62.6)	26.4 (2.1-65.7)	31.4 (4.6-70.2)
Uruguay	858	15.2 (0.1-56.7)	22.0 (0.4-63.2)	26.4 (0.9-66.8)	32.1 (3.1-70.3)
Uzbekistan	860	3.2 (1.8-5.5)	2.9 (1.4-5.8)	3.4 (1.3-8.2)	4.3 (1.4-11.3)
Vanuatu	548	7.8 (3.1-17.4)	10.3 (5.9-16.9)	12.6 (6.0-24.4)	16.2 (6.2-36.8)
Venezuela, Bolivarian Republic of	862	16.3 (6.3-33.4)	23.5 (8.5-48.7)	28.1 (9.8-57.2)	33.0 (11.7-65.8)
Viet Nam	704	1.2 (0.5-3.2)	1.7 (1.0-2.6)	1.6 (0.7-3.2)	2.2 (0.8-5.7)
Yemen	887	1.2 (0.0-7.9)	1.5 (0.1-9.5)	1.8 (0.1-10.5)	2.2 (0.1-12.6)
Zambia	894	8.1 (5.7-11.4)	12.3 (8.0-18.2)	14.2 (7.5-25.3)	17.5 (7.3-36.9)
Zimbabwe	716	12.4 (8.8-17.2)	13.2 (10.7-16.4)	18.4 (11.2-28.8)	21.9 (9.8-41.6)

iii. Unmet need for family planning in 185 countries or areas

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.8)
Albania	8	0.9 (0.4-2.2)	1.2 (0.7-1.9)	1.5 (0.6-4.1)	2.0 (0.6-6.3)
Algeria	12	1.6 (0.3-8.0)	1.7 (0.3-8.5)	1.7 (0.3-8.9)	1.8 (0.3-9.5)
Angola	24	10.8 (4.2-24.1)	15.3 (7.6-27.0)	16.0 (8.7-26.5)	16.2 (6.1-31.7)
Antigua and Barbuda	28	5.6 (0.7-21.0)	5.9 (0.6-21.6)	5.9 (0.4-21.6)	5.9 (0.3-21.6)
Argentina	32	4.3 (0.7-14.8)	4.5 (0.7-15.2)	4.2 (0.5-15.4)	3.7 (0.2-14.5)
Armenia	51	0.5 (0.2-0.9)	0.5 (0.4-0.6)	0.5 (0.2-1.0)	0.5 (0.2-1.2)
Australia	36	4.6 (0.4-32.8)	4.6 (0.4-31.4)	4.3 (0.3-31.1)	3.9 (0.2-29.9)
Austria	40	3.4 (0.1-26.4)	3.2 (0.2-25.5)	3.0 (0.1-25.5)	2.9 (0.1-25.3)
Azerbaijan	31	0.3 (0.1-1.2)	0.3 (0.1-1.2)	0.3 (0.1-1.3)	0.3 (0.1-1.3)
Bahamas	44	5.5 (0.6-21.5)	5.9 (0.6-21.8)	5.9 (0.5-21.3)	5.9 (0.3-21.7)
Bahrain	48	0.4 (0.1-1.5)	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.8)
Bangladesh	50	0.4 (0.1-1.5)	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.5 (0.1-1.9)
Barbados	52	6.6 (1.7-18.9)	7.2 (2.2-18.7)	7.1 (1.8-19.2)	6.4 (1.0-19.3)
Belarus	112	3.0 (0.6-12.0)	3.0 (0.6-12.1)	2.4 (0.4-10.7)	2.3 (0.2-10.7)
Belgium	56	4.3 (0.3-28.7)	4.5 (0.4-28.9)	3.5 (0.2-26.3)	3.4 (0.1-26.9)
Belize	84	4.5 (1.0-16.4)	5.4 (1.4-18.0)	5.6 (1.4-18.5)	5.5 (1.1-18.2)
Benin	204	7.7 (5.2-11.3)	8.6 (5.3-13.1)	9.5 (4.5-17.7)	9.6 (3.6-20.6)
Bhutan	64	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.8)	0.5 (0.1-2.0)
Bolivia, Plurinational State of	68	3.7 (2.3-5.7)	4.8 (2.8-8.2)	5.8 (2.5-12.5)	6.5 (2.1-14.7)
Bosnia and Herzegovina	70	1.3 (0.3-6.6)	1.8 (0.4-7.8)	2.2 (0.4-9.6)	2.4 (0.4-10.2)
Botswana	72	8.3 (1.4-25.2)	7.6 (0.7-24.3)	7.2 (0.4-23.9)	6.6 (0.3-23.6)
Brazil	76	5.2 (2.5-9.6)	4.1 (0.8-10.7)	3.7 (0.4-11.1)	3.1 (0.1-10.9)
Bulgaria	100	2.5 (0.3-11.2)	2.4 (0.2-10.8)	2.3 (0.1-10.8)	2.1 (0.1-10.4)

continued

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Burkina Faso	854	5.3 (3.5-7.8)	4.8 (3.7-6.4)	6.3 (3.2-12.3)	6.8 (2.5-16.5)
Burundi	108	3.4 (1.5-7.4)	3.4 (2.5-4.6)	3.7 (1.7-8.2)	4.4 (1.6-11.7)
Cabo Verde	132	10.2 (3.0-26.9)	10.4 (2.9-27.3)	9.9 (2.6-27.0)	9.5 (2.0-26.2)
Cambodia	116	0.4 (0.2-0.6)	0.4 (0.3-0.5)	0.3 (0.2-0.6)	0.4 (0.1-0.9)
Cameroon	120	6.7 (4.3-10.1)	6.6 (4.4-9.4)	6.3 (2.3-12.4)	6.0 (1.1-14.9)
Canada	124	1.3 (0.0-17.3)	1.5 (0.0-20.1)	1.5 (0.0-20.5)	1.5 (0.0-20.3)
Central African Republic	140	8.4 (3.8-17.1)	8.0 (3.1-18.4)	9.5 (3.3-22.9)	10.8 (3.4-25.1)
Chad	148	3.8 (2.4-6.1)	4.4 (2.5-7.5)	5.6 (3.1-9.9)	6.8 (2.6-17.3)
Chile	152	4.1 (0.4-14.8)	3.6 (0.3-14.5)	3.1 (0.2-13.4)	2.8 (0.1-13.2)
China	156	5.2 (0.5-27.1)	5.4 (0.4-27.7)	5.5 (0.4-27.3)	5.5 (0.4-27.6)
China, Hong Kong SAR	344	5.2 (0.5-26.9)	5.3 (0.5-27.7)	5.4 (0.4-28.1)	5.5 (0.4-28.5)
Colombia	170	3.9 (3.0-5.0)	4.3 (3.3-5.6)	3.9 (1.4-7.4)	3.0 (0.2-8.6)
Comoros	174	3.4 (1.8-6.3)	2.3 (1.4-4.0)	2.8 (1.3-6.0)	3.9 (1.4-10.6)
Congo	178	10.0 (4.1-18.2)	8.8 (4.9-13.3)	8.3 (1.8-17.6)	7.5 (0.8-19.8)
Costa Rica	188	4.4 (0.4-17.2)	2.5 (0.3-12.9)	3.4 (0.2-15.2)	3.0 (0.1-15.0)
Côte d'Ivoire	384	12.4 (7.8-18.6)	15.3 (9.7-22.6)	14.6 (7.2-24.8)	13.0 (4.7-25.9)
Croatia	191	1.9 (0.2-9.2)	2.0 (0.2-9.7)	2.1 (0.2-9.8)	2.1 (0.1-10.0)
Cuba	192	5.5 (0.3-21.8)	2.9 (0.2-12.9)	2.8 (0.1-14.6)	2.7 (0.1-17.1)
Czechia	203	3.0 (0.6-11.8)	2.9 (0.6-11.6)	2.8 (0.5-11.6)	2.6 (0.4-11.2)
Democratic People's Rep. of Korea	408	5.2 (0.5-27.4)	5.4 (0.5-27.6)	5.6 (0.5-27.6)	5.5 (0.4-27.6)
Democratic Rep. of the Congo	180	10.6 (5.0-20.1)	10.6 (6.5-16.2)	12.4 (6.1-22.1)	12.3 (4.6-25.1)
Denmark	208	3.8 (0.2-29.2)	3.9 (0.1-28.8)	3.9 (0.1-29.0)	3.8 (0.1-29.3)
Djibouti	262	1.6 (0.3-8.0)	1.7 (0.3-8.6)	1.7 (0.3-8.8)	1.8 (0.3-9.6)
Dominican Republic	214	3.8 (2.7-5.4)	5.4 (3.4-8.3)	5.2 (1.9-9.8)	4.3 (0.5-11.6)
Ecuador	218	3.0 (0.9-9.2)	4.9 (1.7-12.9)	5.1 (1.4-14.2)	4.6 (0.5-14.4)
Egypt	818	1.4 (0.3-6.7)	1.4 (0.3-6.7)	1.4 (0.3-6.6)	1.5 (0.3-6.7)
El Salvador	222	4.6 (1.3-14.2)	5.7 (1.8-15.5)	5.8 (1.8-15.6)	5.6 (1.3-16.0)
Equatorial Guinea	226	8.0 (2.0-25.5)	9.0 (2.5-26.4)	9.9 (2.6-28.3)	10.8 (2.8-29.2)

continued

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Eritrea	232	0.3 (0.1-0.6)	0.4 (0.2-1.0)	0.5 (0.2-1.6)	0.8 (0.2-3.1)
Estonia	233	3.8 (0.2-29.8)	3.8 (0.1-29.3)	3.8 (0.1-30.0)	3.8 (0.1-29.4)
Ethiopia	231	3.4 (2.3-4.3)	2.3 (1.6-3.4)	2.3 (1.3-4.0)	3.4 (1.3-9.1)
Fiji	242	5.2 (0.7-27.3)	5.9 (0.8-28.9)	6.4 (0.8-29.6)	7.1 (0.9-31.1)
Finland	246	3.9 (0.2-29.7)	3.8 (0.1-29.9)	3.9 (0.1-29.4)	3.7 (0.1-29.5)
France	250	4.5 (0.4-29.8)	3.2 (0.2-24.3)	2.9 (0.1-24.7)	2.8 (0.1-25.0)
Gabon	266	13.9 (10.4-17.9)	13.7 (7.9-20.5)	12.6 (4.3-22.4)	10.8 (1.6-24.2)
Gambia	270	2.9 (1.1-7.2)	2.4 (1.3-4.5)	2.7 (1.3-5.7)	3.8 (1.4-10.6)
Georgia	268	1.2 (0.1-13.2)	1.3 (0.1-13.6)	1.4 (0.1-15.1)	1.7 (0.1-18.4)
Germany	276	4.7 (0.3-29.7)	4.7 (0.3-30.2)	4.2 (0.2-28.6)	3.8 (0.2-27.2)
Ghana	288	7.6 (4.8-11.8)	9.0 (5.7-13.7)	10.4 (5.5-18.0)	9.9 (3.8-20.9)
Greece	300	1.9 (0.2-8.9)	2.0 (0.2-9.4)	2.1 (0.2-9.7)	2.1 (0.1-9.7)
Grenada	308	5.6 (0.7-21.0)	5.9 (0.6-21.8)	6.0 (0.5-22.0)	5.9 (0.3-21.9)
Guadeloupe	312	5.5 (0.7-21.2)	5.8 (0.6-21.6)	6.0 (0.5-21.9)	5.9 (0.3-22.0)
Guam	316	3.5 (0.3-23.9)	3.6 (0.2-23.6)	3.8 (0.2-24.1)	3.9 (0.2-24.5)
Guatemala	320	2.4 (1.5-3.5)	2.8 (1.4-5.1)	3.2 (1.7-6.1)	4.3 (1.5-10.6)
Guinea	324	8.3 (5.5-12.2)	9.9 (6.0-15.3)	10.0 (4.6-19.0)	10.4 (3.9-21.9)
Guinea-Bissau	624	8.2 (2.6-22.1)	11.5 (3.9-25.9)	10.8 (3.1-25.3)	10.2 (2.2-25.6)
Guyana	328	4.3 (1.6-10.7)	6.4 (4.0-9.8)	5.3 (2.2-11.6)	6.1 (1.9-14.6)
Haiti	332	5.9 (4.4-7.7)	8.3 (5.2-13.0)	9.9 (4.6-19.6)	11.0 (3.7-23.4)
Honduras	340	3.5 (1.7-6.9)	3.9 (2.3-6.3)	4.5 (2.0-9.0)	5.0 (1.7-11.7)
Hungary	348	2.1 (0.4-9.6)	2.2 (0.5-10.1)	2.5 (0.5-10.8)	2.6 (0.5-11.2)
India	356	0.1 (0.0-0.4)	0.1 (0.1-0.3)	0.1 (0.1-0.2)	0.2 (0.1-0.5)
Indonesia	360	0.3 (0.1-0.6)	0.3 (0.2-0.4)	0.3 (0.2-0.6)	0.3 (0.1-0.8)
Iran, Islamic Republic of	364	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
Iraq	368	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.7)
Ireland	372	3.8 (0.2-29.4)	3.8 (0.2-29.5)	3.8 (0.1-29.6)	3.7 (0.1-29.7)
Israel	376	1.9 (0.1-21.4)	2.1 (0.1-23.6)	2.3 (0.2-24.3)	2.7 (0.2-25.7)

continued

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Italy	380	2.3 (0.3-10.3)	2.2 (0.2-10.2)	2.0 (0.2-9.8)	1.8 (0.1-9.5)
Jamaica	388	6.9 (1.6-23.3)	7.7 (1.9-24.4)	7.7 (1.7-24.4)	7.2 (1.2-23.6)
Japan	392	6.0 (0.7-29.8)	6.4 (0.7-30.1)	6.3 (0.7-29.6)	5.9 (0.5-29.0)
Jordan	400	0.3 (0.1-1.0)	0.3 (0.1-1.0)	0.3 (0.1-1.1)	0.3 (0.1-1.1)
Kazakhstan	398	2.9 (1.9-4.6)	3.0 (1.3-6.6)	3.6 (1.4-8.4)	3.7 (1.2-9.8)
Kenya	404	8.2 (5.2-12.6)	6.9 (4.3-10.7)	7.9 (4.3-13.6)	8.3 (3.2-17.3)
Kiribati	296	4.2 (0.4-26.7)	3.0 (0.3-21.6)	3.7 (0.3-25.1)	4.2 (0.4-26.2)
Kuwait	414	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
Kyrgyzstan	417	1.5 (0.6-3.7)	1.4 (0.8-2.5)	1.4 (0.6-3.0)	1.9 (0.6-5.6)
Lao People's Dem. Republic	418	0.5 (0.2-1.8)	0.6 (0.2-1.9)	0.6 (0.2-2.0)	0.6 (0.2-2.0)
Latvia	428	3.9 (0.2-28.9)	3.9 (0.1-29.8)	3.9 (0.1-29.7)	3.8 (0.1-29.7)
Lebanon	422	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.9)
Lesotho	426	7.8 (4.1-14.0)	7.2 (5.0-10.3)	6.5 (3.0-11.7)	6.6 (1.4-14.8)
Liberia	430	19.3 (9.3-33.2)	23.4 (15.5-31.9)	21.3 (11.5-33.1)	19.1 (7.4-34.1)
Libya	434	1.6 (0.3-8.1)	1.7 (0.3-8.7)	1.8 (0.3-9.0)	1.8 (0.4-9.4)
Lithuania	440	3.8 (0.3-29.7)	4.3 (0.4-31.8)	4.5 (0.4-32.4)	4.6 (0.4-32.9)
Madagascar	450	9.2 (5.4-14.8)	8.4 (5.4-12.7)	9.3 (3.9-19.3)	10.3 (3.5-22.8)
Malawi	454	9.6 (7.4-12.1)	7.6 (6.0-10.1)	9.3 (5.0-16.1)	10.2 (3.6-21.1)
Malaysia	458	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.8)
Maldives	462	0.3 (0.1-1.2)	0.3 (0.1-1.1)	0.3 (0.1-1.2)	0.4 (0.1-1.4)
Mali	466	9.4 (6.4-13.8)	6.3 (4.1-9.7)	8.9 (4.4-17.8)	9.6 (3.6-21.8)
Malta	470	1.9 (0.2-9.3)	2.0 (0.2-9.4)	2.0 (0.2-9.7)	2.1 (0.1-9.8)
Martinique	474	5.5 (0.6-20.3)	5.9 (0.6-21.0)	6.0 (0.5-21.5)	5.9 (0.3-21.6)
Mauritania	478	1.7 (0.3-8.3)	1.7 (0.3-8.7)	1.7 (0.3-8.9)	1.9 (0.3-9.8)
Mauritius	480	2.7 (0.8-9.5)	3.0 (0.8-10.2)	3.3 (0.9-11.6)	4.1 (1.0-14.9)
Mexico	484	4.1 (1.2-13.2)	5.9 (1.8-16.4)	6.7 (2.2-17.5)	6.2 (1.4-17.8)
Mongolia	496	5.7 (1.1-23.0)	6.6 (1.4-23.7)	6.9 (1.4-24.3)	7.2 (1.3-26.7)
Montenegro	499	2.5 (0.5-9.7)	3.3 (0.8-11.5)	3.6 (0.8-12.2)	3.3 (0.6-12.2)

continued

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Morocco	504	1.6 (0.3-8.1)	1.7 (0.3-8.4)	1.8 (0.3-8.9)	1.8 (0.3-9.6)
Mozambique	508	12.9 (8.0-19.9)	13.4 (9.0-19.4)	13.4 (6.2-25.0)	13.9 (5.1-27.9)
Myanmar	104	0.2 (0.1-0.5)	0.2 (0.1-0.4)	0.2 (0.1-0.3)	0.2 (0.1-0.5)
Namibia	516	10.8 (8.1-13.5)	8.4 (3.9-13.6)	8.0 (2.0-16.5)	6.9 (0.7-18.2)
Nepal	524	0.2 (0.1-0.4)	0.2 (0.1-0.2)	0.2 (0.1-0.3)	0.2 (0.1-0.6)
Netherlands	528	5.1 (0.5-31.3)	4.1 (0.3-27.8)	3.6 (0.2-27.2)	3.5 (0.1-27.1)
New Zealand	554	4.2 (0.2-30.6)	4.0 (0.2-30.1)	3.8 (0.1-29.3)	3.7 (0.1-29.4)
Nicaragua	558	3.7 (2.5-5.5)	2.9 (1.3-6.2)	3.2 (1.2-8.4)	4.3 (1.4-11.7)
Niger	562	2.4 (1.5-3.9)	1.4 (0.9-2.2)	1.8 (0.9-3.5)	2.0 (0.8-5.2)
Nigeria	566	4.2 (2.8-6.4)	5.5 (3.5-8.4)	4.9 (2.5-9.4)	5.5 (2.0-13.0)
Norway	578	3.9 (0.2-29.1)	3.9 (0.1-29.1)	3.9 (0.1-29.5)	3.8 (0.1-29.3)
Oman	512	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.8)
Pakistan	586	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
Panama	591	5.9 (1.5-17.6)	6.9 (2.1-17.9)	6.8 (1.9-18.6)	6.0 (1.1-18.1)
Papua New Guinea	598	3.8 (0.6-19.4)	4.5 (0.7-22.0)	5.3 (0.8-25.2)	6.3 (1.0-29.3)
Paraguay	600	4.0 (1.9-7.6)	4.8 (1.7-10.2)	5.0 (1.7-11.3)	3.6 (0.3-11.3)
Peru	604	2.8 (2.1-3.6)	2.8 (2.3-3.5)	3.5 (1.7-6.8)	3.7 (1.1-8.7)
Philippines	608	0.8 (0.5-1.2)	1.5 (0.9-2.2)	1.4 (0.7-3.0)	1.6 (0.6-4.9)
Poland	616	1.9 (0.4-8.9)	1.9 (0.4-8.5)	2.2 (0.4-10.0)	2.5 (0.5-10.7)
Portugal	620	2.4 (0.4-10.7)	2.5 (0.4-11.0)	2.4 (0.4-10.6)	2.1 (0.2-10.2)
Puerto Rico	630	5.6 (0.7-21.0)	5.9 (0.6-21.4)	6.0 (0.5-21.7)	5.9 (0.3-22.3)
Qatar	634	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
Republic of Korea	410	5.1 (0.5-27.7)	5.3 (0.5-28.0)	5.4 (0.4-28.3)	5.5 (0.4-28.7)
Republic of Moldova	498	2.9 (1.3-6.2)	3.3 (1.5-6.9)	3.5 (1.3-8.6)	3.4 (1.0-9.2)
Réunion	638	8.2 (1.8-23.4)	8.0 (1.4-23.1)	7.8 (1.1-23.3)	7.4 (0.7-22.8)
Romania	642	2.4 (0.3-10.6)	2.5 (0.3-10.7)	2.5 (0.3-10.7)	2.5 (0.2-10.8)
Russian Federation	643	2.4 (0.5-10.5)	2.9 (0.6-11.9)	2.8 (0.5-11.5)	2.8 (0.5-11.8)
Rwanda	646	3.3 (2.5-4.3)	4.6 (3.6-6.0)	5.7 (3.2-10.3)	6.4 (2.4-15.6)

continued

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
St. Lucia	662	7.1 (1.5-23.8)	8.0 (2.0-25.0)	7.6 (1.7-24.1)	6.7 (0.9-23.2)
St. Vincent and the Grenadines	670	5.4 (0.7-21.1)	5.8 (0.6-21.5)	5.9 (0.4-22.1)	5.9 (0.3-22.4)
Samoa	882	2.1 (0.5-7.5)	2.4 (0.6-7.4)	2.5 (0.6-8.5)	3.3 (0.7-13.3)
Sao Tome and Principe	678	8.3 (3.5-17.7)	9.7 (5.6-15.6)	11.1 (4.9-21.3)	11.1 (3.8-23.9)
Saudi Arabia	682	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.8)
Senegal	686	2.8 (1.7-4.6)	2.6 (1.8-3.8)	2.0 (1.1-3.3)	3.2 (1.2-8.1)
Serbia	688	1.4 (0.3-5.2)	1.0 (0.2-3.8)	1.1 (0.2-4.2)	1.1 (0.1-4.9)
Sierra Leone	694	11.1 (5.3-21.8)	16.1 (11.0-22.4)	13.3 (6.7-22.1)	12.8 (4.6-24.9)
Singapore	702	1.2 (0.2-7.3)	1.4 (0.2-8.2)	1.5 (0.2-8.8)	1.8 (0.2-9.5)
Slovakia	703	2.4 (0.3-10.6)	2.5 (0.3-10.9)	2.5 (0.3-10.8)	2.5 (0.2-10.8)
Slovenia	705	1.9 (0.2-9.2)	2.0 (0.2-10.0)	2.1 (0.2-9.9)	2.1 (0.2-9.8)
Solomon Islands	90	3.6 (1.0-12.2)	4.1 (1.3-12.5)	5.4 (1.6-16.3)	6.4 (1.6-21.6)
Somalia	706	1.6 (0.3-8.4)	1.7 (0.3-8.6)	1.8 (0.3-9.0)	1.8 (0.4-9.6)
South Africa	710	8.6 (3.9-15.1)	8.0 (1.6-19.0)	7.1 (0.7-19.4)	6.2 (0.4-19.8)
South Sudan	728	4.6 (1.0-18.3)	5.2 (1.1-19.8)	5.8 (1.2-20.8)	6.6 (1.3-22.1)
Spain	724	2.7 (0.5-11.1)	2.4 (0.4-10.6)	2.3 (0.2-10.5)	2.1 (0.1-10.4)
Sri Lanka	144	0.3 (0.1-1.2)	0.4 (0.1-1.3)	0.4 (0.1-1.4)	0.4 (0.1-1.5)
State of Palestine	275	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
Sudan	729	1.7 (0.3-8.5)	1.7 (0.3-8.6)	1.8 (0.3-9.0)	1.8 (0.4-9.3)
Suriname	740	3.0 (0.8-10.8)	4.9 (1.3-15.8)	5.0 (1.2-15.8)	4.5 (0.6-15.7)
Swaziland	748	9.2 (4.2-17.2)	9.6 (5.1-16.2)	8.3 (2.3-17.6)	7.3 (0.8-19.1)
Sweden	752	3.9 (0.2-28.8)	3.9 (0.2-29.2)	3.9 (0.1-29.7)	3.8 (0.1-28.9)
Switzerland	756	1.6 (0.0-20.8)	1.0 (0.0-16.5)	1.1 (0.0-17.2)	1.3 (0.0-18.9)
Syrian Arab Republic	760	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.8)
Tajikistan	762	0.3 (0.1-1.3)	0.3 (0.1-1.3)	0.4 (0.1-1.4)	0.4 (0.1-1.5)
Thailand	764	0.8 (0.2-2.9)	1.0 (0.2-3.7)	1.2 (0.3-4.9)	1.6 (0.3-6.9)
TFYR Macedonia	807	2.1 (0.4-9.9)	2.5 (0.5-10.9)	2.6 (0.5-11.1)	2.5 (0.4-10.7)
Timor-Leste	626	0.4 (0.2-0.9)	0.4 (0.3-0.7)	0.4 (0.2-0.9)	0.4 (0.2-1.1)

continued

Table 8. Unmet need for family planning among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Togo	768	10.6 (6.6-16.1)	9.6 (5.3-16.2)	9.9 (5.1-17.3)	10.2 (3.8-20.6)
Tonga	776	1.5 (0.3-7.2)	1.6 (0.3-7.1)	1.9 (0.4-9.0)	2.6 (0.5-13.4)
Trinidad and Tobago	780	4.7 (1.2-17.5)	7.0 (1.6-23.2)	7.4 (1.6-23.6)	7.0 (1.0-23.4)
Tunisia	788	1.6 (0.3-8.1)	1.7 (0.3-8.7)	1.7 (0.3-9.1)	1.8 (0.3-9.6)
Turkey	792	0.3 (0.1-1.3)	0.4 (0.1-1.4)	0.4 (0.1-1.4)	0.4 (0.1-1.5)
Turkmenistan	795	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.5 (0.1-1.9)
Uganda	800	8.9 (6.9-11.3)	8.2 (5.5-12.1)	9.8 (5.1-17.8)	10.4 (3.8-21.4)
Ukraine	804	1.9 (0.8-4.0)	1.9 (1.0-3.4)	1.9 (0.7-4.5)	1.9 (0.4-5.2)
United Arab Emirates	784	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
United Kingdom	826	1.4 (0.1-17.4)	1.6 (0.0-19.5)	1.7 (0.0-21.6)	1.6 (0.0-20.9)
United Rep. of Tanzania	834	10.9 (7.4-15.5)	9.8 (7.7-12.3)	9.1 (5.0-15.1)	9.6 (3.6-19.3)
United States of America	840	3.2 (0.2-24.8)	3.5 (0.2-26.3)	3.2 (0.1-25.2)	2.9 (0.1-25.3)
United States Virgin Islands	850	5.5 (0.7-21.0)	5.8 (0.6-21.8)	5.9 (0.5-22.1)	6.0 (0.3-21.9)
Uruguay	858	3.3 (0.4-13.4)	3.6 (0.3-13.9)	3.7 (0.2-14.4)	3.6 (0.1-14.7)
Uzbekistan	860	0.4 (0.1-1.6)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.5 (0.1-2.0)
Vanuatu	548	7.8 (1.3-28.9)	9.8 (1.7-31.8)	10.9 (1.9-34.6)	11.6 (1.9-36.8)
Venezuela, Bolivarian Republic of	862	4.2 (1.0-14.6)	4.7 (1.1-15.5)	4.6 (0.8-15.6)	4.2 (0.3-15.1)
Viet Nam	704	0.3 (0.1-0.9)	0.3 (0.1-0.8)	0.3 (0.1-0.8)	0.3 (0.1-1.0)
Yemen	887	0.4 (0.1-1.5)	0.4 (0.1-1.6)	0.4 (0.1-1.7)	0.4 (0.1-1.8)
Zambia	894	9.9 (6.4-15.1)	10.3 (6.4-16.0)	10.7 (5.2-19.6)	11.5 (4.2-23.9)
Zimbabwe	716	4.6 (3.0-6.9)	4.7 (3.5-5.9)	4.9 (2.5-8.7)	6.1 (2.2-13.3)

iv. Demand for family planning satisfied by modern methods in 185 countries or areas

Table 9. Demand for family planning satisfied by modern methods among unmarried/not-in-union women of reproductive age

Country	ISO	2000	2010	2018	2030
Albania	8	31.0 (12.5-50.1)	45.1 (30.0-59.0)	58.6 (35.9-76.4)	70.3 (43.8-87.0)
Angola	24	30.0 (15.5-47.6)	42.5 (28.5-57.5)	45.3 (32.0-59.6)	51.9 (32.6-73.2)
Antigua and Barbuda	28	73.1 (15.4-93.6)	76.8 (27.2-95.4)	79.0 (34.9-96.1)	81.7 (41.7-97.2)
Argentina	32	83.4 (52.0-95.9)	86.8 (61.0-97.3)	89.0 (63.8-98.2)	90.9 (65.3-98.8)
Australia	36	86.5 (43.4-98.1)	87.9 (47.8-98.3)	88.8 (48.0-98.6)	90.0 (48.7-99.0)
Austria	40	87.8 (48.9-97.2)	89.8 (55.3-97.4)	90.5 (55.5-97.8)	91.1 (54.1-98.2)
Bahamas	44	73.8 (16.3-94.1)	77.1 (28.8-95.3)	79.4 (35.7-96.2)	81.9 (42.7-97.1)
Barbados	52	69.9 (45.7-85.7)	70.9 (49.5-85.0)	73.8 (50.3-88.2)	77.6 (51.4-91.7)
Belarus	112	76.5 (50.8-88.8)	83.1 (64.5-91.3)	86.7 (68.8-93.8)	88.7 (67.2-96.1)
Belgium	56	88.8 (50.2-98.5)	89.1 (54.0-98.6)	91.9 (56.8-99.1)	92.0 (54.4-99.2)
Belize	84	73.2 (46.2-88.3)	74.8 (49.4-88.5)	76.5 (51.1-90.4)	79.2 (52.9-92.5)
Benin	204	24.0 (15.9-33.6)	41.6 (30.3-52.4)	50.6 (34.3-64.9)	61.2 (38.6-78.3)
Bolivia, Plurinational State of	68	40.6 (29.9-51.1)	52.9 (39.8-64.0)	60.7 (43.9-74.1)	69.7 (47.1-85.6)
Bosnia and Herzegovina	70	51.8 (20.9-73.2)	65.1 (41.9-79.9)	72.9 (47.9-87.2)	80.0 (52.4-92.7)
Botswana	72	76.1 (46.7-95.4)	79.6 (48.5-97.5)	81.8 (49.8-98.0)	83.8 (50.7-98.4)
Brazil	76	81.3 (69.1-89.8)	88.7 (73.0-96.4)	90.2 (72.1-97.7)	91.9 (71.8-98.6)
Bulgaria	100	72.7 (42.9-89.2)	80.9 (51.5-94.0)	84.9 (55.2-95.8)	88.3 (59.4-97.2)
Burkina Faso	854	57.7 (47.9-65.8)	66.2 (58.5-72.6)	64.9 (50.5-76.5)	68.1 (48.2-82.6)
Burundi	108	32.5 (18.0-49.3)	34.2 (25.8-44.3)	44.6 (23.6-66.1)	53.5 (28.2-75.4)
Cabo Verde	132	66.1 (43.0-84.0)	71.5 (46.7-89.0)	72.8 (46.2-91.2)	74.8 (47.0-93.6)
Cameroon	120	35.6 (23.6-47.8)	59.4 (47.2-69.4)	71.2 (52.7-83.6)	79.5 (55.5-92.4)
Canada	124	94.7 (68.4-98.7)	94.6 (63.5-98.9)	94.7 (62.7-99.0)	94.8 (62.4-99.1)
Central African Republic	140	26.2 (13.7-40.9)	35.8 (21.1-52.9)	45.5 (25.0-65.2)	55.0 (31.0-75.9)
Chad	148	23.8 (14.3-34.8)	37.8 (25.4-51.1)	44.6 (30.0-59.3)	52.4 (30.8-71.5)

continued

Table 9. **Demand for family planning satisfied by modern methods among unmarried/not-in-union women of reproductive age (cont'd)**

Country	ISO	2000	2010	2018	2030
Chile	152	80.3 (47.2-93.8)	86.5 (60.9-95.7)	89.3 (66.4-96.7)	91.0 (67.1-97.9)
China	156	70.1 (13.5-92.5)	74.6 (25.0-94.2)	77.2 (30.3-95.2)	79.9 (36.2-96.3)
China, Hong Kong SAR	344	69.8 (13.6-92.0)	74.9 (25.0-94.0)	77.3 (30.6-94.9)	79.9 (35.4-96.2)
Colombia	170	76.2 (68.6-81.8)	83.4 (78.0-87.3)	86.9 (76.4-93.6)	89.7 (72.8-96.9)
Comoros	174	51.1 (37.9-62.4)	51.7 (36.9-64.1)	57.1 (37.8-71.4)	62.6 (39.1-78.6)
Congo	178	24.1 (8.3-44.0)	46.2 (32.1-59.5)	61.6 (37.9-80.2)	74.5 (44.6-91.7)
Costa Rica	188	89.5 (63.1-98.3)	94.8 (76.4-98.7)	92.6 (69.4-98.9)	93.6 (68.5-99.2)
Côte d'Ivoire	384	38.0 (26.2-49.8)	45.7 (33.8-57.3)	53.0 (35.7-69.3)	62.5 (39.4-82.1)
Croatia	191	66.2 (11.8-90.7)	77.3 (30.2-93.9)	82.5 (41.8-95.5)	86.9 (52.4-96.9)
Cuba	192	88.0 (58.7-97.6)	93.6 (78.3-97.9)	93.9 (74.8-98.3)	94.1 (68.6-98.8)
Czechia	203	79.0 (55.1-90.6)	84.1 (59.9-93.8)	86.9 (62.4-95.6)	89.1 (65.0-97.0)
Democratic People's Rep. of Korea	408	69.9 (13.7-92.3)	74.6 (25.5-93.9)	76.8 (31.3-95.0)	79.9 (36.2-96.3)
Democratic Rep. of the Congo	180	19.1 (10.6-30.9)	25.8 (17.9-34.8)	37.7 (23.0-53.2)	52.0 (30.0-73.0)
Denmark	208	82.2 (24.4-96.7)	84.4 (32.4-97.4)	85.6 (36.5-97.8)	87.1 (40.2-98.1)
Dominican Republic	214	81.2 (75.5-85.7)	81.8 (73.9-88.2)	83.9 (71.4-92.6)	86.6 (67.9-95.7)
Ecuador	218	66.4 (44.7-80.2)	72.0 (51.9-84.5)	76.3 (53.9-89.6)	81.3 (56.2-94.2)
El Salvador	222	75.0 (52.0-88.8)	76.7 (56.3-89.1)	77.9 (56.8-90.5)	81.2 (57.6-93.8)
Equatorial Guinea	226	39.4 (13.3-64.9)	52.3 (29.4-72.8)	58.2 (33.1-79.3)	63.3 (36.4-84.9)
Eritrea	232	71.4 (56.8-81.0)	75.1 (56.0-85.9)	79.2 (54.9-90.0)	82.4 (55.8-92.5)
Estonia	233	82.5 (23.9-96.7)	84.4 (32.1-97.4)	85.8 (35.7-97.7)	86.9 (39.3-98.0)
Ethiopia	231	33.0 (25.4-43.1)	59.9 (49.0-69.3)	69.6 (56.9-79.0)	68.9 (47.6-83.4)
Fiji	242	52.1 (3.6-83.7)	58.1 (7.9-86.8)	61.6 (13.1-88.6)	65.7 (19.7-91.3)
Finland	246	82.1 (23.0-96.7)	84.4 (31.3-97.4)	85.4 (35.9-97.6)	87.0 (39.8-98.0)
France	250	87.0 (50.1-96.9)	91.1 (61.4-97.3)	91.9 (59.4-97.9)	92.1 (57.2-98.3)
Gabon	266	37.4 (26.7-48.0)	54.6 (39.7-68.0)	64.1 (43.9-81.2)	72.7 (46.2-91.1)
Gambia	270	57.5 (33.8-75.5)	61.1 (42.8-74.8)	63.9 (43.9-78.4)	67.2 (43.9-82.9)
Georgia	268	29.5 (3.3-74.9)	40.1 (5.6-80.6)	50.1 (8.0-86.1)	61.2 (12.9-90.3)
Germany	276	85.8 (48.4-97.2)	86.5 (48.1-97.8)	88.6 (49.7-98.2)	90.0 (51.2-98.6)

continued

Table 9. Demand for family planning satisfied by modern methods among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Ghana	288	37.8 (27.3-47.7)	46.8 (37.1-55.8)	53.2 (40.9-64.5)	60.5 (40.8-77.3)
Greece	300	65.8 (12.1-90.7)	77.1 (30.6-94.0)	82.4 (43.6-95.6)	86.8 (53.5-97.0)
Grenada	308	73.3 (15.8-93.7)	76.7 (26.2-95.4)	79.0 (33.9-96.3)	81.8 (41.9-97.0)
Guadeloupe	312	73.4 (16.6-93.4)	77.0 (28.7-95.3)	79.2 (36.3-96.2)	81.6 (42.8-97.2)
Guam	316	79.3 (24.4-95.6)	81.4 (31.5-96.3)	82.5 (36.0-96.9)	84.0 (39.8-97.3)
Guatemala	320	62.1 (51.1-71.8)	70.0 (56.9-79.9)	72.5 (59.8-81.5)	73.7 (55.7-85.5)
Guinea	324	40.2 (30.1-49.8)	49.8 (38.4-60.2)	55.0 (38.7-69.3)	60.1 (39.3-77.7)
Guinea-Bissau	624	44.5 (24.9-63.8)	64.7 (44.5-80.3)	70.6 (47.9-87.2)	72.7 (46.5-91.2)
Guyana	328	60.8 (40.1-75.5)	65.9 (54.5-75.0)	65.9 (47.4-78.4)	71.8 (50.3-86.8)
Haiti	332	44.3 (36.2-52.3)	50.1 (38.9-60.4)	54.7 (37.9-69.7)	62.3 (40.2-83.1)
Honduras	340	71.9 (57.7-82.0)	74.5 (65.1-81.5)	75.7 (62.0-85.3)	77.3 (58.9-89.2)
Hungary	348	76.2 (43.8-90.3)	80.8 (54.0-91.8)	83.0 (56.1-93.5)	85.3 (59.1-94.9)
Ireland	372	82.1 (22.9-96.8)	84.3 (31.2-97.4)	85.7 (36.2-97.7)	87.0 (38.9-98.1)
Israel	376	55.2 (0.1-91.4)	63.4 (0.4-93.3)	68.7 (1.0-94.4)	74.8 (3.1-95.6)
Italy	380	67.6 (26.9-88.5)	79.7 (50.5-92.3)	85.1 (57.9-94.8)	89.3 (63.2-96.9)
Jamaica	388	70.8 (43.3-88.7)	72.5 (45.9-89.5)	75.4 (47.2-91.9)	78.6 (48.6-94.4)
Japan	392	66.2 (21.9-88.6)	71.6 (34.6-90.8)	75.0 (38.9-92.3)	78.9 (40.7-94.7)
Kazakhstan	398	74.7 (65.5-81.6)	79.8 (66.6-87.8)	81.2 (66.2-89.9)	83.2 (64.9-92.7)
Kenya	404	49.8 (39.2-59.3)	62.6 (52.9-70.6)	69.0 (57.1-79.0)	71.7 (52.9-86.6)
Kiribati	296	80.0 (39.1-95.1)	77.8 (34.6-95.3)	79.3 (37.6-95.8)	81.2 (40.7-96.3)
Kyrgyzstan	417	72.4 (52.1-85.0)	70.9 (57.4-81.0)	74.5 (57.1-85.5)	78.1 (57.3-89.1)
Latvia	428	81.9 (23.0-96.7)	84.2 (31.5-97.3)	85.3 (34.8-97.6)	86.9 (39.2-98.0)
Lesotho	426	68.8 (55.4-79.6)	77.0 (69.2-83.7)	82.2 (69.4-92.3)	82.6 (62.6-95.9)
Liberia	430	39.9 (26.3-55.5)	42.7 (33.2-53.4)	48.9 (35.0-65.2)	53.8 (34.4-77.5)
Lithuania	440	72.4 (26.9-92.5)	74.5 (31.6-93.1)	77.1 (33.7-94.6)	79.8 (36.0-95.6)
Madagascar	450	21.7 (13.6-31.5)	44.6 (32.8-55.1)	53.9 (35.0-69.9)	60.8 (38.6-79.6)
Malawi	454	46.7 (39.3-54.3)	61.4 (53.2-68.0)	65.2 (51.9-77.3)	65.5 (46.3-84.3)
Mali	466	35.4 (26.3-44.4)	47.4 (36.6-57.6)	53.2 (37.4-67.9)	56.9 (36.8-75.4)

continued

Table 9. Demand for family planning satisfied by modern methods among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Malta	470	66.3 (12.5-90.8)	77.3 (31.9-93.9)	82.6 (43.5-95.6)	87.1 (53.1-97.0)
Martinique	474	73.1 (16.2-93.5)	76.7 (28.1-95.1)	79.1 (36.8-96.3)	81.7 (42.8-97.2)
Mauritius	480	39.7 (14.5-68.3)	44.9 (18.5-71.9)	49.1 (21.6-75.0)	55.6 (26.0-79.2)
Mexico	484	72.4 (46.7-87.6)	75.1 (52.6-88.9)	77.4 (56.2-90.5)	80.5 (56.3-94.6)
Mongolia	496	61.1 (32.3-80.3)	66.4 (38.1-85.1)	67.9 (38.1-86.7)	71.5 (40.0-90.3)
Montenegro	499	57.5 (26.6-76.7)	70.6 (48.9-83.3)	77.3 (54.4-89.1)	83.1 (57.7-93.9)
Mozambique	508	46.5 (36.0-56.7)	51.5 (41.5-61.2)	54.1 (37.9-70.4)	58.7 (38.8-79.9)
Namibia	516	74.2 (67.5-80.3)	82.9 (71.4-92.1)	83.9 (66.0-95.8)	85.7 (61.4-98.2)
Netherlands	528	82.1 (45.0-95.1)	87.0 (52.1-96.7)	88.3 (52.3-97.4)	88.8 (50.9-97.8)
New Zealand	554	86.8 (43.0-98.1)	88.0 (44.6-98.4)	88.8 (45.7-98.6)	89.7 (47.1-98.7)
Nicaragua	558	77.4 (69.9-83.2)	76.0 (60.6-86.4)	76.4 (57.7-87.9)	78.2 (58.5-90.3)
Nigeria	566	45.5 (34.2-55.5)	58.1 (48.4-66.6)	64.4 (51.2-74.6)	70.2 (49.8-83.2)
Norway	578	82.1 (24.1-96.6)	84.4 (32.3-97.3)	85.6 (36.4-97.7)	87.0 (39.9-98.0)
Panama	591	74.2 (49.1-89.3)	75.7 (53.9-89.1)	77.9 (55.2-91.0)	81.1 (56.1-94.2)
Papua New Guinea	598	34.3 (10.1-61.5)	43.9 (14.7-71.7)	49.7 (17.5-78.0)	55.8 (21.7-83.2)
Paraguay	600	71.2 (56.3-81.8)	82.9 (68.1-91.7)	84.6 (69.3-93.0)	89.4 (69.4-97.4)
Peru	604	56.5 (47.3-64.5)	66.6 (59.6-72.5)	71.4 (58.9-80.4)	77.5 (57.9-89.1)
Philippines	608	54.6 (42.3-65.2)	52.4 (39.0-64.0)	60.8 (41.1-73.9)	68.9 (46.0-81.6)
Poland	616	79.0 (46.2-91.8)	82.2 (55.8-92.9)	84.0 (57.6-94.2)	85.7 (60.1-95.3)
Portugal	620	67.1 (16.6-91.1)	78.4 (36.0-94.3)	83.9 (48.3-95.5)	88.5 (57.5-97.2)
Puerto Rico	630	73.4 (16.3-93.8)	77.2 (27.5-95.5)	79.3 (35.8-96.3)	81.8 (42.0-97.2)
Republic of Korea	410	70.2 (12.6-92.3)	75.1 (24.3-94.1)	77.3 (29.5-95.1)	80.1 (35.6-96.3)
Republic of Moldova	498	64.3 (46.8-76.7)	70.8 (56.6-80.8)	75.3 (57.7-85.9)	79.5 (58.7-90.6)
Réunion	638	74.0 (45.7-91.8)	76.4 (47.0-94.3)	78.2 (47.9-95.3)	80.8 (49.8-96.9)
Romania	642	77.2 (32.8-93.6)	82.7 (46.6-95.2)	85.4 (52.4-96.1)	87.6 (57.0-97.0)
Russian Federation	643	70.6 (40.2-86.7)	78.9 (53.6-91.0)	82.0 (56.4-93.2)	85.1 (59.1-95.3)
Rwanda	646	24.8 (18.5-31.6)	45.0 (36.7-52.7)	50.9 (36.0-64.1)	56.5 (35.4-73.8)
St. Lucia	662	71.4 (40.9-88.8)	73.7 (47.2-89.5)	77.0 (49.1-92.0)	80.5 (50.8-94.9)

continued

Table 9. Demand for family planning satisfied by modern methods among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
St. Vincent and the Grenadines	670	73.6 (15.6-93.8)	77.0 (27.2-95.5)	79.1 (35.3-96.4)	81.6 (41.6-97.2)
Samoa	882	35.9 (9.8-68.3)	44.2 (19.9-70.8)	52.0 (22.6-77.7)	61.7 (28.8-84.5)
Sao Tome and Principe	678	55.8 (34.7-71.7)	61.2 (48.9-72.5)	63.8 (46.3-78.9)	67.4 (45.3-86.8)
Senegal	686	53.5 (41.9-64.0)	49.4 (37.9-59.8)	66.5 (53.2-77.3)	67.9 (46.9-82.8)
Serbia	688	74.2 (48.5-87.9)	84.6 (73.4-91.4)	87.5 (72.5-94.5)	90.8 (73.2-96.9)
Sierra Leone	694	46.4 (31.6-61.2)	54.3 (44.9-63.3)	63.6 (48.4-79.2)	65.2 (44.7-85.7)
Singapore	702	73.3 (1.6-93.3)	78.2 (3.9-94.5)	80.9 (7.4-95.3)	84.1 (17.7-96.1)
Slovakia	703	77.4 (32.6-93.9)	82.9 (46.6-95.3)	85.6 (52.5-96.3)	87.9 (58.2-97.3)
Slovenia	705	65.9 (11.4-90.7)	77.0 (29.8-93.7)	82.4 (43.1-95.4)	87.1 (53.4-96.8)
Solomon Islands	90	45.1 (16.0-69.4)	52.1 (26.1-72.2)	54.2 (27.5-75.4)	59.8 (30.1-81.4)
South Africa	710	83.0 (70.4-92.6)	84.3 (63.0-97.0)	86.2 (61.2-98.5)	87.9 (60.5-99.0)
South Sudan	728	52.6 (8.0-79.1)	59.8 (15.9-83.4)	63.2 (22.2-85.7)	67.1 (29.6-89.1)
Spain	724	83.6 (60.2-93.0)	87.7 (62.8-96.1)	89.6 (64.6-97.2)	91.2 (67.0-98.0)
Suriname	740	76.6 (49.7-91.2)	80.5 (56.8-93.0)	83.3 (59.7-95.3)	87.0 (61.8-97.9)
Swaziland	748	67.9 (51.9-81.1)	77.8 (65.4-87.4)	81.7 (63.0-94.8)	84.0 (59.2-97.9)
Sweden	752	82.0 (24.0-96.8)	84.2 (30.9-97.3)	85.4 (35.8-97.7)	86.7 (40.5-97.9)
Switzerland	756	92.5 (58.3-98.0)	94.6 (69.5-98.2)	94.9 (68.0-98.5)	94.9 (64.3-98.8)
Thailand	764	73.4 (42.3-89.7)	79.1 (51.5-91.8)	81.7 (55.1-93.0)	83.4 (57.9-93.8)
TFYR Macedonia	807	58.3 (21.7-81.1)	69.5 (45.0-84.6)	76.7 (50.5-89.8)	83.1 (56.4-93.9)
Togo	768	39.1 (26.3-51.2)	58.3 (46.1-69.0)	62.8 (48.3-75.4)	69.4 (48.2-86.4)
Tonga	776	47.6 (9.9-82.2)	58.2 (22.9-84.7)	65.4 (28.7-88.1)	71.6 (34.4-90.9)
Trinidad and Tobago	780	55.5 (30.1-73.9)	61.2 (36.2-79.2)	64.7 (37.7-83.8)	70.0 (40.7-88.6)
Uganda	800	51.7 (43.7-59.0)	56.7 (47.4-65.0)	60.2 (46.4-72.6)	63.0 (44.1-80.8)
Ukraine	804	76.8 (61.2-86.4)	83.6 (73.6-89.5)	86.0 (72.0-92.9)	88.4 (72.0-95.4)
United Kingdom	826	90.8 (63.7-96.4)	90.8 (61.4-96.7)	91.5 (59.2-97.3)	92.1 (59.2-97.8)
United Rep. of Tanzania	834	47.6 (38.3-56.3)	58.1 (50.3-65.1)	63.4 (50.0-75.0)	66.4 (46.8-83.5)
United States of America	840	85.4 (53.2-95.3)	86.4 (54.2-95.8)	88.0 (54.4-96.6)	89.3 (54.0-97.4)
United States Virgin Islands	850	73.6 (14.8-93.8)	76.9 (26.4-95.4)	79.2 (34.0-96.4)	81.7 (42.0-97.2)

continued

Table 9. Demand for family planning satisfied by modern methods among unmarried/not-in-union women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Uruguay	858	74.5 (6.4-92.5)	80.9 (19.2-95.2)	83.6 (32.8-96.5)	86.4 (47.7-97.4)
Vanuatu	548	49.0 (20.1-80.0)	50.5 (23.9-81.8)	53.0 (25.7-82.8)	57.7 (28.3-86.3)
Venezuela, Bolivarian Republic of	862	73.6 (47.4-87.6)	79.1 (51.9-92.2)	82.3 (55.6-94.7)	85.6 (57.7-96.9)
Zambia	894	42.1 (32.3-51.8)	52.9 (42.1-63.3)	56.2 (41.0-70.5)	59.5 (40.0-79.2)
Zimbabwe	716	71.6 (62.9-78.6)	73.1 (66.9-79.2)	78.4 (67.6-86.7)	77.7 (60.5-90.4)

K. All women

i. Any contraceptive use in 185 countries or areas

Table 10. Any contraceptive use among all women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	7.7 (5.3-11.8)	14.3 (11.8-17.8)	18.1 (13.0-25.1)	27.7 (16.4-42.1)
Albania	8	43.2 (36.2-49.7)	42.0 (34.9-48.7)	43.5 (31.3-55.5)	45.9 (30.3-62.8)
Algeria	12	30.3 (26.8-35.5)	28.8 (24.3-35.2)	30.9 (23.6-39.3)	31.2 (21.7-41.2)
Angola	24	7.7 (5.6-11.1)	13.3 (9.8-18.1)	15.6 (10.2-23.2)	22.3 (11.5-40.3)
Antigua and Barbuda	28	34.6 (19.9-61.9)	38.4 (20.9-67.5)	41.5 (22.1-70.3)	46.9 (25.5-73.7)
Argentina	32	43.4 (30.7-59.4)	51.5 (40.3-64.1)	55.8 (40.2-71.6)	57.4 (37.3-77.1)
Armenia	51	34.7 (29.9-39.5)	35.0 (30.4-39.6)	38.4 (31.3-45.4)	38.7 (26.8-49.5)
Australia	36	51.3 (40.2-62.8)	52.1 (41.0-61.8)	52.9 (39.2-67.2)	53.4 (34.6-72.9)
Austria	40	53.4 (40.7-66.4)	58.8 (47.2-69.3)	58.0 (42.3-73.0)	57.9 (37.1-76.4)
Azerbaijan	31	33.3 (26.7-40.1)	33.0 (24.4-41.6)	36.7 (24.8-47.9)	37.6 (23.9-49.4)
Bahamas	44	38.5 (23.4-65.1)	40.1 (21.9-69.1)	42.4 (22.4-71.4)	47.0 (25.7-73.7)
Bahrain	48	35.1 (25.8-43.8)	34.0 (23.1-44.4)	32.7 (21.5-43.5)	32.5 (20.7-44.1)
Bangladesh	50	44.0 (40.0-48.1)	49.1 (44.0-54.0)	52.3 (42.8-60.8)	52.9 (37.6-65.4)
Barbados	52	42.9 (30.0-57.5)	46.2 (36.6-56.6)	48.3 (34.3-63.4)	50.9 (32.0-70.1)
Belarus	112	50.4 (41.4-60.0)	55.7 (48.4-63.3)	60.4 (51.0-69.4)	57.6 (39.9-74.6)
Belgium	56	57.6 (48.5-67.8)	57.3 (49.4-65.8)	59.3 (44.9-73.6)	57.6 (39.0-76.3)
Belize	84	37.0 (29.4-46.2)	39.0 (32.3-46.5)	41.3 (31.0-53.9)	45.0 (29.0-63.0)
Benin	204	16.1 (12.7-20.3)	15.8 (12.5-19.9)	19.2 (12.1-29.4)	25.6 (13.5-43.9)
Bhutan	64	20.6 (18.0-23.8)	36.1 (30.3-41.7)	41.2 (29.7-51.8)	43.9 (29.4-56.6)
Bolivia, Plurinational State of	68	31.8 (27.9-35.9)	38.2 (33.1-43.4)	42.3 (34.7-51.0)	47.4 (31.7-65.3)
Bosnia and Herzegovina	70	36.6 (28.3-46.2)	34.5 (26.5-43.6)	37.5 (24.9-52.2)	42.1 (25.1-61.4)
Botswana	72	35.3 (25.1-54.1)	41.3 (27.9-63.0)	45.1 (28.9-67.8)	49.0 (30.8-71.6)

continued

Table 10. Any contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Brazil	76	56.2 (47.5-65.5)	63.6 (54.5-73.3)	64.0 (51.3-77.1)	64.7 (46.3-81.4)
Bulgaria	100	62.0 (51.2-73.2)	59.0 (46.3-73.4)	58.9 (43.2-74.7)	57.7 (39.5-76.1)
Burkina Faso	854	13.0 (9.9-16.9)	15.7 (13.5-18.1)	22.7 (17.1-29.8)	28.7 (16.3-45.9)
Burundi	108	9.0 (7.1-11.5)	14.4 (12.7-16.5)	20.3 (15.5-26.3)	27.7 (16.8-40.6)
Cabo Verde	132	36.8 (30.6-43.8)	43.2 (30.8-57.0)	45.3 (29.4-62.9)	49.2 (30.4-68.8)
Cambodia	116	15.8 (13.4-18.7)	32.4 (28.5-36.4)	40.9 (32.2-48.8)	43.3 (29.6-54.6)
Cameroon	120	24.3 (19.8-29.6)	27.5 (22.9-33.0)	36.1 (24.4-49.9)	43.4 (25.2-63.8)
Canada	124	69.3 (59.3-76.7)	65.7 (50.4-78.2)	64.9 (46.1-79.9)	64.2 (43.6-80.9)
Central African Republic	140	18.2 (13.7-24.1)	17.8 (13.5-23.5)	22.8 (13.1-37.5)	29.8 (15.2-50.6)
Chad	148	3.7 (2.7-5.2)	4.3 (3.4-5.6)	6.5 (4.3-10.1)	12.0 (5.8-24.1)
Chile	152	46.6 (31.9-64.6)	55.0 (40.9-69.7)	59.5 (44.6-74.6)	60.5 (40.5-79.7)
China	156	68.4 (63.0-79.2)	66.8 (58.5-79.1)	68.1 (56.2-81.0)	65.0 (49.8-80.5)
China, Hong Kong SAR	344	56.0 (47.8-74.1)	50.0 (39.7-70.5)	48.8 (35.8-71.1)	50.3 (34.8-72.9)
Colombia	170	52.9 (49.9-56.0)	58.9 (55.7-62.1)	62.3 (52.4-72.1)	63.3 (45.8-79.3)
Comoros	174	17.1 (13.4-21.6)	15.2 (11.1-20.6)	19.0 (11.8-29.2)	26.6 (14.3-43.7)
Congo	178	34.6 (22.1-49.3)	41.4 (34.1-49.6)	41.8 (29.1-56.0)	46.3 (27.6-66.4)
Costa Rica	188	60.8 (49.2-73.0)	67.5 (57.3-72.4)	63.0 (47.1-77.4)	63.7 (43.6-80.9)
Côte d'Ivoire	384	17.9 (13.9-22.8)	19.1 (15.2-24.0)	21.8 (14.8-31.3)	29.0 (16.0-46.6)
Croatia	191	46.4 (29.0-66.5)	46.8 (28.4-68.3)	47.2 (28.3-69.7)	48.6 (29.0-71.7)
Cuba	192	63.4 (53.1-72.9)	68.7 (61.5-74.9)	68.9 (56.1-79.5)	68.1 (48.9-83.2)
Czechia	203	54.7 (45.0-65.1)	55.4 (45.8-66.8)	55.2 (41.5-70.3)	53.6 (36.4-72.1)
Democratic People's Rep. of Korea	408	51.4 (43.6-65.5)	53.2 (44.3-67.7)	57.4 (46.3-72.8)	57.7 (42.3-74.8)
Democratic Rep. of the Congo	180	21.6 (16.2-28.9)	19.3 (15.5-24.0)	22.8 (14.3-34.8)	29.0 (15.5-48.4)
Denmark	208	54.7 (40.0-72.4)	53.6 (35.3-74.5)	52.8 (33.0-75.7)	53.5 (32.5-76.6)
Djibouti	262	4.3 (2.7-9.6)	8.2 (5.9-14.4)	12.2 (7.6-21.0)	20.5 (11.2-33.5)
Dominican Republic	214	47.3 (43.7-51.1)	53.9 (49.2-59.1)	55.2 (43.7-67.1)	56.6 (38.6-74.7)
Ecuador	218	43.7 (39.5-47.9)	54.2 (48.6-61.4)	56.3 (43.9-70.6)	58.3 (41.0-76.7)
Egypt	818	37.0 (34.1-40.0)	41.2 (36.1-46.2)	43.6 (35.0-51.4)	42.9 (30.2-53.7)

continued

Table 10. Any contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
El Salvador	222	41.3 (34.6-48.3)	47.2 (40.8-53.9)	48.7 (38.2-60.7)	51.8 (35.6-69.1)
Equatorial Guinea	226	11.5 (7.6-18.3)	13.9 (11.1-17.7)	18.0 (10.3-29.8)	24.8 (12.4-44.5)
Eritrea	232	5.5 (4.0-7.5)	6.1 (5.1-7.7)	10.1 (5.7-17.5)	17.0 (8.2-31.7)
Estonia	233	48.2 (34.7-67.4)	48.0 (32.5-69.8)	48.7 (31.1-71.5)	48.8 (29.3-73.2)
Ethiopia	231	5.9 (4.9-7.1)	18.3 (15.2-22.0)	27.0 (22.4-32.3)	37.8 (24.6-51.9)
Fiji	242	30.1 (17.1-49.9)	32.4 (17.6-54.0)	33.9 (17.8-56.7)	35.8 (18.6-60.2)
Finland	246	56.9 (46.0-73.8)	57.7 (45.2-75.7)	60.9 (48.1-78.6)	60.3 (44.7-79.2)
France	250	64.2 (57.0-72.4)	65.1 (58.7-71.3)	63.9 (50.3-76.7)	62.3 (43.6-78.8)
Gabon	266	32.0 (26.9-38.2)	33.7 (25.5-43.5)	37.0 (23.7-52.2)	42.0 (23.4-63.4)
Gambia	270	10.4 (8.4-13.2)	9.5 (7.5-12.1)	10.2 (6.3-16.2)	15.6 (7.6-29.4)
Georgia	268	26.1 (19.2-33.7)	31.0 (24.6-37.6)	35.4 (24.3-46.5)	36.3 (23.0-50.0)
Germany	276	54.4 (41.9-67.6)	49.9 (39.4-61.9)	51.6 (36.3-67.8)	53.4 (34.8-72.0)
Ghana	288	17.3 (14.2-21.0)	21.0 (17.6-25.1)	26.0 (20.3-33.0)	30.2 (17.4-47.7)
Greece	300	47.3 (36.6-65.8)	49.5 (34.6-70.6)	50.3 (33.2-72.4)	50.6 (31.6-73.8)
Grenada	308	30.6 (15.6-62.0)	35.4 (17.1-67.2)	40.4 (20.5-70.1)	46.7 (25.7-73.9)
Guadeloupe	312	30.8 (15.2-59.2)	35.9 (17.5-65.1)	38.7 (18.7-67.5)	43.5 (22.2-71.2)
Guam	316	35.2 (22.8-54.6)	35.9 (20.9-59.6)	36.6 (19.9-62.0)	39.4 (21.2-65.5)
Guatemala	320	25.2 (21.6-29.2)	35.5 (30.8-40.3)	40.3 (32.5-48.8)	43.8 (29.7-59.4)
Guinea	324	7.1 (5.4-9.4)	9.2 (6.6-12.6)	12.2 (8.1-18.2)	19.1 (9.9-34.7)
Guinea-Bissau	624	9.8 (7.3-13.7)	21.1 (15.6-27.8)	26.4 (16.5-39.1)	31.1 (16.2-52.3)
Guyana	328	26.9 (21.7-34.0)	30.9 (26.6-35.8)	30.4 (20.9-42.0)	37.4 (22.0-56.8)
Haiti	332	16.7 (14.4-19.3)	22.9 (18.9-27.5)	27.4 (21.7-34.9)	35.8 (22.0-53.7)
Honduras	340	38.9 (34.2-43.9)	46.5 (42.0-51.2)	49.6 (39.1-60.9)	51.8 (36.4-68.0)
Hungary	348	49.4 (40.7-59.0)	43.3 (34.1-54.0)	43.5 (30.2-59.2)	44.1 (28.3-63.5)
India	356	38.1 (33.2-43.3)	42.3 (36.4-47.9)	43.0 (34.5-51.6)	45.0 (30.6-59.0)
Indonesia	360	38.6 (36.1-41.1)	44.2 (41.7-46.7)	44.2 (38.1-49.9)	43.4 (30.5-54.5)
Iran, Islamic Republic of	364	49.1 (46.3-52.7)	52.2 (48.7-56.6)	54.0 (45.1-61.6)	50.3 (38.4-59.3)
Iraq	368	27.3 (21.9-33.8)	34.2 (27.7-41.4)	36.2 (26.3-46.4)	36.6 (24.5-48.4)

continued

Table 10. Any contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Ireland	372	48.6 (35.1-69.7)	49.7 (34.7-70.4)	51.1 (33.9-72.4)	50.8 (31.1-73.8)
Israel	376	40.5 (29.2-58.3)	40.1 (27.7-62.0)	39.0 (26.0-63.1)	38.5 (24.1-65.9)
Italy	380	52.3 (39.9-67.2)	55.3 (43.1-68.2)	55.7 (40.0-72.4)	55.6 (35.4-76.3)
Jamaica	388	38.3 (33.0-44.6)	40.1 (31.9-50.2)	41.4 (27.7-58.9)	45.7 (28.3-67.3)
Japan	392	39.7 (31.2-55.2)	38.0 (27.9-52.9)	36.6 (24.2-53.8)	40.1 (22.7-63.0)
Jordan	400	33.0 (28.3-37.6)	36.1 (32.3-39.9)	37.2 (28.9-44.4)	37.1 (25.6-46.5)
Kazakhstan	398	44.1 (38.6-49.8)	38.0 (32.8-43.4)	42.1 (32.1-53.0)	42.1 (26.8-59.7)
Kenya	404	29.1 (24.6-34.1)	36.1 (31.3-41.3)	46.0 (38.2-54.5)	48.5 (33.4-64.8)
Kiribati	296	27.2 (21.1-33.2)	19.5 (14.8-26.2)	23.8 (14.0-38.4)	28.9 (14.9-49.2)
Kuwait	414	29.3 (22.8-36.9)	31.7 (20.6-43.4)	34.6 (21.7-48.0)	33.7 (20.4-47.1)
Kyrgyzstan	417	36.8 (30.1-43.6)	28.2 (22.8-34.0)	30.8 (22.3-40.5)	33.0 (20.2-48.0)
Lao People's Dem. Republic	418	20.7 (18.1-24.0)	30.6 (24.8-36.6)	37.1 (25.9-47.8)	40.4 (25.8-53.7)
Latvia	428	50.3 (36.0-70.9)	49.4 (31.1-73.5)	50.4 (30.8-74.8)	50.5 (29.7-76.0)
Lebanon	422	31.6 (27.8-36.7)	25.8 (21.3-32.3)	27.6 (20.1-36.4)	34.1 (22.9-45.4)
Lesotho	426	27.2 (23.1-32.0)	39.2 (34.6-44.1)	48.2 (36.4-60.7)	51.2 (33.5-70.2)
Liberia	430	12.4 (7.4-20.5)	17.8 (13.1-23.7)	27.2 (19.9-36.7)	32.8 (19.2-51.0)
Libya	434	20.1 (15.2-27.0)	18.3 (13.5-26.2)	20.3 (13.2-30.1)	22.6 (13.9-34.1)
Lithuania	440	42.8 (33.4-55.1)	43.8 (33.0-57.7)	44.9 (30.4-62.9)	46.4 (28.7-66.9)
Madagascar	450	18.8 (15.7-22.8)	30.3 (25.7-35.4)	36.3 (26.1-48.5)	42.8 (27.1-60.2)
Malawi	454	23.3 (20.3-26.5)	34.4 (31.0-37.9)	45.7 (36.5-55.1)	49.3 (33.8-65.0)
Malaysia	458	32.0 (24.4-40.3)	30.0 (23.8-37.6)	31.3 (24.1-40.2)	35.2 (23.3-47.3)
Maldives	462	26.7 (22.5-31.6)	24.4 (19.6-30.0)	31.0 (20.3-42.9)	34.5 (20.4-48.7)
Mali	466	7.6 (5.9-9.9)	9.1 (7.2-11.6)	14.7 (9.5-22.0)	22.2 (11.3-39.2)
Malta	470	56.6 (44.9-76.0)	57.7 (42.9-78.0)	60.5 (43.6-80.2)	62.8 (43.9-81.6)
Martinique	474	30.7 (15.5-60.5)	35.0 (16.8-65.5)	38.4 (18.6-68.6)	43.2 (22.1-71.7)
Mauritania	478	5.2 (3.9-8.8)	8.0 (5.8-12.6)	12.6 (8.2-20.0)	19.8 (10.5-33.8)
Mauritius	480	47.1 (41.7-51.8)	44.2 (37.2-50.4)	43.1 (33.9-51.2)	46.0 (32.2-58.1)
Mexico	484	47.3 (42.4-53.1)	51.0 (46.5-56.6)	52.6 (43.4-63.0)	53.7 (37.9-70.8)

continued

Table 10. Any contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Mongolia	496	44.3 (40.2-48.5)	40.6 (36.3-45.3)	42.7 (31.4-54.9)	42.5 (27.0-60.6)
Montenegro	499	37.3 (29.8-46.1)	30.4 (23.2-39.1)	31.9 (20.5-46.2)	37.2 (21.2-57.8)
Morocco	504	34.5 (30.0-40.1)	36.8 (32.5-42.3)	37.1 (29.4-45.2)	37.0 (26.5-46.8)
Mozambique	508	12.0 (8.8-16.3)	15.2 (12.1-19.0)	24.4 (17.3-33.8)	34.5 (20.7-52.3)
Myanmar	104	21.0 (17.7-24.6)	26.8 (22.2-31.8)	31.1 (25.5-36.8)	34.3 (23.3-44.8)
Namibia	516	37.3 (33.4-41.3)	47.2 (38.7-55.8)	48.9 (34.4-64.1)	50.9 (30.4-71.7)
Nepal	524	24.9 (21.2-28.7)	36.4 (31.4-41.4)	40.3 (33.1-47.6)	45.5 (30.8-59.1)
Netherlands	528	60.1 (51.9-67.5)	61.0 (51.7-68.7)	59.6 (45.3-73.0)	58.6 (39.5-76.3)
New Zealand	554	56.1 (42.8-71.8)	55.9 (40.0-73.2)	56.0 (38.7-74.2)	56.6 (37.9-75.3)
Nicaragua	558	42.9 (39.2-46.6)	48.3 (44.6-52.0)	50.7 (42.2-59.1)	52.2 (38.9-65.6)
Niger	562	8.9 (6.8-11.4)	11.5 (8.7-14.9)	17.2 (13.3-21.9)	24.4 (13.5-39.9)
Nigeria	566	13.0 (10.6-16.0)	15.5 (12.8-18.7)	18.0 (12.7-25.0)	24.4 (12.9-41.4)
Norway	578	56.3 (43.4-73.3)	55.7 (41.0-75.2)	54.6 (37.5-75.9)	54.6 (35.8-76.9)
Oman	512	19.1 (14.4-25.6)	17.4 (12.7-24.4)	21.4 (14.3-30.9)	25.6 (15.4-38.6)
Pakistan	586	17.7 (15.3-21.3)	21.4 (17.0-27.1)	27.2 (19.4-36.6)	32.5 (20.4-45.9)
Panama	591	41.8 (31.7-53.8)	43.1 (36.6-51.3)	47.1 (34.6-61.0)	49.3 (31.2-68.5)
Papua New Guinea	598	20.6 (15.3-27.6)	24.7 (17.0-34.7)	27.0 (15.8-42.1)	30.1 (16.2-50.2)
Paraguay	600	47.2 (40.6-54.7)	59.3 (51.8-67.3)	57.5 (47.5-67.9)	60.7 (42.7-77.1)
Peru	604	43.8 (40.8-46.6)	50.3 (48.0-52.5)	53.2 (46.2-60.8)	55.4 (40.0-71.8)
Philippines	608	31.3 (28.2-34.5)	32.2 (28.2-36.3)	35.3 (26.8-44.1)	37.9 (24.6-52.1)
Poland	616	44.2 (34.3-54.9)	38.9 (31.7-47.3)	42.1 (29.1-57.1)	43.7 (27.6-62.5)
Portugal	620	56.0 (45.6-67.8)	56.3 (46.2-66.1)	54.8 (41.4-68.2)	54.5 (36.0-73.3)
Puerto Rico	630	49.8 (39.7-70.9)	51.4 (37.1-74.1)	53.1 (36.4-76.0)	56.0 (37.0-78.0)
Qatar	634	27.0 (20.5-34.8)	27.1 (20.4-35.4)	29.5 (20.2-40.3)	32.2 (19.9-45.4)
Republic of Korea	410	52.7 (44.1-70.5)	53.9 (44.3-71.9)	52.9 (41.1-72.4)	54.3 (39.3-74.3)
Republic of Moldova	498	48.5 (43.0-54.1)	49.0 (41.3-56.5)	51.8 (38.6-64.7)	52.1 (34.8-68.9)
Réunion	638	47.1 (35.6-63.7)	46.5 (31.4-66.9)	46.9 (29.9-69.2)	49.3 (30.6-72.4)
Romania	642	50.8 (40.5-65.7)	52.0 (39.5-69.2)	51.7 (36.1-70.7)	50.6 (33.2-71.8)

continued

Table 10. Any contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Russian Federation	643	49.2 (41.2-58.0)	49.3 (41.7-59.1)	49.3 (36.6-64.5)	48.0 (31.8-67.2)
Rwanda	646	9.3 (7.3-12.0)	27.3 (24.3-30.1)	31.7 (24.9-39.1)	34.8 (23.2-47.8)
St. Lucia	662	39.0 (27.8-53.1)	43.5 (34.5-53.3)	46.2 (32.2-62.1)	50.0 (31.0-69.9)
St. Vincent and the Grenadines	670	42.2 (27.6-64.9)	45.2 (27.5-69.5)	47.4 (27.9-72.5)	50.3 (29.5-74.8)
Samoa	882	15.9 (11.5-21.6)	17.2 (14.2-20.6)	17.4 (12.0-24.5)	21.1 (11.7-35.8)
Sao Tome and Principe	678	23.0 (17.5-30.3)	30.6 (25.2-36.5)	35.9 (25.0-48.8)	41.0 (24.1-60.6)
Saudi Arabia	682	17.8 (12.1-25.8)	17.6 (11.8-26.1)	20.3 (13.9-29.4)	25.4 (14.9-39.0)
Senegal	686	8.6 (6.9-10.7)	10.5 (8.5-13.0)	18.5 (13.8-24.3)	24.6 (13.9-39.4)
Serbia	688	49.2 (40.0-59.1)	51.6 (43.9-58.8)	47.5 (34.2-61.7)	50.0 (31.2-69.8)
Sierra Leone	694	6.8 (5.3-9.0)	14.8 (12.4-17.5)	22.4 (14.0-33.9)	30.0 (15.5-51.0)
Singapore	702	39.4 (31.0-54.5)	38.1 (26.3-59.4)	38.3 (25.1-62.3)	40.5 (24.9-65.8)
Slovakia	703	50.2 (37.1-68.8)	48.2 (31.6-70.3)	48.4 (30.5-71.6)	49.2 (29.4-73.1)
Slovenia	705	51.6 (40.3-71.4)	49.9 (34.6-72.4)	49.8 (32.7-73.8)	50.1 (30.6-74.7)
Solomon Islands	90	21.9 (13.6-33.3)	23.5 (17.7-30.9)	23.7 (16.9-33.2)	27.7 (15.6-45.5)
Somalia	706	6.3 (4.2-10.5)	12.2 (7.4-20.4)	17.9 (9.2-32.2)	25.4 (12.6-42.0)
South Africa	710	49.2 (42.2-56.6)	49.1 (37.5-61.7)	49.5 (34.5-65.4)	52.0 (33.1-71.2)
South Sudan	728	4.1 (1.6-12.0)	6.1 (3.0-15.3)	9.8 (4.6-21.8)	18.7 (8.3-39.6)
Spain	724	53.2 (46.0-62.4)	53.5 (44.2-66.0)	53.9 (42.8-68.5)	53.2 (37.7-71.8)
Sri Lanka	144	44.7 (41.2-48.3)	45.8 (39.3-51.5)	44.8 (38.4-50.7)	44.2 (32.5-54.0)
State of Palestine	275	33.2 (29.5-38.0)	34.0 (29.3-39.9)	36.4 (28.5-45.1)	37.8 (26.1-49.2)
Sudan	729	5.7 (3.9-9.5)	7.8 (5.6-12.1)	10.8 (6.8-17.9)	16.9 (9.0-29.8)
Suriname	740	29.9 (24.8-35.6)	36.1 (30.3-42.5)	40.4 (26.3-57.0)	45.3 (26.9-66.8)
Swaziland	748	27.7 (21.0-37.0)	46.3 (40.3-52.6)	51.0 (37.7-65.2)	54.4 (35.5-73.7)
Sweden	752	51.9 (37.7-70.8)	51.2 (33.1-73.8)	52.2 (32.6-74.9)	52.7 (31.6-76.4)
Switzerland	756	69.8 (57.0-80.6)	69.4 (58.4-78.3)	68.2 (51.8-81.2)	66.9 (46.0-83.7)
Syrian Arab Republic	760	28.5 (24.0-34.5)	32.1 (27.1-38.2)	31.7 (23.1-41.1)	34.2 (22.8-45.5)
Tajikistan	762	24.2 (18.7-30.2)	22.4 (18.1-27.3)	24.9 (16.8-34.7)	28.6 (16.8-42.6)
Thailand	764	46.9 (44.0-49.7)	48.5 (45.8-51.2)	47.2 (41.6-52.9)	46.7 (35.9-58.3)

continued

Table 10. Any contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
TFYR Macedonia	807	37.7 (24.7-52.5)	36.3 (26.7-47.4)	39.4 (24.8-56.1)	43.2 (24.9-64.1)
Timor-Leste	626	9.2 (7.2-11.7)	13.8 (11.1-17.0)	14.0 (10.5-18.3)	15.4 (8.9-23.5)
Togo	768	22.8 (18.3-28.5)	18.8 (15.4-23.0)	22.2 (14.5-32.4)	29.0 (15.3-47.3)
Tonga	776	15.9 (8.9-26.4)	18.1 (13.5-24.3)	19.8 (12.9-29.1)	23.6 (12.9-40.5)
Trinidad and Tobago	780	27.1 (22.5-32.5)	32.3 (25.5-41.5)	37.0 (24.6-53.3)	42.3 (25.4-63.0)
Tunisia	788	33.7 (30.5-38.8)	33.3 (28.3-39.7)	34.4 (27.1-42.7)	34.5 (24.5-44.6)
Turkey	792	43.6 (38.5-48.4)	47.8 (43.4-51.7)	47.1 (39.5-53.4)	45.2 (33.8-54.0)
Turkmenistan	795	38.1 (34.3-41.6)	33.0 (26.3-39.7)	35.1 (26.9-43.5)	35.6 (23.7-46.9)
Uganda	800	17.5 (15.1-20.1)	22.0 (17.9-27.0)	30.4 (24.6-37.2)	38.5 (24.4-55.4)
Ukraine	804	53.3 (47.3-59.4)	52.0 (44.8-59.1)	52.6 (39.3-66.1)	51.4 (34.0-69.9)
United Arab Emirates	784	22.9 (14.5-34.0)	28.4 (16.0-43.4)	33.1 (18.1-49.9)	34.7 (19.4-50.7)
United Kingdom	826	70.4 (60.5-76.9)	70.3 (57.6-80.2)	68.5 (50.6-82.5)	67.1 (45.1-83.7)
United Rep. of Tanzania	834	21.2 (17.0-26.1)	28.0 (24.8-31.6)	34.1 (24.8-44.7)	40.3 (24.4-59.0)
United States of America	840	63.8 (54.3-72.7)	62.0 (52.4-71.0)	60.3 (45.6-74.2)	60.1 (40.4-77.9)
United States Virgin Islands	850	34.7 (20.6-63.7)	37.6 (20.2-67.9)	40.3 (20.7-70.6)	44.8 (23.3-74.1)
Uruguay	858	52.2 (42.1-73.3)	53.4 (40.9-74.2)	54.8 (40.5-75.9)	56.9 (39.4-77.5)
Uzbekistan	860	43.5 (39.5-47.4)	44.8 (36.0-52.6)	47.8 (34.9-58.7)	46.4 (31.1-59.3)
Vanuatu	548	27.1 (20.8-34.8)	31.1 (24.8-38.2)	34.4 (23.6-47.2)	36.8 (21.4-55.6)
Venezuela, Bolivarian Republic of	862	45.7 (39.1-55.2)	50.4 (41.0-63.8)	52.4 (38.9-69.3)	54.7 (37.6-73.8)
Viet Nam	704	50.1 (47.8-52.4)	55.2 (53.1-57.3)	58.0 (51.6-63.1)	55.7 (43.8-64.2)
Yemen	887	13.0 (9.9-17.9)	20.1 (15.7-26.3)	26.5 (19.1-35.9)	32.3 (20.4-45.3)
Zambia	894	21.4 (17.2-26.1)	31.8 (25.6-38.8)	37.2 (27.1-48.8)	41.9 (27.0-59.1)
Zimbabwe	716	39.1 (34.5-43.8)	43.2 (40.2-46.4)	49.2 (40.7-58.1)	49.7 (34.6-65.2)

ii. Modern contraceptive use in 185 countries or areas

Table 11. Modern contraceptive use among all women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	5.8 (3.6-9.0)	13.0 (10.7-16.2)	16.5 (11.6-22.9)	25.5 (14.3-38.6)
Albania	8	10.5 (7.1-14.6)	10.3 (6.7-14.9)	17.8 (7.6-31.9)	28.4 (11.6-47.4)
Algeria	12	26.4 (22.9-30.9)	25.0 (20.4-30.9)	27.3 (19.4-35.2)	28.3 (18.1-37.9)
Angola	24	5.4 (3.7-7.5)	11.6 (8.3-15.9)	14.5 (9.4-21.5)	21.2 (10.7-38.1)
Antigua and Barbuda	28	33.2 (18.8-58.3)	37.0 (19.4-64.1)	40.1 (20.8-66.8)	45.3 (23.9-70.4)
Argentina	32	40.9 (28.0-56.1)	49.2 (37.7-61.8)	53.7 (38.0-69.1)	55.5 (35.0-74.5)
Armenia	51	15.3 (12.5-18.2)	16.3 (13.4-19.3)	20.2 (13.2-27.2)	25.0 (11.8-37.3)
Australia	36	50.4 (39.3-61.8)	50.9 (39.6-60.5)	51.8 (37.8-65.7)	52.3 (33.3-71.1)
Austria	40	50.0 (36.4-62.7)	56.3 (44.4-66.6)	55.6 (39.7-70.1)	55.7 (34.9-73.4)
Azerbaijan	31	10.4 (7.6-13.8)	11.8 (6.2-19.4)	17.8 (7.3-30.3)	23.0 (9.2-37.1)
Bahamas	44	37.2 (22.3-61.8)	38.8 (20.7-65.6)	41.1 (21.3-68.0)	45.6 (24.4-70.7)
Bahrain	48	21.5 (12.1-31.4)	23.3 (11.2-34.9)	23.7 (11.3-35.5)	25.2 (12.0-37.0)
Bangladesh	50	36.3 (32.5-39.9)	42.5 (37.2-47.3)	46.7 (36.5-55.2)	47.9 (31.1-60.3)
Barbados	52	40.5 (27.9-54.0)	43.0 (33.6-52.4)	45.2 (31.3-59.0)	48.0 (29.5-65.6)
Belarus	112	38.0 (25.7-49.2)	45.7 (37.3-53.2)	51.3 (40.8-60.3)	51.5 (32.9-67.7)
Belgium	56	56.3 (47.1-66.2)	56.4 (48.4-64.8)	58.5 (44.1-72.6)	56.8 (38.1-75.0)
Belize	84	33.3 (25.6-42.1)	36.3 (29.6-43.4)	38.9 (28.7-50.7)	42.5 (26.6-59.5)
Benin	204	5.9 (4.4-7.7)	8.8 (6.6-11.4)	14.1 (8.3-22.1)	22.1 (10.7-37.9)
Bhutan	64	20.5 (17.9-23.5)	35.9 (30.1-41.4)	40.9 (29.5-51.4)	43.6 (29.1-56.0)
Bolivia, Plurinational State of	68	18.2 (14.8-21.6)	24.7 (18.9-30.3)	31.3 (22.8-39.6)	38.7 (22.4-55.2)
Bosnia and Herzegovina	70	11.8 (8.2-16.1)	11.8 (8.0-16.9)	17.9 (9.1-29.9)	28.3 (12.7-46.5)
Botswana	72	34.1 (23.9-52.5)	40.2 (26.7-61.4)	44.0 (27.5-66.0)	47.8 (29.3-69.6)
Brazil	76	52.9 (44.1-61.9)	61.3 (52.0-70.7)	62.0 (49.0-74.6)	62.8 (44.0-78.9)
Bulgaria	100	35.8 (23.4-48.4)	40.2 (25.6-54.6)	45.9 (27.3-62.2)	50.1 (29.1-67.5)

continued

Table 11. Modern contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Burkina Faso	854	7.1 (5.2-9.3)	14.4 (12.5-16.6)	21.9 (16.5-28.6)	28.0 (15.7-44.3)
Burundi	108	6.2 (4.8-7.8)	12.1 (10.6-13.7)	17.4 (12.9-22.5)	25.3 (14.4-37.1)
Cabo Verde	132	33.5 (27.5-40.1)	41.2 (29.0-54.2)	43.6 (27.7-60.4)	47.7 (28.5-66.3)
Cambodia	116	12.2 (10.4-14.1)	23.1 (19.9-26.1)	30.4 (20.6-38.8)	35.0 (19.4-47.2)
Cameroon	120	10.8 (8.4-13.5)	17.1 (13.7-20.8)	26.2 (16.0-37.5)	36.0 (18.8-54.3)
Canada	124	67.2 (57.0-74.3)	63.8 (48.4-75.8)	63.1 (44.3-77.3)	62.4 (41.8-78.2)
Central African Republic	140	8.5 (6.1-11.3)	12.1 (8.9-15.9)	17.6 (8.9-29.6)	25.7 (11.6-43.7)
Chad	148	2.5 (1.8-3.3)	3.7 (2.9-4.8)	5.9 (3.8-9.0)	11.2 (5.2-22.3)
Chile	152	43.7 (29.8-59.8)	52.7 (39.0-66.5)	56.9 (42.1-71.1)	58.4 (38.3-76.4)
China	156	67.2 (62.0-76.7)	65.8 (57.6-77.2)	67.1 (55.2-79.0)	64.0 (48.8-78.6)
China, Hong Kong SAR	344	52.4 (44.2-67.9)	47.3 (37.3-65.3)	46.4 (33.4-66.4)	48.2 (32.2-69.1)
Colombia	170	45.4 (41.8-48.7)	54.4 (51.0-57.6)	58.6 (48.7-67.9)	60.0 (42.1-75.2)
Comoros	174	12.7 (9.8-16.0)	11.3 (8.0-15.4)	15.2 (8.9-23.7)	23.1 (11.4-38.1)
Congo	178	11.3 (5.0-20.6)	21.1 (15.6-26.8)	27.8 (16.8-39.8)	37.3 (19.7-54.7)
Costa Rica	188	57.5 (45.6-69.4)	66.0 (55.8-70.8)	61.6 (45.6-75.6)	62.2 (42.1-78.9)
Côte d'Ivoire	384	10.2 (7.6-13.3)	14.1 (10.8-17.9)	18.8 (12.5-26.9)	26.7 (14.2-42.5)
Croatia	191	25.0 (8.9-46.3)	31.8 (12.4-53.8)	36.3 (15.4-58.1)	41.4 (19.7-63.1)
Cuba	192	61.8 (51.5-71.1)	67.3 (60.1-73.4)	67.5 (54.6-77.8)	66.6 (47.4-81.2)
Czechia	203	44.5 (32.4-55.5)	48.3 (36.3-59.9)	49.8 (33.8-64.8)	49.9 (31.2-67.5)
Democratic People's Rep. of Korea	408	45.2 (36.3-57.4)	49.1 (39.8-62.1)	54.3 (42.5-68.4)	54.7 (38.2-70.5)
Democratic Rep. of the Congo	180	6.9 (4.6-9.8)	7.2 (5.7-9.0)	11.7 (6.1-19.6)	20.3 (8.9-35.8)
Denmark	208	51.4 (34.9-67.5)	50.9 (31.3-70.0)	50.4 (29.7-71.3)	51.3 (29.8-73.0)
Djibouti	262	3.0 (1.7-7.1)	7.5 (5.4-12.9)	11.6 (7.2-19.5)	19.8 (10.6-31.8)
Dominican Republic	214	44.9 (41.3-48.6)	52.2 (47.6-57.1)	53.3 (42.0-64.6)	54.6 (36.8-71.8)
Ecuador	218	35.1 (30.4-39.4)	47.8 (40.9-54.8)	50.7 (36.8-64.2)	53.5 (35.0-70.7)
Egypt	818	35.4 (32.6-38.2)	39.6 (34.5-44.3)	42.2 (33.7-49.8)	41.6 (28.7-51.9)
El Salvador	222	37.9 (30.7-44.9)	44.0 (37.2-50.7)	46.1 (35.4-57.4)	49.3 (32.8-65.8)
Equatorial Guinea	226	7.1 (4.3-11.8)	10.7 (8.3-13.6)	15.1 (8.2-25.0)	22.1 (10.5-39.6)

continued

Table 11. Modern contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Eritrea	232	4.4 (3.2-6.1)	5.3 (4.4-6.4)	9.2 (5.0-15.7)	15.9 (7.3-29.2)
Estonia	233	42.1 (27.6-60.0)	44.3 (28.5-64.4)	45.5 (27.2-66.6)	46.2 (26.0-68.9)
Ethiopia	231	4.9 (4.1-5.8)	17.4 (14.3-20.9)	26.2 (21.6-31.1)	36.8 (23.7-50.4)
Fiji	242	26.9 (13.7-43.9)	29.5 (14.5-49.0)	31.2 (15.2-52.2)	33.4 (16.1-55.6)
Finland	246	53.2 (41.2-68.7)	54.1 (40.8-70.5)	57.8 (44.3-74.1)	57.6 (40.7-74.9)
France	250	61.2 (53.6-69.2)	62.6 (56.1-68.7)	61.8 (47.9-74.1)	60.4 (41.4-76.1)
Gabon	266	15.6 (13.1-18.1)	22.7 (15.8-30.2)	28.5 (16.8-41.4)	36.2 (18.8-55.0)
Gambia	270	9.2 (7.4-11.5)	8.5 (6.6-10.8)	9.4 (5.7-14.9)	14.7 (7.0-27.3)
Georgia	268	14.2 (9.6-20.1)	22.0 (15.9-28.4)	26.2 (14.5-37.3)	28.3 (14.4-41.7)
Germany	276	51.2 (38.3-64.3)	48.8 (38.2-60.6)	50.7 (35.3-66.5)	52.4 (33.9-70.4)
Ghana	288	11.3 (9.0-13.9)	15.8 (12.9-19.0)	22.0 (16.9-27.7)	27.1 (15.0-42.6)
Greece	300	25.1 (14.9-40.5)	33.2 (16.5-53.1)	37.6 (18.5-58.0)	42.0 (21.0-63.6)
Grenada	308	29.0 (14.2-58.0)	33.8 (15.7-63.2)	38.6 (18.9-66.4)	44.9 (23.7-70.0)
Guadeloupe	312	28.3 (12.7-54.2)	33.5 (15.1-60.4)	36.5 (16.3-63.0)	41.3 (19.4-66.8)
Guam	316	29.9 (17.2-47.6)	31.7 (16.6-53.0)	32.9 (16.1-55.9)	36.1 (17.9-59.9)
Guatemala	320	21.1 (17.8-24.4)	29.5 (25.0-33.8)	34.1 (26.0-42.3)	38.7 (24.3-53.3)
Guinea	324	5.1 (3.7-6.6)	7.3 (5.1-10.0)	10.6 (6.8-15.8)	17.5 (8.8-31.4)
Guinea-Bissau	624	6.8 (5.0-9.2)	18.7 (13.8-24.5)	24.4 (15.0-36.0)	29.5 (15.0-49.3)
Guyana	328	25.4 (20.5-31.7)	29.3 (25.0-33.9)	28.8 (19.7-39.5)	35.6 (20.8-53.5)
Haiti	332	14.4 (12.5-16.4)	20.5 (16.7-24.6)	25.3 (19.8-32.0)	33.3 (19.7-49.7)
Honduras	340	32.6 (28.0-37.2)	40.9 (35.8-45.5)	44.5 (33.4-55.3)	47.3 (30.9-62.5)
Hungary	348	41.3 (29.7-51.2)	37.0 (26.8-47.4)	38.7 (24.3-53.5)	40.5 (23.8-58.8)
India	356	34.0 (29.2-39.1)	37.6 (31.6-43.0)	38.7 (30.1-46.8)	41.3 (26.4-54.6)
Indonesia	360	37.7 (35.2-40.1)	42.7 (40.2-45.0)	42.9 (36.9-48.5)	42.2 (29.3-52.8)
Iran, Islamic Republic of	364	37.9 (32.8-42.3)	41.6 (36.3-46.4)	44.8 (31.2-54.1)	43.4 (27.2-53.6)
Iraq	368	20.7 (16.0-26.1)	24.9 (18.8-31.3)	27.3 (16.8-37.5)	29.4 (15.8-41.4)
Ireland	372	43.5 (29.3-63.1)	46.0 (30.4-65.4)	47.9 (29.9-67.9)	48.1 (27.8-69.6)
Israel	376	30.9 (17.0-46.7)	31.6 (16.4-51.5)	31.5 (16.3-54.2)	32.3 (16.2-57.9)

continued

Table 11. Modern contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Italy	380	34.1 (19.4-49.7)	41.7 (27.2-55.2)	45.5 (28.3-61.4)	48.7 (27.5-68.2)
Jamaica	388	36.6 (31.5-42.7)	38.3 (30.3-47.9)	39.7 (26.2-56.5)	43.9 (26.7-64.5)
Japan	392	34.8 (26.8-48.2)	33.8 (24.0-47.4)	33.2 (21.4-49.1)	37.6 (20.7-58.8)
Jordan	400	24.3 (19.3-28.8)	25.9 (21.6-29.8)	27.5 (17.6-35.6)	29.1 (15.8-39.7)
Kazakhstan	398	38.9 (33.4-44.2)	36.5 (31.4-41.8)	40.5 (30.6-50.9)	40.6 (25.5-57.2)
Kenya	404	23.6 (19.5-27.9)	33.1 (28.3-37.8)	43.9 (36.4-52.0)	46.8 (31.7-62.2)
Kiribati	296	23.7 (17.9-28.7)	16.7 (12.3-22.2)	21.0 (11.6-33.9)	26.2 (12.9-44.4)
Kuwait	414	22.9 (16.1-30.0)	25.5 (14.2-36.5)	28.4 (14.8-41.3)	28.5 (14.2-41.5)
Kyrgyzstan	417	32.7 (26.1-39.1)	26.3 (21.1-31.7)	29.0 (20.7-38.0)	31.3 (18.6-45.4)
Lao People's Dem. Republic	418	18.5 (16.1-21.0)	26.9 (21.3-32.5)	33.1 (21.9-43.5)	36.9 (21.6-49.5)
Latvia	428	43.3 (27.5-62.5)	44.6 (25.3-67.0)	46.2 (25.7-69.0)	47.2 (25.6-71.1)
Lebanon	422	19.9 (15.9-24.7)	19.9 (15.0-25.9)	21.5 (13.3-30.3)	27.4 (15.1-38.8)
Lesotho	426	26.0 (22.0-30.6)	38.5 (34.0-43.4)	47.7 (36.0-60.0)	50.6 (33.1-69.0)
Liberia	430	11.1 (6.5-18.1)	16.5 (12.1-22.0)	26.3 (19.2-35.3)	31.9 (18.5-49.3)
Libya	434	11.4 (7.2-17.5)	10.5 (6.5-17.1)	13.7 (6.9-22.7)	17.4 (8.3-28.1)
Lithuania	440	32.1 (20.2-46.1)	36.7 (24.8-50.8)	39.1 (23.3-56.6)	41.8 (23.0-61.1)
Madagascar	450	10.8 (8.8-13.0)	23.6 (19.5-27.6)	31.3 (21.1-41.8)	39.3 (22.9-55.3)
Malawi	454	20.0 (17.5-22.5)	32.7 (29.4-35.9)	44.8 (35.7-53.8)	48.5 (32.9-63.7)
Malaysia	458	21.3 (13.2-29.6)	20.9 (14.0-27.5)	23.1 (15.1-30.7)	28.3 (15.3-39.9)
Maldives	462	21.5 (17.6-25.3)	19.7 (15.4-24.0)	26.0 (15.5-36.7)	30.0 (15.8-43.4)
Mali	466	6.5 (4.9-8.3)	8.7 (6.8-11.1)	14.2 (9.2-21.2)	21.6 (10.9-38.0)
Malta	470	37.9 (20.2-56.2)	43.5 (22.2-63.5)	48.6 (25.2-68.2)	53.8 (29.0-72.8)
Martinique	474	28.5 (13.1-55.7)	32.9 (14.6-61.1)	36.3 (16.4-64.1)	41.1 (19.7-67.4)
Mauritania	478	3.6 (2.8-6.4)	6.8 (4.8-10.6)	11.2 (7.1-17.7)	18.4 (9.4-31.2)
Mauritius	480	28.3 (19.2-35.9)	26.2 (16.1-35.5)	27.9 (16.3-38.3)	35.6 (18.6-49.1)
Mexico	484	43.3 (37.8-49.0)	48.2 (43.5-53.7)	50.3 (41.0-60.3)	51.5 (35.4-67.6)
Mongolia	496	37.5 (33.2-41.4)	36.4 (32.1-40.8)	38.6 (27.3-49.9)	39.0 (23.3-55.9)
Montenegro	499	20.2 (14.9-26.1)	18.0 (12.5-24.5)	22.3 (12.7-34.1)	29.9 (14.9-48.1)

continued

Table 11. Modern contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Morocco	504	29.7 (24.9-34.7)	32.1 (27.8-37.2)	33.0 (24.6-40.9)	33.7 (22.1-43.2)
Mozambique	508	11.0 (8.0-14.9)	14.5 (11.6-18.2)	23.4 (16.5-32.3)	33.3 (19.6-50.2)
Myanmar	104	19.2 (16.2-22.5)	26.1 (21.6-31.0)	30.5 (25.0-35.9)	33.4 (22.4-43.6)
Namibia	516	36.5 (32.6-40.5)	46.6 (38.2-55.1)	48.3 (33.9-63.4)	50.3 (29.9-70.9)
Nepal	524	24.3 (20.7-27.9)	33.7 (28.9-38.4)	35.6 (28.5-42.4)	42.1 (27.2-55.1)
Netherlands	528	57.6 (48.8-64.9)	58.0 (48.0-65.5)	56.9 (42.1-69.5)	56.1 (36.8-72.8)
New Zealand	554	53.7 (40.1-69.1)	53.6 (37.0-70.2)	53.9 (35.8-71.2)	54.5 (35.1-72.3)
Nicaragua	558	41.1 (37.5-44.7)	46.6 (42.8-50.2)	48.9 (40.2-57.0)	50.5 (36.6-63.4)
Niger	562	6.8 (5.3-8.7)	10.1 (7.6-13.2)	15.9 (12.3-20.0)	23.1 (12.4-37.4)
Nigeria	566	8.1 (6.4-10.1)	11.0 (9.0-13.3)	14.3 (9.8-20.0)	21.4 (10.7-35.9)
Norway	578	50.8 (36.2-67.1)	51.4 (35.0-69.4)	51.1 (32.9-71.0)	51.5 (31.5-72.3)
Oman	512	14.5 (10.3-19.8)	10.9 (7.0-16.3)	14.6 (8.5-22.4)	19.4 (9.5-31.1)
Pakistan	586	14.0 (12.0-16.7)	15.8 (12.0-20.6)	21.3 (13.9-29.7)	27.3 (15.0-39.7)
Panama	591	39.1 (28.4-50.7)	40.6 (34.1-48.1)	44.6 (32.2-57.8)	47.0 (29.0-64.9)
Papua New Guinea	598	15.7 (11.0-20.6)	19.8 (12.8-27.7)	22.5 (12.0-35.4)	26.0 (12.6-43.5)
Paraguay	600	37.6 (30.2-44.9)	54.3 (46.0-62.0)	54.8 (44.7-64.6)	58.0 (39.7-73.8)
Peru	604	31.5 (27.9-34.6)	34.8 (31.5-37.8)	39.9 (31.1-48.2)	45.6 (28.0-61.6)
Philippines	608	20.3 (17.8-22.6)	22.4 (18.3-26.0)	26.2 (16.9-34.7)	30.2 (16.1-43.7)
Poland	616	28.7 (16.4-41.0)	31.8 (24.4-40.0)	36.2 (22.5-50.5)	39.5 (22.4-57.2)
Portugal	620	44.9 (31.5-55.9)	48.9 (36.7-58.3)	49.1 (34.4-61.2)	50.4 (31.0-67.8)
Puerto Rico	630	44.2 (33.2-64.0)	46.8 (31.0-67.9)	48.9 (30.9-70.5)	52.2 (31.6-72.9)
Qatar	634	22.0 (15.6-29.2)	23.7 (17.1-31.2)	25.9 (16.7-35.9)	28.4 (15.9-41.0)
Republic of Korea	410	45.6 (35.8-61.4)	48.1 (37.1-64.3)	48.0 (34.1-65.9)	50.1 (33.1-68.5)
Republic of Moldova	498	32.5 (26.2-38.7)	35.3 (26.3-43.3)	40.3 (25.6-53.5)	44.3 (25.1-60.6)
Réunion	638	45.1 (33.3-60.6)	45.0 (29.5-64.2)	45.5 (28.5-66.4)	48.0 (29.0-69.9)
Romania	642	27.0 (16.4-41.0)	40.1 (25.3-56.2)	43.8 (25.5-61.6)	46.1 (26.2-65.4)
Russian Federation	643	36.0 (23.9-47.5)	39.5 (30.1-49.6)	41.9 (27.1-56.5)	43.1 (26.0-60.9)
Rwanda	646	4.0 (3.3-4.8)	23.1 (20.4-25.4)	28.9 (22.2-35.7)	33.0 (21.0-45.0)

continued

Table 11. Modern contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
St. Lucia	662	37.1 (25.8-50.4)	41.1 (32.4-50.3)	43.9 (30.0-58.8)	47.7 (29.2-66.3)
St. Vincent and the Grenadines	670	40.4 (25.7-61.5)	43.5 (25.6-66.3)	45.7 (26.1-68.7)	48.6 (27.4-71.3)
Samoa	882	15.0 (10.7-20.3)	16.3 (13.5-19.5)	16.4 (11.2-22.9)	20.0 (10.8-33.4)
Sao Tome and Principe	678	21.0 (15.7-27.7)	28.3 (23.1-33.7)	33.5 (22.9-45.5)	38.9 (22.3-56.9)
Saudi Arabia	682	15.2 (9.5-22.5)	14.4 (8.5-21.9)	16.3 (10.2-23.7)	21.2 (10.9-33.1)
Senegal	686	7.3 (5.8-9.0)	9.6 (7.7-11.9)	17.3 (12.8-22.6)	23.4 (12.8-37.2)
Serbia	688	26.8 (19.6-34.6)	29.7 (23.6-35.5)	29.5 (18.0-42.6)	38.2 (20.0-57.0)
Sierra Leone	694	6.0 (4.6-7.9)	13.6 (11.3-16.0)	21.2 (13.1-32.0)	28.7 (14.5-48.2)
Singapore	702	34.1 (24.0-48.5)	34.0 (20.9-53.2)	34.8 (20.3-57.0)	37.4 (20.8-61.0)
Slovakia	703	36.9 (21.1-54.8)	39.7 (20.7-60.0)	42.2 (22.0-63.5)	44.8 (23.7-66.8)
Slovenia	705	38.8 (24.1-55.6)	40.9 (22.0-60.8)	43.0 (22.9-64.5)	45.5 (24.0-67.9)
Solomon Islands	90	17.8 (10.3-27.1)	19.5 (14.1-25.4)	20.0 (13.6-27.8)	24.3 (12.7-39.7)
Somalia	706	6.0 (4.0-9.7)	11.7 (7.1-19.4)	17.3 (8.7-30.8)	24.6 (11.9-40.3)
South Africa	710	48.9 (42.0-56.3)	48.9 (37.3-61.4)	49.2 (34.2-65.0)	51.7 (32.8-70.7)
South Sudan	728	3.2 (1.1-9.5)	4.7 (1.9-12.7)	8.0 (3.3-18.5)	16.3 (6.6-34.1)
Spain	724	47.5 (39.8-56.0)	51.0 (41.7-62.4)	52.3 (41.0-65.9)	51.8 (36.2-69.4)
Sri Lanka	144	34.1 (28.7-38.2)	36.6 (28.4-43.3)	37.0 (29.5-43.1)	38.0 (24.0-48.2)
State of Palestine	275	24.5 (21.2-28.2)	26.8 (22.1-32.0)	28.6 (19.6-37.2)	30.6 (17.5-42.4)
Sudan	729	4.7 (3.1-7.8)	7.2 (5.1-11.0)	10.2 (6.2-16.7)	15.9 (8.1-27.8)
Suriname	740	29.1 (24.1-34.8)	35.7 (29.9-42.1)	39.9 (25.9-56.3)	44.8 (26.5-65.9)
Swaziland	748	26.2 (19.7-35.0)	45.2 (39.1-51.3)	50.2 (37.0-64.2)	53.5 (34.8-72.5)
Sweden	752	46.2 (29.7-63.5)	47.0 (27.6-67.6)	48.4 (27.8-69.5)	49.5 (27.5-71.3)
Switzerland	756	65.6 (51.9-75.9)	65.8 (54.5-74.3)	64.9 (48.3-77.3)	64.0 (42.7-79.8)
Syrian Arab Republic	760	20.6 (16.4-25.5)	23.0 (18.2-28.6)	23.8 (14.5-33.2)	27.1 (14.4-38.6)
Tajikistan	762	20.3 (15.4-25.7)	20.0 (15.9-24.3)	22.8 (15.0-31.7)	26.4 (14.8-39.3)
Thailand	764	45.8 (42.7-48.5)	47.1 (44.3-49.7)	45.5 (39.8-51.0)	45.2 (34.2-56.3)
TFYR Macedonia	807	12.0 (5.1-23.9)	14.8 (10.0-20.9)	21.3 (10.5-35.3)	30.9 (14.1-50.2)
Timor-Leste	626	8.1 (6.3-10.4)	12.4 (10.0-15.3)	12.7 (9.5-16.6)	14.2 (7.9-21.6)

continued

Table 11. Modern contraceptive use among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Togo	768	11.7 (9.1-14.7)	15.8 (12.8-19.3)	20.1 (12.9-29.3)	27.5 (14.2-44.5)
Tonga	776	14.0 (7.2-23.1)	16.1 (11.8-21.2)	17.9 (11.3-25.9)	21.7 (11.3-37.1)
Trinidad and Tobago	780	23.4 (19.1-28.2)	28.5 (22.2-36.2)	33.1 (21.5-47.2)	38.2 (22.2-56.6)
Tunisia	788	28.9 (25.6-33.2)	27.6 (22.1-33.6)	29.4 (20.9-37.6)	30.6 (19.2-40.4)
Turkey	792	26.4 (19.8-32.6)	30.9 (23.5-37.2)	31.9 (20.5-41.4)	33.2 (17.7-44.9)
Turkmenistan	795	34.1 (30.5-37.2)	31.3 (24.7-37.7)	33.3 (25.0-41.3)	33.9 (21.8-44.7)
Uganda	800	15.0 (13.0-17.0)	19.6 (15.7-24.0)	27.6 (22.2-33.6)	35.9 (22.0-51.5)
Ukraine	804	36.8 (28.3-44.6)	40.6 (32.6-47.8)	43.5 (29.2-56.7)	45.4 (26.9-62.8)
United Arab Emirates	784	18.9 (11.0-28.8)	23.5 (11.5-37.1)	27.6 (13.1-43.1)	29.5 (14.0-44.8)
United Kingdom	826	68.6 (58.1-75.2)	68.5 (55.6-78.2)	66.8 (49.1-80.3)	65.4 (43.8-81.2)
United Rep. of Tanzania	834	16.5 (13.0-20.6)	23.5 (20.8-26.3)	29.7 (21.0-39.1)	36.8 (21.1-53.7)
United States of America	840	58.5 (47.5-67.5)	57.0 (46.2-66.0)	55.4 (39.9-68.9)	56.0 (35.8-73.0)
United States Virgin Islands	850	32.0 (17.5-58.7)	35.3 (17.7-63.3)	38.0 (18.3-66.2)	42.6 (20.9-69.8)
Uruguay	858	49.3 (39.0-67.4)	51.3 (38.7-70.3)	52.9 (38.6-72.4)	55.1 (37.2-74.5)
Uzbekistan	860	40.7 (36.5-44.4)	42.2 (33.2-49.8)	45.3 (31.8-55.9)	44.2 (28.5-56.4)
Vanuatu	548	24.7 (18.6-31.5)	28.3 (22.2-34.8)	30.7 (20.2-42.4)	33.7 (18.4-50.9)
Venezuela, Bolivarian Republic of	862	41.6 (34.3-50.2)	46.9 (35.6-59.3)	49.3 (34.3-65.0)	51.9 (33.7-69.5)
Viet Nam	704	38.6 (35.3-41.5)	45.2 (41.9-47.9)	47.7 (37.9-54.3)	47.8 (31.3-57.6)
Yemen	887	8.2 (5.8-11.8)	16.6 (12.5-21.9)	22.5 (15.2-31.1)	27.7 (15.7-39.8)
Zambia	894	16.4 (12.9-20.2)	28.2 (22.4-34.5)	34.5 (24.5-45.5)	39.9 (24.6-56.2)
Zimbabwe	716	37.3 (32.8-41.7)	42.4 (39.4-45.5)	48.6 (40.2-57.2)	49.0 (34.0-64.1)

iii. Unmet need for family planning in 185 countries or areas

Table 12. Unmet need for family planning among all women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	20.0 (13.4-27.9)	18.6 (14.1-23.6)	17.0 (13.2-21.2)	14.3 (7.8-21.3)
Albania	8	9.7 (5.9-14.6)	10.3 (7.3-13.8)	9.6 (5.0-16.2)	9.1 (3.9-17.5)
Algeria	12	6.4 (3.9-10.9)	5.5 (3.3-10.2)	5.4 (2.7-10.9)	5.0 (2.1-11.5)
Angola	24	25.3 (18.5-33.8)	27.2 (21.5-33.9)	26.7 (20.7-34.1)	23.8 (14.7-35.1)
Antigua and Barbuda	28	9.9 (4.5-20.4)	9.3 (3.6-20.9)	9.0 (3.2-20.3)	8.8 (2.9-20.6)
Argentina	32	12.3 (7.2-20.3)	9.8 (5.6-16.9)	8.3 (3.7-16.6)	7.8 (2.6-17.7)
Armenia	51	13.2 (10.7-15.8)	8.5 (6.9-10.5)	8.6 (5.7-12.0)	7.9 (3.4-14.3)
Australia	36	9.1 (4.7-21.5)	8.6 (4.6-21.3)	8.0 (3.7-21.3)	7.4 (2.7-22.3)
Austria	40	9.0 (4.4-19.6)	6.7 (3.2-16.7)	6.7 (2.6-18.3)	6.6 (2.2-19.6)
Azerbaijan	31	9.4 (6.1-13.2)	8.9 (5.3-13.1)	8.4 (3.8-14.9)	7.3 (2.6-14.6)
Bahamas	44	8.8 (3.8-19.0)	8.3 (2.9-19.2)	8.1 (2.7-19.5)	8.1 (2.5-19.6)
Bahrain	48	7.4 (3.3-13.6)	6.0 (2.2-12.5)	5.2 (1.7-11.9)	4.7 (1.4-11.3)
Bangladesh	50	14.8 (12.7-17.1)	11.6 (9.2-14.5)	9.4 (5.6-14.5)	8.3 (3.3-16.8)
Barbados	52	12.9 (7.2-21.3)	12.6 (7.6-19.7)	11.8 (6.1-20.5)	10.7 (4.1-21.1)
Belarus	112	7.6 (4.1-13.7)	5.8 (3.3-10.7)	4.9 (2.6-9.8)	5.1 (1.8-12.3)
Belgium	56	6.2 (3.3-15.8)	6.1 (3.1-16.7)	5.3 (2.0-16.9)	5.2 (1.6-18.3)
Belize	84	14.7 (10.1-21.6)	14.2 (9.8-21.1)	13.3 (8.3-21.1)	11.9 (5.6-21.6)
Benin	204	22.6 (19.7-25.7)	23.2 (19.9-26.7)	22.5 (16.9-29.2)	19.9 (12.4-29.2)
Bhutan	64	16.4 (10.8-23.2)	10.1 (6.4-15.1)	8.2 (3.7-15.0)	6.6 (2.2-14.4)
Bolivia, Plurinational State of	68	15.3 (12.7-18.3)	12.5 (9.5-16.1)	10.8 (7.3-15.6)	10.2 (4.8-18.0)
Bosnia and Herzegovina	70	10.4 (5.7-17.0)	10.6 (6.3-16.6)	10.4 (5.6-17.5)	10.1 (4.4-18.7)
Botswana	72	13.0 (8.0-23.3)	10.8 (5.6-21.1)	9.9 (4.3-21.0)	9.1 (3.4-20.5)
Brazil	76	7.6 (4.9-11.1)	5.8 (3.3-9.7)	5.7 (2.6-10.9)	5.7 (1.9-13.4)
Bulgaria	100	7.1 (3.3-13.7)	7.1 (3.2-14.1)	6.8 (2.7-15.0)	6.2 (2.2-15.1)

continued

Table 12. Unmet need for family planning among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Burkina Faso	854	24.6 (21.3-28.1)	20.7 (18.6-23.4)	21.7 (16.8-27.3)	18.9 (11.6-27.4)
Burundi	108	18.8 (14.3-23.9)	18.6 (14.9-22.6)	18.1 (14.5-22.2)	14.0 (8.0-21.4)
Cabo Verde	132	14.2 (9.3-23.9)	12.3 (6.5-23.3)	11.1 (4.7-22.6)	10.0 (3.4-21.6)
Cambodia	116	20.6 (18.3-22.7)	11.7 (9.9-13.6)	8.1 (4.8-12.6)	6.7 (2.4-13.9)
Cameroon	120	16.4 (13.9-19.3)	16.4 (14.0-19.0)	14.9 (9.8-20.9)	12.1 (5.3-20.9)
Canada	124	4.5 (2.3-11.6)	4.8 (2.1-14.5)	4.7 (1.7-15.9)	4.7 (1.5-16.5)
Central African Republic	140	18.4 (13.9-23.9)	19.7 (14.3-26.6)	19.7 (12.9-28.5)	18.0 (10.0-28.0)
Chad	148	16.2 (13.2-19.6)	17.8 (14.4-22.0)	18.5 (14.2-23.8)	18.6 (12.3-27.5)
Chile	152	9.9 (5.6-17.2)	7.0 (3.7-13.8)	5.5 (2.4-12.3)	5.5 (1.8-14.2)
China	156	3.4 (1.8-9.3)	3.9 (1.8-10.5)	4.2 (1.7-11.2)	4.7 (1.6-13.5)
China, Hong Kong SAR	344	4.1 (1.7-14.0)	5.7 (2.5-17.1)	6.0 (2.4-18.5)	6.1 (2.1-19.1)
Colombia	170	7.5 (6.4-8.8)	6.4 (5.5-7.5)	5.5 (3.0-9.0)	5.4 (1.9-12.0)
Comoros	174	23.2 (19.1-27.5)	21.0 (17.3-24.8)	19.9 (14.8-25.6)	17.1 (10.1-25.1)
Congo	178	17.5 (11.5-24.4)	15.3 (11.8-19.0)	14.8 (9.2-21.7)	12.9 (5.5-22.9)
Costa Rica	188	5.6 (3.0-12.2)	4.5 (2.9-10.1)	5.2 (1.9-13.0)	5.1 (1.6-14.4)
Côte d'Ivoire	384	23.3 (19.6-27.4)	20.9 (17.4-25.0)	20.5 (15.2-27.0)	18.8 (11.4-28.4)
Croatia	191	7.8 (2.6-17.2)	7.3 (2.5-16.6)	7.0 (2.3-16.1)	6.7 (2.2-15.7)
Cuba	192	8.7 (4.9-15.6)	6.6 (4.0-11.3)	6.2 (2.8-13.7)	6.1 (2.0-16.8)
Czechia	203	6.0 (3.3-11.3)	4.1 (2.1-9.0)	4.3 (1.7-10.4)	4.3 (1.5-11.5)
Democratic People's Rep. of Korea	408	9.4 (5.6-17.7)	9.2 (5.7-17.4)	7.2 (3.5-15.8)	7.4 (2.9-17.6)
Democratic Rep. of the Congo	180	21.5 (16.3-27.5)	21.2 (18.0-24.8)	21.3 (15.5-28.5)	19.4 (11.4-29.3)
Denmark	208	7.3 (3.1-18.5)	7.2 (2.6-19.8)	7.0 (2.3-20.6)	7.1 (2.2-21.2)
Djibouti	262	14.3 (9.1-21.7)	13.3 (8.6-20.1)	12.5 (7.9-19.2)	10.9 (5.3-18.7)
Dominican Republic	214	9.6 (8.0-11.5)	8.5 (6.8-10.5)	8.2 (4.5-13.0)	7.4 (2.6-15.3)
Ecuador	218	8.0 (5.6-11.7)	5.8 (3.8-9.7)	5.9 (2.7-11.6)	5.8 (2.0-13.6)
Egypt	818	9.5 (8.2-11.8)	8.6 (6.4-11.6)	8.8 (5.4-13.6)	7.6 (3.3-14.9)
El Salvador	222	9.7 (6.3-15.5)	8.6 (5.5-14.2)	8.2 (4.6-14.4)	7.9 (3.2-16.0)
Equatorial Guinea	226	22.7 (16.5-31.7)	23.8 (19.7-31.1)	23.2 (16.4-33.4)	21.2 (12.7-32.8)

continued

Table 12. Unmet need for family planning among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Eritrea	232	18.3 (15.4-21.5)	18.5 (13.9-23.7)	18.6 (13.0-25.1)	16.5 (10.3-23.2)
Estonia	233	8.5 (4.2-20.6)	7.9 (3.5-21.1)	7.6 (3.0-22.1)	7.2 (2.5-22.8)
Ethiopia	231	26.2 (23.5-28.7)	19.4 (16.9-22.1)	14.6 (11.8-17.7)	10.7 (5.5-18.0)
Fiji	242	14.7 (7.0-26.8)	14.3 (6.3-27.1)	13.9 (5.9-27.0)	13.0 (5.2-26.7)
Finland	246	5.5 (2.6-16.3)	5.1 (2.3-16.5)	4.2 (1.7-15.4)	4.6 (1.5-16.7)
France	250	3.8 (1.8-13.7)	3.8 (1.9-12.7)	3.9 (1.4-14.6)	4.1 (1.2-16.3)
Gabon	266	23.5 (20.5-26.5)	20.9 (15.8-26.3)	18.9 (11.5-27.1)	15.9 (6.8-27.3)
Gambia	270	20.0 (14.0-27.3)	18.0 (14.4-22.2)	17.5 (13.0-23.0)	16.7 (10.9-24.2)
Georgia	268	13.8 (9.4-20.7)	10.8 (7.2-17.1)	10.0 (5.1-18.5)	8.4 (3.6-18.5)
Germany	276	7.6 (3.4-19.0)	9.0 (4.5-21.1)	8.0 (3.4-21.0)	7.5 (2.6-20.6)
Ghana	288	24.8 (21.9-28.1)	22.3 (19.4-25.5)	19.2 (15.2-24.1)	16.6 (10.0-25.1)
Greece	300	6.0 (3.0-11.8)	5.9 (2.4-12.9)	5.9 (2.1-13.5)	5.7 (1.9-13.7)
Grenada	308	8.5 (3.6-20.1)	8.2 (2.8-20.2)	8.2 (2.7-20.3)	8.3 (2.5-20.0)
Guadeloupe	312	11.1 (5.0-22.3)	10.3 (4.1-21.6)	9.5 (3.5-21.6)	9.2 (3.2-21.3)
Guam	316	11.3 (5.8-22.4)	10.2 (4.8-22.2)	9.7 (4.1-22.3)	9.5 (3.6-22.8)
Guatemala	320	16.8 (14.2-19.5)	11.7 (8.8-15.0)	9.4 (6.6-13.3)	9.1 (4.6-16.0)
Guinea	324	21.5 (18.2-25.1)	20.0 (16.3-24.4)	20.4 (15.3-26.5)	19.6 (12.8-28.1)
Guinea-Bissau	624	16.7 (11.0-25.1)	15.8 (10.5-23.6)	16.3 (10.0-25.5)	15.3 (7.8-26.4)
Guyana	328	19.5 (14.9-24.9)	19.9 (16.9-23.1)	18.2 (12.9-24.4)	16.3 (8.7-25.1)
Haiti	332	25.3 (23.2-27.4)	24.5 (21.1-28.2)	25.3 (21.2-30.4)	21.5 (13.2-30.8)
Honduras	340	11.5 (8.5-15.1)	8.9 (6.7-11.6)	7.8 (4.7-12.4)	7.8 (3.5-14.8)
Hungary	348	5.4 (2.7-10.9)	6.6 (3.4-12.5)	6.4 (2.9-13.3)	6.2 (2.5-13.7)
India	356	12.5 (10.1-15.2)	10.4 (7.7-13.8)	9.2 (5.9-13.2)	8.3 (3.5-15.4)
Indonesia	360	10.7 (8.8-12.9)	9.0 (7.4-10.9)	9.4 (6.3-13.3)	8.6 (3.8-15.7)
Iran, Islamic Republic of	364	4.9 (2.8-7.7)	3.7 (2.0-6.1)	3.8 (1.5-8.4)	3.7 (1.2-9.7)
Iraq	368	12.2 (7.4-18.3)	8.6 (5.0-13.4)	7.5 (3.5-13.5)	6.3 (2.3-13.2)
Ireland	372	6.5 (3.0-19.9)	7.5 (3.3-20.6)	7.4 (2.9-21.1)	7.0 (2.4-22.0)
Israel	376	6.1 (2.3-16.7)	5.6 (1.9-17.0)	5.4 (1.8-17.7)	5.3 (1.6-18.9)

continued

Table 12. Unmet need for family planning among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Italy	380	6.2 (3.0-12.1)	6.1 (3.1-11.9)	5.9 (2.5-12.4)	5.5 (1.9-13.2)
Jamaica	388	9.1 (5.3-19.1)	8.5 (4.2-19.7)	8.3 (3.4-20.4)	8.1 (2.7-20.0)
Japan	392	11.4 (6.7-23.4)	13.0 (7.5-25.6)	13.7 (7.7-27.2)	11.8 (5.2-26.4)
Jordan	400	10.7 (8.2-13.5)	8.1 (6.4-10.1)	6.9 (3.8-11.5)	6.2 (2.4-12.6)
Kazakhstan	398	9.4 (7.4-11.9)	10.5 (7.3-14.5)	10.3 (6.2-16.0)	8.9 (4.3-15.9)
Kenya	404	20.2 (17.1-23.6)	16.2 (13.1-19.5)	11.6 (8.4-15.8)	10.1 (4.9-17.6)
Kiribati	296	17.8 (11.5-28.3)	18.6 (12.4-28.1)	18.4 (11.4-29.1)	16.4 (8.9-28.6)
Kuwait	414	12.5 (7.3-19.3)	9.9 (4.5-17.5)	9.0 (3.5-17.1)	7.2 (2.4-15.1)
Kyrgyzstan	417	9.4 (6.6-12.8)	11.4 (8.9-14.3)	11.9 (7.9-16.8)	10.2 (5.3-16.8)
Lao People's Dem. Republic	418	19.8 (14.8-25.3)	14.0 (9.6-19.2)	11.4 (5.7-18.9)	9.1 (3.3-18.2)
Latvia	428	7.7 (3.5-20.0)	7.3 (2.6-21.5)	7.3 (2.5-21.8)	7.0 (2.2-22.5)
Lebanon	422	6.5 (3.7-10.5)	6.1 (3.4-10.0)	5.8 (2.6-10.9)	6.3 (2.4-13.2)
Lesotho	426	22.0 (18.0-26.5)	16.1 (13.6-18.8)	12.0 (7.3-17.5)	9.8 (3.9-18.3)
Liberia	430	28.3 (20.5-37.6)	29.2 (23.8-34.9)	25.3 (19.0-32.2)	21.7 (12.5-32.3)
Libya	434	10.7 (6.8-16.6)	9.2 (5.8-14.9)	8.0 (4.2-14.7)	6.9 (3.1-14.2)
Lithuania	440	9.5 (5.0-21.0)	8.1 (3.9-21.8)	8.1 (3.4-22.5)	8.1 (3.0-23.2)
Madagascar	450	21.6 (18.3-25.3)	17.0 (14.1-20.1)	15.7 (10.4-22.4)	13.3 (6.7-22.5)
Malawi	454	24.7 (22.4-27.0)	20.0 (17.8-22.4)	14.2 (10.1-19.2)	11.4 (5.7-19.7)
Malaysia	458	10.8 (5.9-17.4)	10.3 (5.8-16.4)	10.1 (5.3-16.2)	9.4 (4.0-17.3)
Maldives	462	16.1 (11.7-21.0)	17.8 (14.5-21.3)	16.1 (9.5-23.1)	12.4 (5.5-21.0)
Mali	466	25.4 (21.9-29.4)	23.0 (19.5-26.9)	22.5 (17.0-29.2)	21.2 (13.6-30.1)
Malta	470	2.4 (0.9-7.1)	2.7 (0.9-8.3)	2.9 (0.9-9.2)	3.2 (0.9-10.5)
Martinique	474	9.9 (4.3-21.2)	9.3 (3.6-20.8)	9.0 (3.1-20.8)	8.7 (2.8-20.7)
Mauritania	478	20.0 (17.7-23.4)	19.5 (15.0-25.2)	18.7 (13.6-25.1)	15.4 (9.1-23.0)
Mauritius	480	5.1 (3.0-8.9)	6.7 (3.8-11.5)	7.4 (4.0-13.4)	7.5 (3.5-15.6)
Mexico	484	8.7 (6.0-13.4)	8.8 (6.0-13.7)	9.3 (5.6-15.4)	8.9 (3.7-17.5)
Mongolia	496	8.3 (5.3-15.7)	11.3 (7.8-18.8)	11.2 (6.5-19.7)	10.2 (4.6-21.5)
Montenegro	499	11.1 (6.5-17.7)	13.8 (8.7-20.6)	13.7 (8.2-21.3)	12.1 (6.0-20.8)

continued

Table 12. Unmet need for family planning among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Morocco	504	8.4 (6.1-12.1)	6.4 (4.3-10.3)	5.6 (2.9-11.0)	5.0 (2.1-11.8)
Mozambique	508	20.6 (16.6-25.3)	22.1 (18.7-25.9)	20.1 (15.4-26.2)	17.0 (9.7-26.5)
Myanmar	104	13.0 (9.5-17.1)	11.5 (8.3-15.1)	9.0 (6.4-12.1)	7.6 (3.3-13.6)
Namibia	516	16.2 (14.2-18.2)	12.2 (8.5-16.4)	10.5 (4.7-18.3)	9.0 (2.7-19.4)
Nepal	524	24.9 (21.7-28.0)	20.6 (17.2-24.2)	17.2 (12.5-22.1)	13.0 (5.8-22.6)
Netherlands	528	6.0 (2.9-16.0)	5.8 (2.7-16.0)	5.7 (2.2-17.8)	5.7 (1.7-19.2)
New Zealand	554	6.7 (2.8-18.3)	6.8 (2.5-19.3)	6.8 (2.4-19.7)	6.7 (2.2-20.2)
Nicaragua	558	10.4 (8.5-12.7)	5.4 (3.9-7.7)	4.9 (2.9-8.5)	5.5 (2.6-11.6)
Niger	562	16.1 (13.2-19.5)	14.7 (12.0-17.8)	16.2 (12.2-21.1)	15.0 (9.2-22.0)
Nigeria	566	15.5 (13.4-17.9)	16.7 (13.8-20.0)	17.4 (12.9-23.1)	15.9 (10.0-23.6)
Norway	578	6.0 (2.7-16.6)	5.5 (2.1-17.6)	5.7 (1.9-19.2)	5.9 (1.9-20.2)
Oman	512	18.4 (12.5-24.9)	17.0 (12.0-22.7)	14.7 (9.3-20.8)	11.2 (5.2-18.3)
Pakistan	586	19.3 (15.8-23.3)	15.2 (12.4-18.2)	12.9 (8.7-17.6)	10.2 (4.6-17.1)
Panama	591	13.0 (7.5-21.0)	13.9 (9.3-20.2)	12.1 (6.6-20.2)	10.9 (4.5-20.8)
Papua New Guinea	598	20.4 (13.6-29.7)	19.4 (12.5-28.7)	18.2 (10.7-29.1)	16.6 (8.6-28.9)
Paraguay	600	7.8 (5.2-11.3)	5.9 (3.7-9.3)	7.3 (4.0-12.1)	6.7 (2.4-14.7)
Peru	604	9.7 (8.2-11.4)	5.2 (4.5-6.1)	5.3 (3.7-7.7)	5.9 (2.4-11.7)
Philippines	608	14.2 (11.9-16.7)	13.0 (10.6-15.7)	10.9 (6.9-16.0)	9.9 (4.7-17.3)
Poland	616	7.1 (3.4-14.0)	9.1 (5.0-15.6)	8.9 (4.2-16.8)	8.2 (3.4-16.8)
Portugal	620	5.2 (2.6-10.7)	5.7 (3.0-11.1)	6.0 (2.8-12.0)	5.6 (2.0-12.9)
Puerto Rico	630	5.6 (2.6-13.3)	5.9 (2.3-14.6)	6.1 (2.1-15.4)	6.3 (1.9-16.2)
Qatar	634	12.4 (7.4-18.7)	11.5 (6.9-17.1)	10.7 (5.7-17.1)	9.1 (3.9-16.5)
Republic of Korea	410	5.3 (2.5-15.6)	5.5 (2.6-15.7)	5.7 (2.4-17.0)	5.9 (2.1-17.9)
Republic of Moldova	498	8.7 (6.1-12.2)	9.5 (6.5-13.6)	9.8 (5.2-16.5)	9.3 (3.9-17.9)
Réunion	638	8.7 (4.1-17.7)	8.2 (3.1-18.5)	8.0 (2.6-19.1)	7.6 (2.2-18.9)
Romania	642	6.0 (3.4-10.7)	5.8 (2.9-11.5)	5.9 (2.5-12.8)	5.8 (2.2-13.4)
Russian Federation	643	6.4 (3.5-11.8)	6.4 (3.8-11.3)	6.4 (3.1-12.7)	6.1 (2.4-13.5)
Rwanda	646	20.8 (18.9-22.8)	14.3 (12.6-16.2)	11.7 (8.5-15.9)	9.7 (5.3-16.8)

continued

Table 12. Unmet need for family planning among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
St. Lucia	662	13.3 (7.5-22.8)	12.8 (7.8-21.8)	11.9 (5.9-22.0)	11.0 (4.2-22.7)
St. Vincent and the Grenadines	670	10.3 (4.7-20.3)	9.7 (3.8-20.3)	9.3 (3.4-20.4)	9.0 (3.0-20.8)
Samoa	882	27.3 (21.6-33.0)	28.0 (24.9-31.5)	24.2 (18.8-29.9)	20.4 (13.2-28.7)
Sao Tome and Principe	678	26.0 (20.4-32.3)	26.8 (22.3-31.3)	23.4 (16.2-31.1)	18.9 (9.5-29.5)
Saudi Arabia	682	16.7 (10.1-24.3)	16.4 (9.9-23.9)	17.5 (10.4-25.8)	14.4 (7.6-22.8)
Senegal	686	22.2 (18.1-26.8)	21.0 (18.4-23.7)	17.3 (14.0-20.8)	15.8 (9.8-22.8)
Serbia	688	7.4 (4.0-12.3)	6.9 (4.2-10.7)	7.2 (3.8-12.3)	6.8 (2.6-13.6)
Sierra Leone	694	23.2 (17.4-30.5)	23.7 (20.5-27.3)	21.4 (15.4-28.3)	19.1 (10.8-28.8)
Singapore	702	7.7 (3.9-14.1)	6.8 (3.0-14.3)	6.5 (2.5-14.3)	6.5 (2.3-14.7)
Slovakia	703	5.6 (2.4-12.1)	5.5 (2.1-12.9)	5.5 (1.9-13.2)	5.5 (1.8-13.5)
Slovenia	705	3.8 (1.6-8.8)	3.9 (1.5-10.1)	4.1 (1.4-10.9)	4.1 (1.3-11.4)
Solomon Islands	90	16.7 (10.5-24.7)	17.1 (11.8-24.0)	18.1 (12.3-25.9)	16.6 (9.6-26.4)
Somalia	706	20.7 (13.1-30.5)	19.1 (12.1-27.8)	16.7 (9.7-25.4)	12.2 (5.0-21.5)
South Africa	710	11.7 (8.5-15.9)	10.3 (5.9-17.6)	9.6 (5.0-18.0)	8.7 (3.3-18.9)
South Sudan	728	22.2 (14.5-32.9)	21.9 (14.8-31.3)	22.2 (14.5-32.3)	20.9 (12.7-31.0)
Spain	724	6.7 (4.0-11.5)	7.4 (4.2-12.8)	7.1 (3.8-13.2)	6.5 (2.8-14.0)
Sri Lanka	144	6.3 (4.5-8.7)	5.3 (3.4-7.8)	5.3 (3.5-7.7)	5.5 (2.3-11.0)
State of Palestine	275	11.2 (7.1-16.4)	8.7 (5.5-12.8)	7.4 (3.9-12.5)	6.7 (2.6-13.5)
Sudan	729	19.4 (14.3-25.8)	18.8 (13.9-25.2)	18.0 (12.7-24.9)	16.2 (10.2-23.6)
Suriname	740	14.3 (9.4-20.7)	13.6 (9.1-20.1)	12.5 (6.7-20.7)	11.2 (4.6-21.0)
Swaziland	748	19.6 (15.2-24.9)	13.1 (9.7-17.5)	10.8 (5.3-18.3)	9.3 (3.0-19.2)
Sweden	752	7.6 (3.4-19.2)	7.3 (2.7-20.4)	7.2 (2.4-21.1)	7.1 (2.2-21.6)
Switzerland	756	3.8 (1.7-11.9)	4.2 (2.1-11.1)	4.4 (1.8-13.1)	4.6 (1.4-15.3)
Syrian Arab Republic	760	11.2 (7.0-16.3)	9.0 (5.6-13.4)	7.4 (3.6-13.1)	6.6 (2.4-13.4)
Tajikistan	762	14.7 (10.2-20.3)	14.9 (11.8-18.2)	14.9 (10.1-20.1)	12.4 (6.3-19.5)
Thailand	764	4.1 (2.7-6.2)	3.5 (2.3-5.4)	3.7 (2.1-6.6)	4.1 (1.8-9.1)
TFYR Macedonia	807	13.1 (6.7-21.8)	13.4 (8.0-20.6)	12.8 (6.7-21.3)	11.5 (4.9-21.1)
Timor-Leste	626	14.7 (11.8-18.2)	17.9 (15.3-20.6)	12.3 (9.8-14.9)	8.5 (5.0-12.4)

continued

Table 12. Unmet need for family planning among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Togo	768	27.9 (23.8-32.0)	26.1 (21.8-30.6)	24.3 (18.7-30.7)	21.7 (13.4-31.0)
Tonga	776	15.9 (9.7-23.5)	15.9 (10.6-22.4)	14.7 (9.4-21.8)	13.8 (7.5-22.6)
Trinidad and Tobago	780	13.9 (9.9-21.1)	15.2 (10.5-23.9)	14.8 (8.6-24.5)	13.1 (6.1-24.2)
Tunisia	788	6.6 (4.3-10.7)	5.6 (3.3-10.1)	5.3 (2.6-10.7)	5.0 (2.1-11.6)
Turkey	792	8.1 (5.8-11.0)	4.6 (3.1-6.6)	4.0 (2.1-7.2)	4.2 (1.6-9.5)
Turkmenistan	795	8.9 (7.3-10.7)	9.7 (6.1-14.1)	9.6 (5.5-14.9)	8.2 (3.5-15.0)
Uganda	800	26.6 (24.3-28.9)	25.1 (21.9-28.4)	21.2 (16.8-26.2)	16.1 (9.1-24.8)
Ukraine	804	7.5 (5.1-10.8)	6.9 (4.8-9.8)	6.8 (3.4-11.9)	6.4 (2.5-12.9)
United Arab Emirates	784	16.2 (9.4-24.6)	13.1 (6.0-21.8)	11.7 (4.3-21.4)	9.2 (3.0-18.6)
United Kingdom	826	4.5 (2.3-11.5)	3.6 (1.6-12.6)	3.8 (1.3-14.9)	3.9 (1.1-16.2)
United Rep. of Tanzania	834	19.4 (16.4-22.7)	19.6 (17.5-21.8)	16.4 (12.2-21.5)	13.6 (6.9-22.0)
United States of America	840	4.7 (2.4-14.0)	4.7 (2.3-15.5)	5.0 (2.1-16.9)	5.0 (1.5-18.2)
United States Virgin Islands	850	8.0 (3.6-18.9)	7.7 (2.9-19.3)	7.6 (2.5-19.8)	7.6 (2.3-19.9)
Uruguay	858	5.1 (2.5-10.6)	5.3 (2.6-11.2)	5.4 (2.4-11.6)	5.6 (2.1-13.2)
Uzbekistan	860	7.0 (4.9-9.8)	6.3 (3.2-11.1)	6.4 (2.6-13.2)	6.0 (2.0-13.8)
Vanuatu	548	19.4 (12.6-29.6)	19.6 (12.8-29.2)	18.8 (11.3-29.5)	17.4 (8.8-30.2)
Venezuela, Bolivarian Republic of	862	9.3 (5.9-15.1)	8.0 (4.6-14.5)	7.9 (3.7-15.7)	7.6 (3.0-16.8)
Viet Nam	704	4.9 (3.8-6.2)	3.3 (2.2-4.6)	4.0 (2.1-7.2)	4.3 (1.5-10.0)
Yemen	887	25.2 (21.2-29.4)	18.6 (14.9-22.3)	15.2 (10.5-20.3)	10.8 (4.7-18.4)
Zambia	894	21.4 (18.1-25.0)	18.5 (15.0-22.5)	15.1 (10.4-21.2)	12.8 (6.8-21.5)
Zimbabwe	716	12.2 (9.9-14.8)	10.5 (9.0-12.0)	8.4 (5.7-11.9)	8.1 (4.0-14.8)

iv. Demand for family planning satisfied by modern methods in 185 countries or areas

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age

Country	ISO	2000	2010	2018	2030
Afghanistan	4	20.8 (12.9-31.8)	39.5 (32.5-47.8)	46.9 (36.1-57.9)	60.6 (39.8-77.6)
Albania	8	19.8 (13.0-28.3)	19.6 (12.5-28.9)	33.5 (14.7-57.1)	51.7 (22.1-76.1)
Algeria	12	71.8 (61.9-78.7)	72.9 (60.1-81.0)	75.2 (56.7-85.3)	78.2 (54.7-88.9)
Angola	24	16.2 (11.1-22.6)	28.6 (21.9-36.0)	34.2 (25.0-44.2)	46.0 (28.8-64.8)
Antigua and Barbuda	28	74.5 (53.9-87.4)	77.6 (54.4-90.3)	79.4 (55.6-91.7)	81.4 (56.6-92.6)
Argentina	32	73.4 (57.4-83.3)	80.3 (68.0-87.8)	83.7 (68.3-91.8)	85.1 (65.2-94.0)
Armenia	51	31.9 (25.5-38.6)	37.6 (29.6-45.5)	42.9 (27.8-57.1)	53.8 (26.4-74.5)
Australia	36	83.6 (67.7-90.8)	83.8 (67.9-90.6)	84.9 (66.7-92.4)	85.9 (63.7-94.5)
Austria	40	80.1 (63.1-88.5)	86.1 (71.7-91.9)	85.9 (68.2-93.0)	86.3 (64.4-94.2)
Azerbaijan	31	24.4 (17.4-33.0)	28.2 (14.8-45.5)	39.5 (16.7-63.3)	51.2 (21.5-75.6)
Bahamas	44	78.6 (59.2-89.5)	80.3 (58.4-91.7)	81.4 (58.6-92.9)	82.9 (59.6-93.4)
Bahrain	48	50.7 (28.8-69.6)	58.3 (29.4-79.0)	62.6 (31.4-82.4)	67.6 (34.8-85.8)
Bangladesh	50	61.7 (56.1-66.5)	70.1 (63.0-75.7)	75.7 (62.4-84.1)	78.3 (56.0-89.4)
Barbados	52	72.7 (56.6-83.5)	73.1 (61.1-81.6)	75.0 (58.9-85.3)	77.9 (57.3-89.1)
Belarus	112	65.5 (47.4-76.9)	74.2 (62.2-81.6)	78.5 (66.3-85.7)	82.2 (61.3-91.3)
Belgium	56	88.1 (75.4-92.9)	89.0 (75.2-93.8)	90.6 (74.3-95.9)	90.4 (70.2-96.6)
Belize	84	64.5 (52.3-73.9)	68.1 (57.8-75.9)	71.2 (57.7-80.8)	74.7 (55.2-86.6)
Benin	204	15.3 (11.7-19.5)	22.6 (17.5-28.0)	33.7 (22.2-45.4)	48.5 (28.8-66.1)
Bhutan	64	55.3 (45.8-65.8)	77.7 (67.4-85.7)	82.9 (67.0-92.5)	86.4 (67.5-95.3)
Bolivia, Plurinational State of	68	38.5 (31.4-45.4)	48.8 (37.7-58.3)	59.0 (44.0-69.4)	67.2 (43.1-81.5)
Bosnia and Herzegovina	70	25.1 (17.1-34.2)	26.1 (17.3-37.0)	37.4 (20.3-56.6)	54.2 (27.0-75.5)
Botswana	72	70.6 (55.8-83.1)	77.3 (60.1-89.1)	79.9 (60.6-91.4)	82.4 (61.7-92.9)
Brazil	76	82.9 (75.1-88.3)	88.3 (81.5-92.5)	88.9 (79.2-94.1)	89.1 (73.9-95.4)
Bulgaria	100	51.9 (34.9-66.6)	60.7 (41.0-74.9)	69.9 (44.7-84.1)	78.4 (51.5-89.7)

continued

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Burkina Faso	854	18.8 (14.4-23.5)	39.7 (35.0-44.3)	49.4 (39.9-58.9)	58.9 (40.6-75.6)
Burundi	108	22.3 (16.8-28.5)	36.5 (31.2-42.1)	45.3 (35.6-54.6)	60.6 (39.2-76.5)
Cabo Verde	132	65.8 (54.1-73.7)	74.2 (58.3-85.1)	77.3 (58.0-89.3)	80.5 (58.9-92.0)
Cambodia	116	33.5 (29.0-38.0)	52.3 (45.2-58.4)	62.0 (43.4-75.1)	70.1 (42.1-85.6)
Cameroon	120	26.5 (21.1-32.2)	38.9 (32.1-45.2)	51.4 (35.5-64.8)	64.9 (40.8-80.9)
Canada	124	91.1 (81.1-94.4)	90.5 (75.9-94.9)	90.7 (73.3-95.6)	90.6 (71.5-96.0)
Central African Republic	140	23.1 (17.0-29.8)	32.3 (24.0-41.0)	41.5 (23.9-57.3)	53.7 (29.5-72.5)
Chad	148	12.3 (9.0-16.5)	16.8 (12.8-21.8)	23.5 (16.0-32.6)	36.7 (20.3-55.1)
Chile	152	77.4 (62.9-86.1)	85.1 (73.5-91.1)	87.7 (75.2-93.1)	88.4 (71.8-94.9)
China	156	93.7 (84.8-96.3)	93.0 (83.8-96.2)	92.9 (82.7-96.5)	91.8 (78.5-96.4)
China, Hong Kong SAR	344	87.1 (70.7-92.5)	85.0 (68.0-91.1)	84.7 (66.0-91.8)	85.3 (64.9-93.1)
Colombia	170	75.1 (70.0-78.9)	83.3 (80.0-85.8)	86.4 (78.4-91.4)	87.4 (71.9-94.0)
Comoros	174	31.6 (25.0-38.2)	31.2 (23.1-39.6)	39.1 (25.2-53.0)	52.8 (30.3-71.0)
Congo	178	21.6 (10.1-36.7)	37.2 (28.0-46.1)	49.2 (32.4-63.5)	63.1 (39.0-79.3)
Costa Rica	188	86.7 (76.3-91.8)	91.6 (83.7-94.1)	90.3 (77.5-95.7)	90.4 (73.8-96.3)
Côte d'Ivoire	384	24.8 (19.1-30.6)	35.3 (28.6-41.8)	44.4 (33.5-55.4)	55.8 (37.2-72.1)
Croatia	191	46.0 (17.8-75.4)	58.8 (25.9-82.7)	66.8 (32.9-86.4)	74.8 (42.2-89.8)
Cuba	192	85.9 (75.9-91.2)	89.4 (82.9-92.9)	89.8 (78.8-94.6)	89.8 (72.9-95.7)
Czechia	203	73.3 (55.9-83.4)	81.0 (65.0-89.0)	83.7 (62.9-92.0)	86.2 (64.4-93.9)
Democratic People's Rep. of Korea	408	74.3 (60.3-81.9)	78.7 (65.6-85.4)	84.1 (69.7-90.6)	84.1 (65.4-91.9)
Democratic Rep. of the Congo	180	15.9 (10.7-22.3)	17.8 (14.1-22.0)	26.4 (14.9-39.4)	41.9 (21.3-61.1)
Denmark	208	82.8 (61.0-91.1)	83.6 (59.4-92.4)	84.2 (58.7-93.1)	84.7 (59.1-93.7)
Djibouti	262	15.9 (8.6-30.6)	35.0 (24.7-48.9)	46.9 (31.0-63.9)	62.9 (39.3-81.7)
Dominican Republic	214	78.9 (75.1-82.0)	83.7 (80.3-86.5)	84.0 (74.4-90.5)	85.3 (69.2-93.3)
Ecuador	218	67.8 (59.0-74.2)	79.6 (69.5-85.7)	81.4 (64.2-89.6)	83.4 (62.6-92.1)
Egypt	818	76.0 (71.4-79.2)	79.5 (72.8-84.3)	80.6 (69.8-87.6)	82.4 (64.2-91.5)
El Salvador	222	74.3 (62.8-82.0)	78.9 (69.2-85.0)	81.0 (68.8-88.4)	82.6 (64.5-91.6)
Equatorial Guinea	226	20.8 (12.9-30.3)	28.4 (22.0-34.4)	36.6 (22.9-50.6)	48.2 (28.2-67.5)

continued

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Eritrea	232	18.6 (13.6-24.3)	21.7 (16.8-27.5)	31.9 (19.1-46.7)	47.5 (26.7-68.3)
Estonia	233	74.1 (53.7-84.6)	79.3 (58.2-88.9)	80.8 (56.4-90.6)	82.5 (55.7-92.2)
Ethiopia	231	15.2 (12.7-18.1)	46.2 (39.9-52.5)	62.8 (55.2-69.8)	75.9 (57.0-87.3)
Fiji	242	60.1 (34.5-78.3)	63.2 (36.3-81.6)	65.3 (38.2-83.1)	68.3 (40.2-85.3)
Finland	246	85.1 (68.4-91.3)	86.1 (68.7-92.1)	88.9 (72.3-94.2)	88.8 (68.8-94.6)
France	250	89.9 (77.5-93.7)	90.9 (79.8-94.0)	91.1 (75.9-95.5)	91.0 (71.6-96.2)
Gabon	266	28.1 (23.3-32.8)	41.4 (30.7-51.8)	51.1 (34.3-66.1)	62.5 (39.0-79.9)
Gambia	270	30.2 (22.9-38.7)	30.9 (24.5-38.1)	33.9 (22.8-46.5)	45.5 (27.0-64.0)
Georgia	268	35.7 (23.7-48.4)	52.6 (37.8-64.6)	57.6 (33.6-74.7)	63.4 (33.9-81.1)
Germany	276	82.6 (65.5-90.7)	82.9 (66.4-90.7)	84.9 (65.6-93.2)	86.0 (64.9-94.4)
Ghana	288	26.7 (22.0-31.7)	36.6 (31.2-41.8)	48.6 (40.7-55.8)	57.9 (39.6-73.0)
Greece	300	46.9 (29.1-64.0)	59.9 (32.2-79.2)	66.9 (36.8-84.4)	74.7 (44.5-88.8)
Grenada	308	74.0 (52.1-87.8)	77.5 (53.4-91.0)	79.5 (55.1-92.0)	81.5 (56.4-92.7)
Guadeloupe	312	67.6 (41.5-83.3)	72.6 (45.4-87.5)	75.6 (48.4-89.1)	78.2 (51.1-90.8)
Guam	316	64.4 (41.9-78.4)	68.7 (43.1-83.0)	71.2 (43.6-85.6)	73.7 (45.8-88.0)
Guatemala	320	50.2 (43.6-56.3)	62.5 (54.2-69.2)	68.6 (55.5-77.5)	73.1 (51.4-85.0)
Guinea	324	17.6 (13.4-22.3)	25.0 (18.6-32.0)	32.4 (23.2-42.3)	45.2 (28.2-62.3)
Guinea-Bissau	624	25.6 (17.7-34.3)	50.8 (39.2-61.3)	57.1 (41.1-71.4)	63.6 (42.1-81.2)
Guyana	328	54.8 (46.1-63.3)	57.5 (51.2-63.5)	59.3 (45.6-70.9)	66.4 (46.5-81.5)
Haiti	332	34.3 (30.2-38.3)	43.2 (36.6-49.6)	47.9 (40.4-55.3)	58.1 (39.8-73.6)
Honduras	340	64.7 (57.0-71.1)	73.9 (66.3-79.4)	77.5 (63.3-85.8)	79.4 (59.0-89.2)
Hungary	348	75.3 (56.0-85.6)	74.0 (57.3-83.8)	77.5 (55.7-87.9)	80.6 (56.6-91.0)
India	356	67.3 (60.4-73.4)	71.3 (62.5-78.0)	74.1 (62.2-82.3)	77.4 (56.2-89.0)
Indonesia	360	76.3 (72.1-80.0)	80.2 (76.7-83.2)	80.1 (72.3-86.1)	81.2 (64.2-91.0)
Iran, Islamic Republic of	364	70.2 (59.6-78.4)	74.6 (63.5-82.6)	77.5 (54.9-88.8)	80.4 (52.8-91.6)
Iraq	368	52.5 (40.9-63.5)	58.2 (45.2-69.2)	62.6 (40.4-78.1)	68.5 (39.9-84.7)
Ireland	372	79.1 (58.3-88.1)	80.6 (59.3-89.5)	81.8 (58.5-91.1)	83.3 (57.4-92.7)
Israel	376	66.4 (36.9-83.3)	69.1 (37.5-86.1)	71.0 (39.1-87.8)	73.8 (41.4-89.0)

continued

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Italy	380	58.3 (35.8-74.5)	68.0 (47.3-80.7)	73.9 (51.1-85.8)	79.8 (53.7-90.6)
Jamaica	388	77.3 (63.7-84.5)	78.7 (63.0-87.2)	79.9 (61.2-90.3)	81.6 (60.9-92.6)
Japan	392	68.0 (51.6-77.4)	66.3 (49.7-77.1)	66.1 (47.6-78.5)	72.4 (48.8-86.2)
Jordan	400	55.5 (44.7-64.2)	58.5 (49.1-66.3)	62.3 (41.4-76.6)	67.1 (38.7-83.8)
Kazakhstan	398	72.6 (65.2-78.0)	75.5 (67.5-81.8)	77.2 (65.0-85.7)	79.6 (61.3-89.8)
Kenya	404	47.9 (40.9-54.4)	63.2 (56.3-69.2)	76.3 (68.5-82.3)	79.8 (63.8-89.4)
Kiribati	296	52.7 (39.4-62.7)	43.7 (32.0-54.6)	49.7 (31.4-65.8)	57.8 (34.3-75.8)
Kuwait	414	54.8 (39.2-68.1)	61.3 (36.6-78.4)	65.2 (37.2-82.8)	69.7 (39.3-86.7)
Kyrgyzstan	417	70.9 (60.7-78.5)	66.4 (58.0-73.7)	68.0 (54.4-78.6)	72.4 (52.0-85.3)
Lao People's Dem. Republic	418	45.8 (38.6-53.2)	60.4 (49.4-70.1)	68.3 (48.9-81.7)	74.5 (49.2-88.3)
Latvia	428	74.6 (52.1-85.7)	78.6 (51.6-89.9)	80.2 (52.4-91.3)	82.2 (53.4-92.7)
Lebanon	422	52.1 (41.4-62.5)	62.5 (47.9-73.8)	64.6 (41.6-80.0)	67.8 (40.1-84.5)
Lesotho	426	52.8 (46.2-59.4)	69.8 (64.6-74.6)	79.2 (68.1-87.8)	83.0 (66.1-93.3)
Liberia	430	27.2 (17.9-38.2)	35.2 (28.2-42.8)	50.1 (40.5-60.5)	58.5 (40.9-76.2)
Libya	434	37.2 (23.6-51.0)	38.1 (24.0-53.0)	48.3 (25.4-67.5)	58.7 (30.3-77.9)
Lithuania	440	61.5 (40.1-76.1)	70.8 (49.2-83.2)	73.8 (48.0-86.7)	76.7 (48.5-89.2)
Madagascar	450	26.7 (21.8-31.7)	49.9 (42.3-56.2)	60.3 (44.4-71.6)	70.0 (47.4-83.1)
Malawi	454	41.7 (37.3-45.9)	60.0 (55.4-64.3)	74.7 (65.1-82.2)	79.9 (63.4-89.8)
Malaysia	458	49.8 (31.0-66.1)	51.8 (34.3-66.1)	55.7 (36.5-70.4)	63.6 (36.1-80.3)
Maldives	462	50.1 (40.7-58.6)	46.6 (37.7-54.8)	55.2 (35.7-70.7)	63.9 (37.6-81.7)
Mali	466	19.5 (15.5-24.0)	26.9 (21.6-33.0)	38.2 (27.4-50.0)	49.8 (31.3-68.9)
Malta	470	64.2 (35.2-83.6)	71.9 (38.9-89.1)	76.6 (42.6-91.3)	81.6 (48.1-93.6)
Martinique	474	70.0 (44.2-85.3)	74.3 (48.1-88.6)	76.7 (50.0-90.3)	79.3 (52.5-91.7)
Mauritania	478	14.4 (11.0-22.1)	24.6 (17.9-34.2)	36.0 (24.3-49.1)	52.3 (31.4-71.9)
Mauritius	480	54.1 (35.6-69.0)	51.5 (31.3-68.8)	55.2 (32.4-72.8)	66.6 (36.3-83.3)
Mexico	484	77.3 (68.7-82.9)	80.6 (73.4-85.3)	81.2 (71.2-87.9)	82.3 (65.3-91.5)
Mongolia	496	71.2 (60.8-77.4)	70.1 (60.1-76.5)	71.5 (55.3-81.6)	74.0 (51.7-86.4)
Montenegro	499	41.8 (31.1-51.8)	40.9 (29.0-52.6)	48.9 (31.1-64.2)	60.6 (36.3-78.0)

continued

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Morocco	504	69.1 (59.3-76.0)	74.4 (65.2-80.3)	77.5 (60.2-86.3)	80.3 (56.9-90.1)
Mozambique	508	33.8 (26.6-41.2)	39.0 (33.0-45.3)	52.4 (41.9-62.7)	64.6 (46.1-80.0)
Myanmar	104	56.5 (48.0-64.7)	68.4 (59.2-76.6)	75.8 (66.9-83.0)	79.9 (61.7-90.8)
Namibia	516	68.3 (64.0-72.3)	78.5 (70.5-85.4)	81.5 (66.6-91.9)	84.0 (63.7-95.2)
Nepal	524	48.8 (42.9-54.6)	59.2 (52.2-65.5)	62.0 (51.4-70.9)	72.0 (51.2-85.6)
Netherlands	528	87.1 (73.9-92.2)	86.9 (73.1-92.1)	87.1 (69.6-93.5)	87.1 (65.6-94.4)
New Zealand	554	85.6 (68.8-92.6)	85.6 (65.9-93.4)	85.8 (64.5-93.7)	86.1 (63.6-94.2)
Nicaragua	558	77.2 (72.6-81.0)	86.8 (82.0-89.9)	88.0 (79.2-92.4)	87.4 (73.1-93.4)
Niger	562	27.2 (21.5-33.2)	38.8 (31.1-46.5)	47.6 (38.7-56.1)	58.6 (39.0-75.2)
Nigeria	566	28.5 (23.3-33.7)	34.2 (28.6-39.8)	40.5 (30.1-50.4)	53.1 (33.2-69.3)
Norway	578	81.7 (62.2-90.0)	84.0 (62.6-92.0)	84.7 (61.1-92.9)	85.2 (60.1-93.6)
Oman	512	38.5 (27.9-50.6)	31.7 (20.8-44.6)	40.3 (24.6-56.1)	52.6 (28.2-72.6)
Pakistan	586	37.7 (32.0-43.9)	43.3 (34.1-52.3)	53.1 (37.1-66.6)	63.9 (39.0-80.5)
Panama	591	71.4 (56.6-81.5)	71.2 (62.2-78.4)	75.4 (61.0-85.3)	77.9 (58.1-89.4)
Papua New Guinea	598	38.2 (26.3-49.1)	44.9 (29.7-57.6)	49.7 (29.0-66.6)	55.7 (30.6-74.3)
Paraguay	600	68.3 (57.2-76.2)	83.2 (75.4-88.0)	84.6 (75.1-90.4)	86.1 (69.2-93.5)
Peru	604	58.9 (52.0-64.4)	62.7 (56.6-68.1)	68.2 (54.9-77.9)	74.3 (50.0-86.7)
Philippines	608	44.6 (38.7-50.1)	49.5 (40.5-56.9)	56.6 (38.0-70.1)	63.2 (37.0-79.6)
Poland	616	55.9 (32.9-73.7)	66.2 (52.3-77.1)	70.9 (48.8-84.1)	76.1 (50.0-88.8)
Portugal	620	73.2 (53.9-83.5)	78.9 (62.2-86.9)	80.7 (62.3-88.9)	84.0 (62.1-92.3)
Puerto Rico	630	79.8 (66.6-87.7)	81.6 (62.9-90.7)	82.6 (61.3-92.1)	83.7 (60.9-92.9)
Qatar	634	55.9 (41.3-69.0)	61.3 (47.1-73.4)	64.6 (45.9-78.7)	68.7 (43.6-84.3)
Republic of Korea	410	78.7 (61.5-86.6)	81.0 (63.8-88.6)	82.0 (61.3-90.4)	83.2 (60.5-92.0)
Republic of Moldova	498	56.8 (46.0-66.2)	60.3 (46.1-70.9)	65.4 (43.8-79.3)	72.1 (44.9-86.3)
Réunion	638	80.7 (66.2-89.2)	82.3 (64.5-92.0)	83.0 (63.9-93.1)	84.3 (63.7-94.3)
Romania	642	47.5 (30.4-62.9)	69.3 (46.9-82.7)	76.2 (49.3-88.2)	81.6 (54.0-91.6)
Russian Federation	643	64.7 (45.3-77.8)	70.8 (56.1-80.6)	75.2 (53.2-86.3)	79.5 (55.3-90.0)
Rwanda	646	13.2 (11.0-15.8)	55.5 (50.3-59.7)	66.6 (54.8-74.8)	74.1 (54.6-84.6)

continued

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
St. Lucia	662	70.9 (54.8-82.0)	73.1 (60.3-81.8)	75.6 (58.4-86.4)	78.4 (57.3-90.2)
St. Vincent and the Grenadines	670	77.0 (57.4-88.2)	79.2 (57.4-90.8)	80.5 (57.7-91.7)	81.9 (57.7-92.7)
Samoa	882	34.8 (25.5-45.3)	36.1 (30.1-42.1)	39.3 (28.4-51.2)	48.2 (29.3-66.9)
Sao Tome and Principe	678	42.9 (34.0-51.9)	49.3 (42.1-56.5)	56.4 (42.8-69.4)	64.9 (43.8-81.7)
Saudi Arabia	682	44.0 (28.7-60.1)	42.3 (26.1-58.2)	43.1 (27.6-58.7)	53.2 (29.9-71.7)
Senegal	686	23.7 (19.0-29.0)	30.6 (25.4-36.1)	48.1 (38.7-57.1)	57.8 (38.4-74.9)
Serbia	688	47.4 (36.0-57.4)	50.8 (42.2-58.7)	53.9 (36.9-69.2)	67.3 (42.6-83.6)
Sierra Leone	694	20.0 (14.9-26.1)	35.3 (30.5-40.1)	48.4 (35.6-61.8)	58.4 (38.1-77.2)
Singapore	702	72.5 (52.8-84.1)	75.7 (50.9-88.2)	77.5 (51.5-89.8)	79.6 (53.2-91.1)
Slovakia	703	66.2 (40.1-82.0)	74.1 (44.4-87.9)	78.3 (48.3-90.4)	82.0 (53.5-92.6)
Slovenia	705	70.0 (45.4-84.0)	76.0 (45.5-89.2)	79.9 (49.8-91.4)	83.9 (54.7-93.3)
Solomon Islands	90	46.2 (28.8-60.8)	48.1 (35.9-58.5)	47.8 (34.2-59.4)	54.8 (33.5-71.8)
Somalia	706	22.4 (14.3-34.6)	37.4 (23.9-54.4)	49.9 (29.6-72.0)	65.4 (38.2-85.8)
South Africa	710	80.3 (73.2-86.2)	82.3 (69.9-90.7)	83.2 (68.4-92.1)	85.1 (66.6-94.7)
South Sudan	728	12.3 (4.4-28.5)	16.7 (7.4-34.6)	25.0 (12.0-43.6)	41.0 (21.1-62.9)
Spain	724	79.4 (69.5-85.0)	83.9 (74.1-89.4)	85.8 (74.8-91.6)	86.8 (71.4-93.5)
Sri Lanka	144	66.9 (54.9-75.5)	71.6 (56.7-81.4)	73.9 (60.4-82.3)	76.6 (51.7-88.2)
State of Palestine	275	55.3 (45.7-64.2)	62.7 (52.7-71.2)	65.2 (46.2-78.0)	68.9 (42.0-84.5)
Sudan	729	18.9 (12.2-28.8)	27.1 (19.2-37.8)	35.2 (23.1-49.3)	48.1 (28.8-67.3)
Suriname	740	66.0 (55.1-75.8)	71.9 (61.5-80.2)	75.5 (58.7-87.7)	79.2 (58.6-92.1)
Swaziland	748	55.5 (47.1-64.1)	76.1 (69.1-81.8)	81.3 (68.4-90.9)	84.1 (65.5-94.5)
Sweden	752	77.7 (54.3-88.1)	80.3 (54.1-90.9)	81.6 (54.5-91.8)	82.8 (54.8-92.9)
Switzerland	756	89.0 (75.7-93.4)	89.4 (78.8-93.2)	89.5 (74.5-94.3)	89.6 (70.5-95.4)
Syrian Arab Republic	760	51.8 (41.3-61.6)	55.9 (44.7-66.0)	61.0 (38.6-76.8)	66.4 (38.0-83.3)
Tajikistan	762	52.2 (41.3-62.6)	53.5 (45.1-61.3)	57.2 (42.3-70.2)	64.5 (42.2-80.7)
Thailand	764	89.8 (85.4-92.7)	90.6 (86.5-93.1)	89.5 (82.5-93.2)	89.1 (76.1-94.3)
TFYR Macedonia	807	23.7 (10.5-43.7)	29.8 (19.9-41.1)	40.8 (21.9-60.1)	56.4 (29.5-76.4)
Timor-Leste	626	34.1 (27.5-41.3)	39.3 (32.8-46.2)	48.5 (38.8-57.9)	59.4 (39.3-75.9)

continued

Table 13. Demand for family planning satisfied by modern methods among all women of reproductive age (cont'd)

Country	ISO	2000	2010	2018	2030
Togo	768	23.1 (18.5-28.1)	35.3 (29.6-41.3)	43.2 (31.8-54.5)	54.3 (35.0-71.9)
Tonga	776	44.1 (25.0-62.3)	47.5 (34.9-58.9)	51.9 (34.9-66.3)	58.2 (35.9-76.3)
Trinidad and Tobago	780	57.0 (46.2-65.6)	60.1 (48.5-69.0)	64.1 (47.0-76.8)	69.0 (47.6-83.0)
Tunisia	788	71.7 (63.2-77.7)	71.0 (57.5-79.8)	73.9 (54.5-84.6)	77.5 (52.0-88.4)
Turkey	792	51.0 (38.2-62.6)	58.9 (44.4-70.9)	62.4 (40.5-78.4)	67.2 (37.3-85.1)
Turkmenistan	795	72.5 (66.9-76.8)	73.4 (62.3-82.1)	74.4 (60.9-84.3)	77.4 (57.3-89.0)
Uganda	800	34.0 (30.2-37.8)	41.6 (35.3-47.8)	53.4 (45.5-60.7)	65.7 (47.0-79.7)
Ukraine	804	60.5 (47.1-71.4)	68.9 (57.2-77.3)	73.2 (53.7-84.7)	78.5 (55.0-89.9)
United Arab Emirates	784	48.3 (30.2-65.4)	56.6 (31.3-76.5)	61.7 (33.1-81.7)	67.1 (36.4-86.0)
United Kingdom	826	91.5 (81.7-94.9)	92.6 (80.5-96.0)	92.4 (76.4-96.4)	92.0 (73.3-96.6)
United Rep. of Tanzania	834	40.8 (34.1-47.1)	49.4 (44.8-53.6)	58.7 (46.8-68.4)	68.2 (47.6-82.0)
United States of America	840	85.4 (71.2-91.0)	85.5 (70.4-90.9)	84.9 (66.4-91.8)	86.0 (63.0-93.7)
United States Virgin Islands	850	74.9 (54.2-87.0)	77.8 (54.6-90.3)	79.5 (54.9-91.8)	81.3 (56.0-92.8)
Uruguay	858	86.0 (73.4-91.7)	87.2 (75.3-92.7)	88.0 (75.9-93.5)	88.3 (72.9-94.3)
Uzbekistan	860	80.5 (74.4-85.0)	82.7 (70.3-89.9)	83.5 (66.2-92.0)	84.3 (62.5-93.3)
Vanuatu	548	53.1 (39.9-64.6)	55.8 (43.7-66.6)	57.8 (40.9-71.4)	62.2 (39.9-79.0)
Venezuela, Bolivarian Republic of	862	75.7 (64.6-82.5)	80.2 (64.7-87.5)	81.7 (63.2-90.1)	83.3 (62.9-91.9)
Viet Nam	704	70.3 (63.7-75.6)	77.3 (71.1-82.2)	77.0 (61.5-86.0)	79.8 (54.6-90.6)
Yemen	887	21.4 (15.4-29.1)	43.1 (33.9-52.5)	54.0 (39.4-67.1)	64.2 (40.3-81.1)
Zambia	894	38.3 (31.5-44.7)	56.0 (47.5-63.4)	66.1 (52.8-76.1)	72.8 (53.3-84.7)
Zimbabwe	716	72.6 (66.8-77.6)	78.9 (75.6-81.8)	84.4 (77.0-89.5)	84.9 (70.7-92.7)