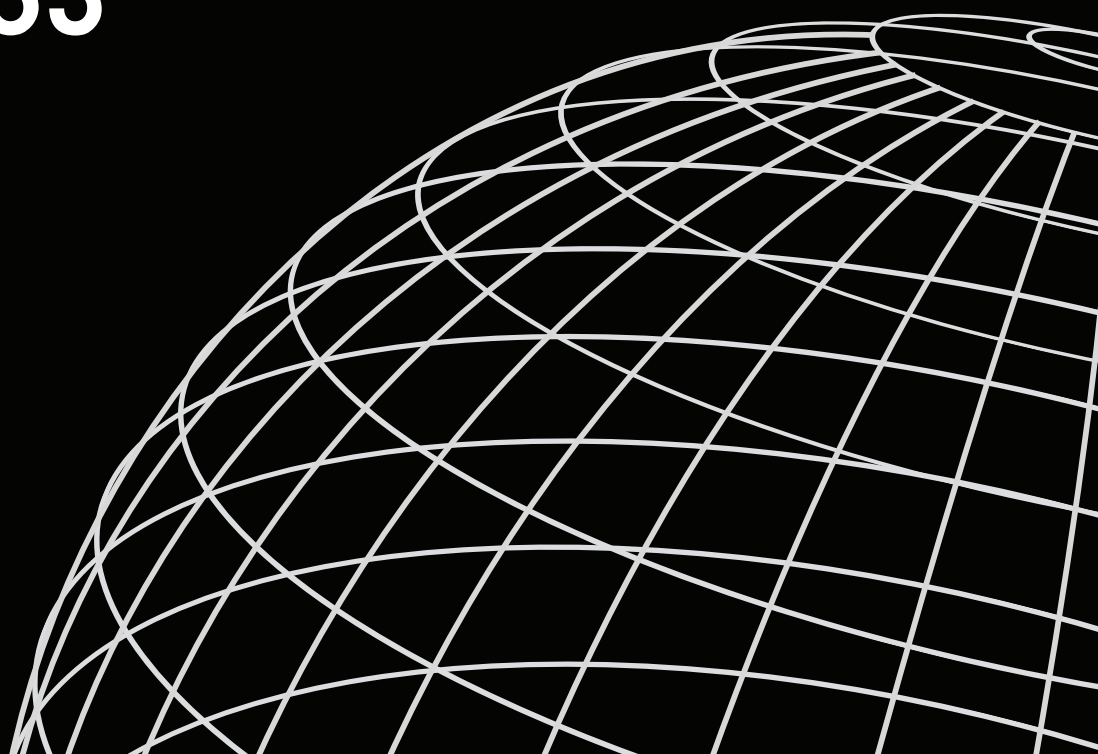




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TRENDS, DETERMINANTS, AND DYNAMICS OF TRADITIONAL CONTRACEPTIVE METHOD USE

DHS ANALYTICAL STUDIES 63



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Trends, Determinants, and Dynamics of Traditional Contraceptive Method Use

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Preface

The Demographic and Health Surveys (DHS) Program is one of the principal sources of international data on fertility, family planning, maternal and child health, nutrition, mortality, environmental health, HIV/AIDS, malaria, and provision of health services.

One of the objectives of The DHS Program is to analyze DHS data and provide findings that will be useful to policymakers and program managers in low- and middle-income countries. DHS Analytical Studies serve this objective by providing in-depth research on a wide range of topics, typically including several countries, and applying multivariate statistical tools and models. These reports are also intended to illustrate research methods and applications of DHS data that may build the capacity of other researchers.

The topics in the DHS Analytical Studies series are selected by The DHS Program in consultation with the U.S. Agency for International Development.

It is hoped that the DHS Analytical Studies will be useful to researchers, policymakers, and survey specialists, particularly those engaged in work in low- and middle-income countries.

Sunita Kishor

Director, The DHS Program

Abstract

Millions of women worldwide use a traditional method of family planning for fertility regulation. As global family planning dialogue has shifted to focus on modern method users only, the contemporary literature about family planning is largely silent on traditional method use. However, evidence from qualitative studies indicates that some women—even those who have access to modern methods — have a distinct preference for traditional methods. This study investigates levels and trends of traditional method use, multiple traditional methods and simultaneous modern and traditional method use; and discontinuation and switching in countries with at least five Demographic and Health Surveys (DHS). Data come from DHS surveys from the early 1990s to present in 16 countries—Bangladesh, Colombia, the Dominican Republic, Egypt, Ghana, Indonesia, Jordan, Kenya, Malawi, Peru, the Philippines, Rwanda, Senegal, Tanzania, Zambia, and Zimbabwe. The analysis includes currently married women age 15-49.

This report also includes case studies of four countries—Peru, Jordan, Indonesia, and Ghana—chosen by patterns of contraceptive use. We examine changes in the contraceptive method mix and run a series of binary logistic regressions to investigate the changing importance of different sociodemographic characteristics in the use of any method (modern versus traditional), traditional versus modern methods (among contraceptive users), and withdrawal versus periodic abstinence (among traditional method users).

In most countries in this study, married women over age 35, with five or more children, those who want no more children, those with more education, and urban residents have generally higher levels of use of traditional methods than their counterparts. The analysis by wealth quintile indicates two distinct patterns. In some countries, traditional method use is more common among richer women, while in others, women in the low quintiles who are poorer are more likely to use traditional methods.

Findings from the multivariate analyses for the four countries in the case studies illustrate that much of the high level of traditional method use found in the descriptive analysis was driven by certain groups of women's higher overall contraceptive use. When restricted to contraceptive users, many of these groups (the more educated and those who want no more children) were more likely to use modern than traditional methods.

The analysis of contraceptive discontinuation indicates that in 15 of the 16 countries, over 25% of women stopped using a modern method because of health concerns or side effects. In contrast, fewer than 2% of users of traditional methods discontinued for the same reason. Overall, traditional method users in the majority of countries in this study have lower discontinuation and switching rates compared with modern method users.

Traditional methods have two key disadvantages compared with modern methods. First, they are less effective and second, the two most popular traditional methods (withdrawal and periodic abstinence) require cooperation of the male partner. However, these methods continue to play a role in the lives of millions of women. We recommend a two-pronged policy strategy, one that ensures traditional method users are aware of more effective modern methods that can be used covertly, and —consistent with a rights-based approach to family planning—one that also does not completely exclude traditional method users from the opportunity to obtain respectful support and education about their method of choice.

Key words: Traditional method, withdrawal, periodic abstinence, trends, discontinuation, currently married women

1. Introduction

1.1. What are traditional methods of family planning?

Traditional methods of contraception were fundamental to fertility declines in Europe in the 19th and early 20th centuries (Rogow and Horowitz 1995; Tietze 1965; Santow 1995). Although their popularity declined after the introduction of more effective methods, traditional methods of family planning are still used by 6% of the world's women. In 2017, this included 71 million women and of these, 59 million lived in developing countries (United Nations 2016).

Much discussion has centered on the characteristics that define a method as modern, traditional, or folkloric. In general, modern and traditional methods are distinguished from one another based on effectiveness. The World Health Organization (WHO) (2017) classifies periodic abstinence and withdrawal as the only traditional methods of family planning, with a longer list of modern methods that include combined oral contraceptives (“the pill”), progestogen only pills, implants, progestogen only injectables, monthly or combined injectables, combined contraceptive patch, combined contraceptive ring, intrauterine device (IUD), male and female condoms, male sterilization (vasectomy), female sterilization (tubal ligation), Lactational Amenorrhea Method (LAM), emergency contraception pills, Standard Days Method (SDM), basal body temperature method (BBT), TwoDay method, and the symptothermal method.

Other authors have argued for different delineations between modern and traditional methods. Hubacher and Trussell (2015) consider modern methods as “a product or medical procedure that interferes with reproduction from acts of sexual intercourse.” They do not define traditional methods, but categorize any method that is not modern as “non-modern.” This definition does not include effectiveness. Therefore, methods such as SDM and LAM would be considered “non-modern” under the Hubacher and Trussell classification. Malarcher and colleagues from the US Agency for International Development (USAID) note that some women are “unwilling or unable to use devices or drugs” and have invested in research on modern, nonmedical methods of fertility regulation such as SDM and LAM (Malarcher et al. 2016a). They caution against labeling these methods non-modern because the methods are more likely to be excluded from programming and contraceptive counseling.

In contrast, Cates, Stanback, and Maggwa (2014) believe that methods of contraception should be classified primarily on effectiveness—and should not be differentiated as being modern or traditional. They argue that the definition of the modern contraceptive prevalence rate (mCPR) is outdated because long acting reversible methods (LARCs) are much more effective than short term modern methods, and some modern methods have similar levels of effectiveness as traditional methods. The authors suggest creating a weighted contraceptive prevalence rate that incorporates typical rates of effectiveness and continuation of methods.

Austad et al. (2016) argue that the classification of methods into traditional and modern is obsolete and that methods should be classified only by their effectiveness. Folkloric methods are not included in the above discussions because they have unproven effectiveness (Rutstein and Rojas 2006). Folk methods vary by country, but often include amulets, herbs, abdominal massages, and spiritual methods that people believe prevent conception or end pregnancy (Guerrero 1977; Quijano 1986; Lans 2007; Rutstein and Rojas 2006). In the DHS, folk methods are recorded only when reported spontaneously by the interview subject and are often grouped with traditional methods (Rutstein and Rojas 2006).

This report classifies methods as traditional or modern based on the Demographic Health Survey's Guide to Statistics (Rutstein and Rojas 2006). This guide includes periodic abstinence (rhythm or calendar method), withdrawal (*coitus interruptus*), and country-specific traditional methods of proven effectiveness (such as prolonged breastfeeding in the 1990 Jordanian DHS) as traditional methods. Our analysis also groups the small number of users of folkloric methods with the traditional method users.

Withdrawal involves removal of the penis from the vagina prior to ejaculation (Kowal 2011). In the best of circumstances, users of periodic abstinence (sometimes referred to as the rhythm method) limit the risk of conception by avoiding sexual intercourse during a woman's "fertile window"—the days during a menstrual cycle when intercourse is most likely to result in pregnancy (Jennings and Burke 2011). Some practices considered as traditional methods of family planning, such as prolonged breastfeeding or abstinence, are not considered contraceptive methods (Rutstein and Rojas 2006), although qualitative research in Ghana finds that women employ abstinence (even when married) to space or avoid pregnancy (Staveteig 2016).

Some natural methods are considered modern when practiced in certain ways. The Lactational Amenorrhea Method (LAM) focuses on exclusive (or nearly exclusive) breastfeeding for the first 6 months after birth with maximum suckling by the infant (Kennedy and Trussell 2011; Institute for Reproductive Health 2013). While LAM was classified as traditional in earlier versions of DHS surveys (Rutstein and Rojas 2006), USAID has always considered LAM a modern method (Malarcher et al. 2016a). Standard Days Method (also referred to as Cycle Beads) is a fertility awareness method that helps women track their menstrual cycle and avoid unprotected intercourse on the days when conception is most likely (Institute for Reproductive Health 2010). Because of the scientific research that studied the fertile window and its high efficacy rate, Standard Days Method (SDM) is considered a modern method (Institute for Reproductive Health. 2010; Malarcher et al. 2016a). However, this classification is not without controversy (Austad et al. 2016; Malarcher et al. 2016b).

1.2. Traditional methods in international family planning dialogue

The Millennium Development Goals, the framework for international development from 2000 to 2015, included reducing the unmet need for contraception as a measure of improving maternal health (United Nations Statistics Division 2015). Women are considered to have an unmet need for contraception if they do not want to have a child in the next 2 years, but are not using a contraceptive method to avoid pregnancy (See Bradley, Croft, Fishel, and Westoff 2012 for a detailed explanation). Traditional methods of family planning, such as withdrawal and periodic abstinence, are counted as methods that can meet a woman's need for contraception. Others have rejected the inclusion of traditional methods in this definition. For example, Singh, Darroch, and Ashford (2014) define women who use traditional methods as having an unmet need for contraception because these women face a higher risk of pregnancy.

Family Planning 2020 (FP2020 2016), a major international partnership established in 2012 to empower women and couples to determine their fertility goals autonomously and to improve contraceptive prevalence worldwide, aims to increase the number of modern contraceptive users by 120 million by the year 2020. The goal omits users of traditional methods. The FP2020 definition of unmet need also counts traditional method users as having an unmet need for family planning (Brown et al. 2014). In addition to this goal, FP2020 has emphasized a human rights-based approach to family planning that offers accessible, acceptable, high-quality services that are respectful of clients and actively supported by local communities (FP2020 2016; Hardee et al. 2014). The discussion of rights-based family planning implicitly emphasizes modern methods, but uses terms such as "high-quality reproductive health commodities" and "scientifically and medically appropriate methods"—that in principle empower women, men, and couples to choose the best-suited method and provide respectful services that should not necessarily preclude the inclusion of traditional methods.

In 2015, a new international development agenda was developed—the Sustainable Development Goals (United Nations 2015) that included a measure of reproductive health, demand satisfied for family planning in which modern contraceptive prevalence (mCPR) was divided by the sum of contraceptive prevalence and unmet need. This focuses on the use of modern methods by women with a need for family planning. The measure includes only modern methods because of their higher level of effectiveness in preventing unwanted pregnancies (Fabic et al. 2015). Traditional methods are not included as part of the current

international family planning goal, although they are still used by millions of women worldwide to delay or avoid pregnancies.

1.3. Preference for traditional methods

Evidence indicates that some women and couples, including those who may be knowledgeable about and have access to modern methods, have a distinct preference for traditional methods. They perceive several benefits to traditional methods of family planning, such as the methods being always available, free of charge, do not require visiting a medical professional, and have no physical side effects (Rogow and Horowitz 1995; Kowal 2011). Johnson-Hanks (2002) argues that while some people may believe that traditional method users are “not committed to contraception” or are “uninformed about the availability and low cost of biomedical contraception,” this is not the case. Her research in southern Cameroon finds that users of periodic abstinence have desires to delay pregnancy and are informed about modern methods. The reasons given by women for using periodic abstinence are the lack of negative “reproductive, sexual, or social” side effects (especially fear of future subfecundity), and the belief that the method is modern and honorable because it relies on the “local notions of self-discipline, temporal management, and measured self-restraint.” Respondents were reluctant to use methods which “disrupt normal sexual functions,” such as condoms, or the pill (because of an associated decrease in sexual desires). Periodic abstinence, however, is associated with the identity of a “disciplined, educated, and modern woman” because knowledge of the fertile period is necessary to use the method successfully.

In a follow-up study to the 2014 Ghana Demographic and Health Surveys (GDHS), Staveteig (2016; 2017) found that the survey respondents who were asked about their reasons for not using a modern method typically gave three times as many reasons for nonuse of modern methods in an extended follow-up discussion. The most frequently cited reasons were fear of side effects, religious opposition, personal opposition, and opposition from a partner. A number of respondents rejected any future modern method use entirely and stated that they would only consider traditional methods or complete abstinence. While limited to a single country, the study suggests that opposition to modern methods may be more substantial than is apparent from surveys such as DHS.

1.4. Current use of traditional methods

The United Nations estimates that 5% of currently married women worldwide use a traditional method of family planning in 2017 (United Nations 2016). This compares to 58% of married women who currently use a modern method. Regional rates vary from 3% in Oceania, 4% in North America and Africa, 5% in Latin America and the Caribbean and Asia, and 9% in Europe. Country level estimates vary even more, from less than 1% in 23 countries to over 30% in Albania, Azerbaijan, Bosnia and Herzegovina, Macedonia, and Serbia. Traditional methods are most common in Central Africa, Western Asia, and Eastern and Southern Europe, where over 10% of women rely on traditional methods.

In an analysis of surveys from 123 countries, Ross, Keesbury, and Hardee (2015) find that 22% of contraceptive users practice traditional methods, which is the same level as the most common method—the pill (22%). Darroch and Singh (2013) estimate that in 2012, traditional method users were almost equally divided between periodic abstinence (47%) and withdrawal (42%).

In 29 Sub-Saharan African countries, Rossier and Corker (2017) find that 4% of women use periodic abstinence or withdrawal, while 60% report knowledge of at least one of the methods. Knowledge of traditional methods is lower than modern methods across Sub-Saharan Africa, except in Central Africa, the region with the most prevalent traditional method use.

In an examination of the demographics of traditional method users, Ross et al. (2015) finds that globally, traditional method use, as a share of the method mix, remains stable across age groups—at around 20% of

methods used. Rossier and Corker's (2017) analysis of Sub-Saharan African countries shows reliance on traditional methods lower at the beginning and end of women's reproductive ages, and higher in the middle. They also find lower use of traditional methods among Muslim women compared with women of other religions. Higher use is found among the more highly educated, urban, and wealthier African women. This pattern was driven by these women's higher overall levels of contraceptive use. In an analysis of 15 low and middle income countries, Che et al. (2004) find that women who use periodic abstinence are more educated and reside in urban areas, compared with users of other methods.

In many countries, the use of traditional methods has declined since the 1970s as modern methods became more available. Globally, the United Nations estimates that traditional method use decreased from 11% of married women in 1970 to 5% today. During the same time, 19 countries saw a decline in traditional use by over 30 percentage points, and in an additional 20 countries by at least 10 percentage points. Much of the decline took place in Europe, where traditional methods of family planning were instrumental in the early fertility declines. However, some developing countries, such as Zimbabwe and Togo, have also experienced large declines. Seventy-two countries are estimated to have experienced an increase in traditional method use between 1970 and 2017, including over a 10 percentage point increase in Bolivia, Armenia, Cambodia, and Azerbaijan.

1.5. Effectiveness of traditional methods

Withdrawal requires the male partner to anticipate orgasm (Ortayli et al. 2005). For those perfectly practicing withdrawal, the probability of pregnancy within 1 year is 4% (based on research with American couples). However, many couples do not practice perfect withdrawal. Typical use among American couples results in a 22% probability of pregnancy within 1 year, which leads to the classification of withdrawal in the bottom tier of contraceptive effectiveness (Kowal 2011).

A review of the literature about withdrawal (Rogow and Horowitz 1995) highlights the belief among individuals and family planning professionals that withdrawal may be an ineffective method because of the presence of sperm in pre-ejaculatory fluid. The studies to support this theory are inconsistent (Ilaria et al. 1992; Zukerman, Orvieto, and Weiss 2003; Pudney et al. 1992; Killick et al. 2011). Jones, Fennell, Higgins, and Blanchard (2009) argue that health care providers and educators should discuss withdrawal as a legitimate option with clients, especially when used with other methods, such as hormonal and barrier methods.

Periodic abstinence is a fertility awareness based (FAB) method. Some FAB methods, such as the Standard Days Method require women to track their cycle to correctly predict ovulation (Arévalo, Jennings, and Sinai 2002). Because of the scientific research on the effectiveness of Standard Days Method, most organizations classify it as a modern method of family planning. Another FAB method, calendar rhythm, involves women tracking their cycle for 6 to 12 months before using the method to pinpoint the fertile window (Jennings and Burke 2011). In a study of 15 DHS surveys, many women and couples say that they are using the rhythm method, although they often have not tracked their cycle beforehand, and are abstaining on the days that they believe they are most likely to be fertile (Che, Cleland, and Ali 2004). The study also finds, that among periodic abstinence users, correct knowledge of the fertile period varies dramatically, from 8% in Zimbabwe to 91% in Kazakhstan; on average 24 of 100 women conceived within a year of using periodic abstinence (Che, Cleland, and Ali 2004). While some users of periodic abstinence abstain from sex on days most likely to result in conception, other couples use another method (such as a condom or withdrawal) on these days (Sheon and Stanton 1989).

An analysis of 43 countries with DHS surveys finds 13.4 pregnancies within 1 year per 100 women who use withdrawal, and 13.9 pregnancies per 100 women who use periodic abstinence—the highest of any contraceptive method (Polis et al. 2016). The high rates of unintended pregnancies in women who report

periodic abstinence may result in part from women's incorrect knowledge of the timing of ovulation. Che et al. (2004) found that with correct knowledge, the probability of contraceptive failure fell by 12%.

By definition, folkloric methods have unproven effectiveness (Rutstein and Rojas 2006) and are excluded from much literature about contraception, including *Contraceptive Technology* (Hatcher, et al. 2011), a book now in its 20th edition, which has served as a family planning reference for more than 30 years.

1.6. Discontinuation of traditional methods

Studies have documented the high rates of discontinuation of traditional methods in many different settings. In an analysis of countries with DHS, Staveteig, Mallick, and Winter (2015) find that of all contraceptive methods, traditional and folkloric methods have the highest rate of discontinuation with 28% of women discontinuing use in the first year. Of the women who discontinued traditional and folkloric methods in the previous 5 years, 28% stated that they discontinued because they became pregnant, while an additional 37% stopped using a method because they wanted to become pregnant, and only 11% reported discontinuing in order to switch to a more effective method. These findings are consistent with an earlier analysis of DHS data that found the same three most common reasons for traditional method discontinuation (Bradley, Schwandt, and Khan 2009).

Research from the United States shows that women begin, end, and change traditional methods quickly. Three quarters of women who used withdrawal discontinued within 1 year, although 85% of these women were using a contraceptive method again within a year, while the majority began a new method within 1 month. One third of women who discontinued the use of withdrawal restarted in 1 year (Vaughan et al. 2008).

1.7. Underreporting of traditional methods

A follow-up study to the 2014 Ghana Demographic and Health Survey (GDHS) re-interviewed 129 GDHS respondents in three regions. In response to questions about traditional method use, 20% of those classified by GDHS as having an unmet need indicated that they were currently using a traditional method of family planning (Staveteig 2016; 2017). Among those asked about the discrepancy, all stated that they had understood the GDHS question about method use as pertaining to modern methods only and thus did not report periodic abstinence or withdrawal.

In addition, a number of respondents classified as having unmet need reported the use of complete abstinence as a method to delay or avoid pregnancy. Abstinence is typically omitted from consideration as a method of family planning by surveys such as the GDHS.

Another study that investigated underreporting of traditional methods was conducted by Rossier, Senderowicz, and Soura (2014) in the capital of Burkina Faso, Ouagadougou. The authors included both the standard contraceptive use questions from the DHS, which do not prompt women with method names, and follow-up questions that specifically asked if women were using the LAM, rhythm, or withdrawal, in a survey of women conducted by the Health and Demographic Surveillance System of Ouagadougou in 2010. The reports of modern method use were almost identical to the DHS conducted in Burkina Faso, although the reported use of natural methods (LAM, withdrawal, and periodic abstinence) was five times greater (26% versus 5%).

The structure of DHS questionnaires may lead to underreporting of traditional methods. For current method use, women in DHS surveys are first asked "Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?" If a woman answers yes, she is then asked "Which method are you using?" Since withdrawal and periodic abstinence are coitus dependent methods, they may not be considered when a woman is asked if she is "currently using a method." The current questions may also

cause underreporting when multiple methods are used. While the interviewer is instructed to record all methods, the phrasing of the question asks the interview subject about “method,” and not “methods.” Therefore, women who use multiple methods may report what they consider to be the most effective method. In DHS surveys that record contraceptive use and reproductive events in a calendar, women are asked about each month of the previous 5 years. Dual use of methods (such as periodic abstinence and condoms) is not recorded, and interviewers are instructed to record the most effective method (Staveteig, Mallick, and Winter 2015).

In addition, a number of respondents classified as having unmet need reported the use of complete abstinence as a method to delay or avoid pregnancy. Abstinence is typically omitted from consideration as a method of family planning by surveys such as the DHS.

1.8. Research Questions

As global family planning dialogue has shifted to focus on modern method users only, contemporary literature about family planning—with few exceptions—is largely silent on traditional method use. However, understanding traditional method use is important for a number of reasons. First, since traditional method users are motivated to use contraception, they may be a key population for targeted efforts to increase modern contraceptive use—and, to the extent that they are undercounted by extant surveys, these users may be an even larger subpopulation than studies indicate. Hence, understanding the size and characteristics of this population is important. Users of periodic abstinence may be easily transitioned to the similar but more effective and modern Standard Days Method. Second, understanding the reasons for discontinuation and how often women are switching between modern and traditional methods may enable further discussion of programmatic interventions to maintain continuity of use. To that end, this report seeks to answer several questions about traditional method use in countries with at least five DHS. These questions include:

- What are the levels of traditional (and folkloric) methods used?
- How has the level of use changed over time?
- What is the composition of traditional method use, and how often are they used with other traditional methods or with modern methods?
- Who uses traditional methods and how have the sociodemographic characteristics of traditional users changed over time?
- After accounting for failure, do people discontinue using traditional methods more than modern methods (switching/stopping) and why do people discontinue use of traditional methods/compared with modern methods?

In this report, we explore levels and trends in the use of traditional methods, multiple traditional methods and simultaneous modern and traditional method use, discontinuation and switching, by using nearly three decades of DHS data from 16 countries: Bangladesh, Colombia, the Dominican Republic, Egypt, Ghana, Indonesia, Jordan, Kenya, Malawi, Peru, the Philippines, Rwanda, Senegal, Tanzania, Zambia, and Zimbabwe.

2. Data and Methods

The data for this study come from 16 countries that have completed at least five DHS for which the data were publicly available by April 2017. The rationale for using five surveys from each country is to assess trends over a long-term period. The countries that qualified for the analysis include three from Asia, (Bangladesh, Indonesia, and the Philippines); two from the Middle East and North Africa (Egypt and Jordan); three from Latin America and the Caribbean (Colombia, Dominican Republic, and Peru); and eight from Sub-Saharan Africa (Ghana, Kenya, Malawi, Rwanda, Senegal, Tanzania, Zambia, and Zimbabwe).

We use the data on individual women and the contraceptive calendar data for this report. Analyses of trends in current contraceptive use of modern and traditional methods use are based on data from individual women in each country, while the data from the contraceptive calendar are used to calculate discontinuation and switching rates.

In standard DHS surveys, women who are not pregnant at the time of the survey—and in older surveys, women who have never been sterilized¹ — are typically asked, “Are you currently doing something or using any method to delay or avoid getting pregnant?” Respondents who give a positive answer are then asked, “Which method are you using?” In some older DHS surveys, respondents were instead asked “What was the last method you used?” The DHS questionnaire includes a standard list of contraceptive methods (typically arranged in order of effectiveness) and an “other method” category. In addition, each country that conducts a DHS survey is encouraged to add any country specific methods that are commonly known or used in their country. With women who report use of more than one method at the time of the survey, the composite method use variable tabulated in the DHS surveys and provided in the DHS datasets reflects only the most effective method. In recent DHS surveys in which women were allowed to name more than one method of contraception, an inventory of yes/no use for each method is typically included in the published DHS datasets.

We use data from the contraceptive calendar to calculate discontinuation and switching rates. The contraceptive calendar records monthly retrospective information on episodes of live births, pregnancies, and terminations; contraceptive use or non-use; and the reason for discontinuation if the respondent reported interruptions of a method use. The format of the contraceptive calendar allows only one reason for discontinuation. Collection of the contraceptive calendar data has varied over the survey phases. Since the early rounds of the DHS included countries with high contraceptive prevalence only, earlier surveys conducted in most Sub-Saharan African countries and others with low contraceptive prevalence did not collect calendar data. In addition, some countries adapted the calendar to collect only births, pregnancies, and terminations, and to exclude episodes of contraceptive use.² For this reason, not all countries have complete calendar data for the five surveys in this analysis.

For the purpose of this study, contraceptive methods are categorized into two broad categories, modern and traditional family planning methods, as follows:

- Modern methods: IUDs, implants; pills, injectables, condoms (male or female), Lactational Amenorrhea Method (LAM), vaginal barrier methods and spermicides, the contraceptive patch, the vaginal ring, sterilization (male or female), emergency contraception, basal body temperature,

¹ In more recent DHS surveys, women are asked about current method use immediately after the contraceptive knowledge inventory. In older DHS surveys, women were first asked if they had ever used contraception and if so, which methods. Anyone who had ever been sterilized was not asked the current method question. Consult individual DHS survey reports for the precise ordering and wording of questions in that survey.

² In some countries, between approximately 2004 and 2009, the DHS core questionnaire did not include information on the reasons for discontinuing use in the contraceptive calendar.

Billings ovulation, the symptothermal method, Standard Days Methods, and other modern methods such as diaphragms, cervical caps, and suppositories³

- Traditional methods: periodic abstinence (the rhythm method), withdrawal (coitus interruptus), prolonged breastfeeding, herbs, massage, other folkloric methods, and any other method not specifically classified as modern

The analysis includes only currently married women age 15-49. Table 2.1 shows the number of all women interviewed for the survey, currently married women age 15-49, contraceptive prevalence (any method) among married women, and demand for family planning satisfied by modern methods. Since two countries (Peru since 2004 and Senegal since 2012) are conducting continuous DHS surveys every year, individual data files were appended into up to 3-year ranges.

³ “Other modern methods” is a category available for interviewers to select in most DHS surveys. Prior to the survey, interviewers are instructed on which methods may be included in the category. However, the full list may not be available to analysts.

Table 2.1. Percentage of married women using any method of contraception and women using any traditional or folkloric method, unweighted number of currently married women age 15-49, by country and DHS survey year

Country	DHS Survey year	Married women currently using any method of contraception (%) ¹	Married women currently using any traditional or folk method of contraception (%)	Demand for family planning satisfied by modern methods (%) ¹	Currently married women age 15-49
Bangladesh	1999/2000	54.3	10.3	60.6	9,530
	2004	58.5	10.8	64.8	10,417
	2007	55.8	8.3	65.4	10,146
	2011	61.2	9.2	69.7	16,616
	2014	62.4	8.4	72.6	16,830
Indonesia	1994	54.7	2.7	74.3	26,220
	1997	57.4	2.7	77.1	26,833
	2002/03	60.3	3.6	77.1	27,784
	2007	61.4	4.0	77.0	30,869
	2012	61.9	4.0	79.0	32,706
The Philippines	1993	40.0	15.1	35.4	9,145
	1998	47.8	19.6	39.0	8,634
	2003	48.9	15.5	46.7	8,764
	2008	50.7	16.7	46.8	8,564
	2013	55.1	17.5	51.8	9,866
Jordan	1990	40.0	13.1	40.4	6,181
	1997	52.6	14.9	51.9	5,340
	2002	55.8	14.6	58.3	5,727
	2007	57.1	15.2	59.1	10,360
	2012	61.2	17.3	58.0	10,746
Egypt	1995	47.9	2.4	66.8	13,718
	2000	56.1	2.2	77.2	14,393
	2005	59.2	2.7	79.0	18,134
	2008	60.3	2.7	80.1	15,406
	2014	58.5	1.6	80.0	20,430
Colombia	1990	66.1	11.5	68.4	4,542
	1995	72.2	12.9	71.0	6,131
	2000	76.9	12.9	73.6	6,026
	2005	78.2	10.0	78.5	20,087
	2010	79.1	6.1	83.8	27,346

Continued...

Table 2.1—Continued

Country	DHS Survey year	Married women currently using any method of contraception (%) ¹	Married women currently using any traditional or folk method of contraception (%)	Demand for family planning satisfied by modern methods (%) ¹	Currently married women age 15-49
Dominican Republic	1991	56.4	4.7	68.2	4,226
	1996	63.7	4.4	76.3	5,171
	2002	69.8	4.0	80.1	14,504
	2007	72.9	2.8	83.3	15,872
	2013	71.9	3.2	83.0	5,219
Peru	1996	64.2	22.9	50.5	17,830
	2000	68.9	18.5	60.6	16,518
	2004/06	71.3	23.7	57.0	10,919
	2009	73.2	23.6	59.4	13,420
	2012	75.5	23.2	61.1	14,235
Ghana	1993	20.3	10.1	17.7	3,204
	1998	22.0	8.7	23.5	3,229
	2003	25.2	6.5	31.3	3,694
	2008	23.5	6.9	28.0	2,950
	2014	26.7	4.5	39.2	5,456
Kenya	1993	32.7	5.5	40.1	7,540
	1998	39.0	7.5	47.0	7,881
	2003	39.3	7.8	47.3	8,195
	2008/09	45.5	6.0	55.5	8,444
	2014	58.0	4.8	70.7	31,079
Malawi	1992	13.0	5.6	14.9	4,849
	2000	30.6	4.5	43.1	13,220
	2004/05	32.5	4.3	44.8	11,698
	2010	46.1	3.9	58.4	23,020
	2015/16	59.2	1.1	74.6	24,562
Rwanda	1992	21.2	8.3	21.7	3,698
	2000	13.2	7.6	11.4	4,891
	2005	17.4	7.1	18.4	5,458
	2010/11	51.6	6.4	62.4	6,834
	2014/15	53.2	5.8	65.8	6,890
Senegal	1992/93	7.5	2.7	13.2	4,450
	1997	12.9	4.8	16.9	6,030
	2005	11.8	1.5	23.5	10,221
	2010/11	13.1	1.0	28.0	10,804
	2015	22.2	2.2	42.6	6,048

Continued...

Table 2.1—Continued

Country	DHS Survey year	Married women currently using any method of contraception (%) ¹	Married women currently using any traditional or folk method of contraception (%)	Demand for family planning satisfied by modern methods (%) ¹	Currently married women age 15-49
Tanzania	1996	18.4	5.1	30.0	5,404
	1999	25.4	8.5	39.3	2,608
	2004/05	26.4	6.4	39.5	6,786
	2010/11	34.4	7.0	48.3	6,310
	2015/16	38.4	6.4	52.9	8,189
Zambia	1992	15.2	6.3	19.6	4,467
	1996	25.9	11.5	28.1	4,949
	2001/02	34.2	8.9	41.0	4,731
	2007	40.8	8.1	48.5	4,316
	2013/14	49.0	4.3	63.8	9,649
Zimbabwe	1994	48.1	6.0	62.7	3,777
	1999	53.5	3.2	71.6	3,553
	2005/06	60.2	1.8	77.2	5,118
	2010/11	58.5	1.3	78.3	5,578
	2015	66.8	1.0	85.2	6,015

¹ Source: Statcompiler. <http://dhsprogram.com/data/STATcompiler.cfm>

We examine levels and trends in modern and traditional method use across different sociodemographic factors—age, educational attainment, residence, wealth status, parity, and fertility intentions—for each country in the study. In addition, 1-year (12-month) discontinuation rates and switching rates were calculated with the competing risk approach, which is analogous to multiple-decrement lifetable (where contraceptive failure is considered as the attrition factor). To avoid the bias that might be introduced by an unrecognized pregnancy, the analysis begins 3 months prior to the date of interview and thus extends back to 62 months prior to the interview date. Stata 14 is used to estimate the rates using the *stcompet* command by Coviello and Boggess (2004). Discontinuation rates are presented for traditional and modern methods. Rates for a method are not shown if there were fewer than 125 episodes of contraceptive use for that method. We used individual level sampling weights to produce nationally representative results within each country.

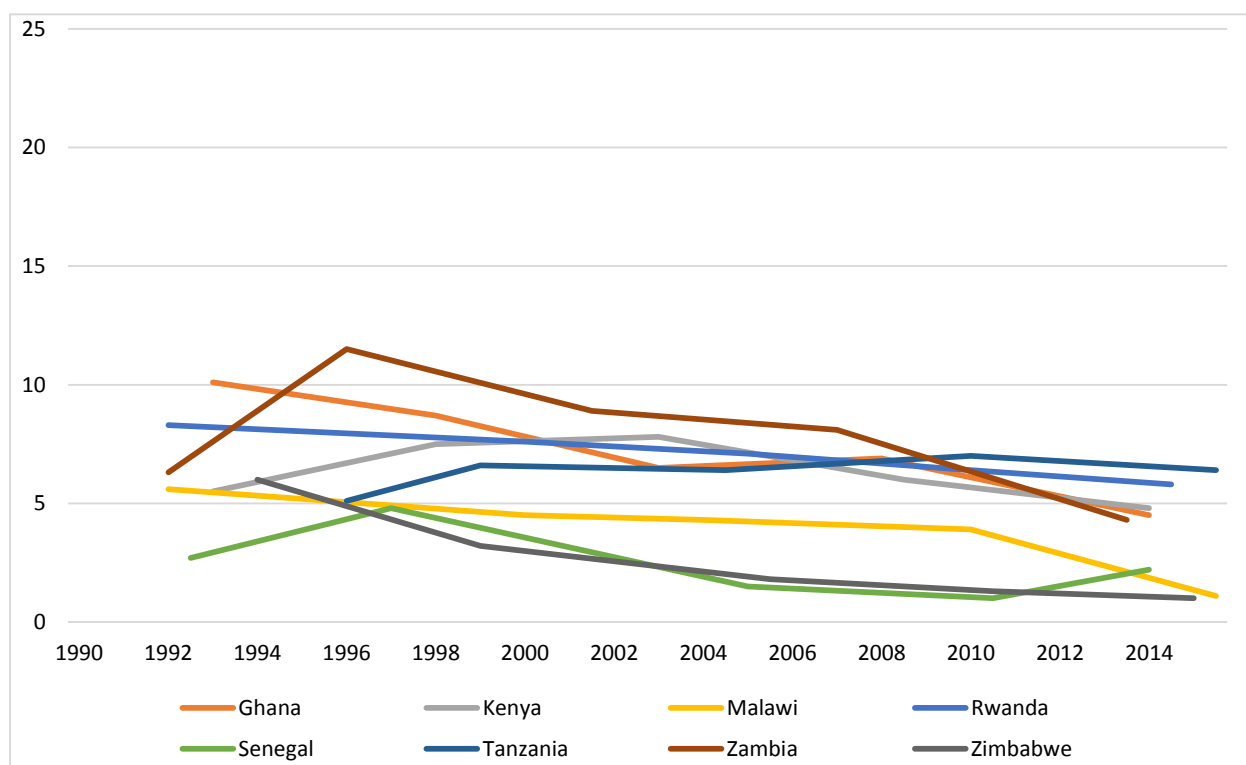
This report also includes case studies on four countries, which were selected by trends in contraceptive use. These include maintaining high levels of traditional methods (Peru), maintaining low levels of traditional methods (Indonesia), increasing traditional use (Jordan), and decreasing traditional use (Ghana). For each country, we focus on an early and most recent survey. We examine changes in the contraceptive method mix and use with a series of binary logistic regressions to investigate the changing importance of different sociodemographic characteristics in use of any method (modern or traditional), use of traditional versus modern methods (among contraceptive users), and use of withdrawal versus periodic abstinence (among traditional method users). The sociodemographic characteristics of interest include age, fertility intentions, parity, education, and residence. Results are presented as adjusted odds ratios and 95% confidence intervals.

3. Levels and Trends in Traditional Method Use

3.1 Traditional Method Use

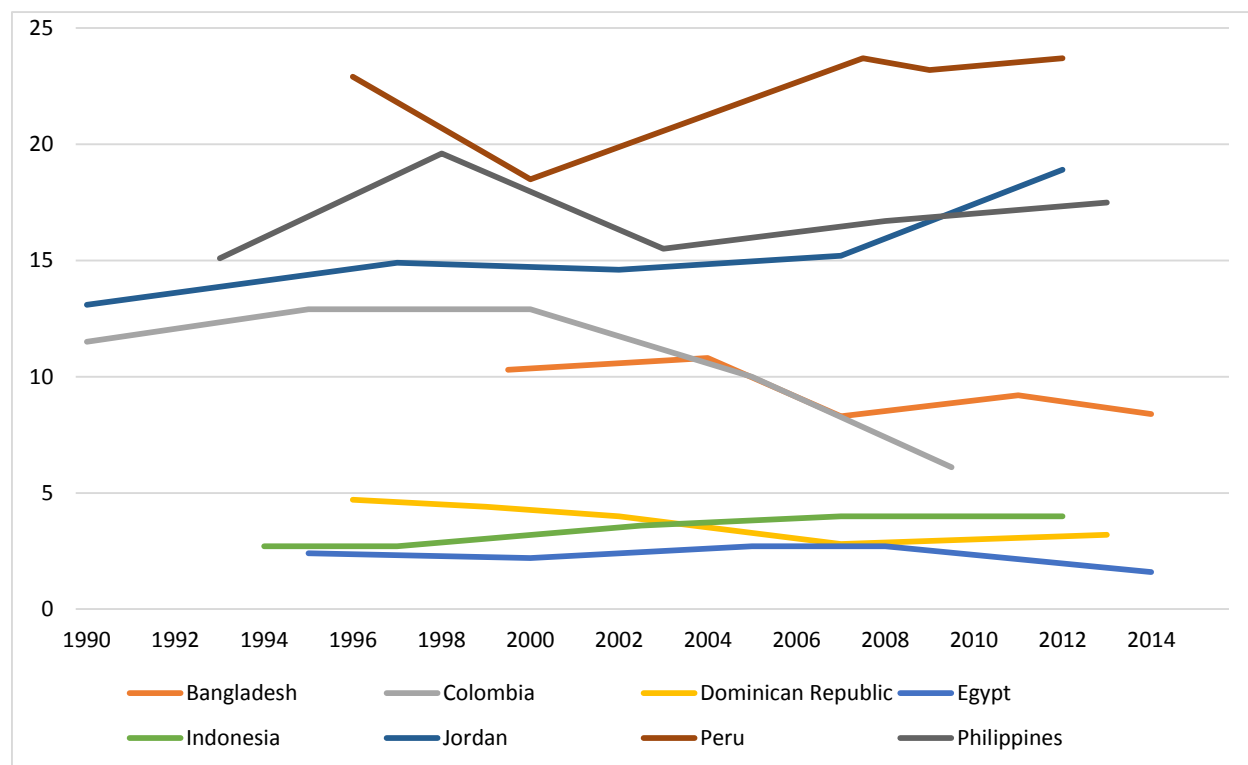
The results presented below provide levels and trends for traditional and folk method use among married women age 15-49, by country. Figure 3.1 shows that traditional method use declined in seven of the eight countries from Sub-Saharan Africa. A study using DHS surveys from Sub-Saharan Africa reported that the highest levels of traditional family planning use are observed in middle Africa (Rossier and Corker 2017). However, countries with fewer than five DHS surveys are excluded from this report. In the analysis of data from the central African countries with at least two DHS (but less than five), the sub-region appears, along with other regions in Sub-Saharan Africa, to have experienced declines in traditional use. Traditional method use has nearly decreased by half in Gabon between their first and most recent surveys (21% to 12%). Cameroon, Congo, and the Democratic Republic of Congo have also seen declines (from 12% to 9% in Cameroon, 32% to 25% in Congo, and 15% to 13% in the Democratic Republic of Congo).

Figure 3.1. Trends in traditional method use in Sub-Saharan Africa



The remaining eight countries in this report (Figure 3.2) are from Asia (Bangladesh, Indonesia, and the Philippines), Latin America (Colombia, Dominican Republic, and Peru), and the Middle East and North Africa (Jordan and Egypt). Within these regions, there are considerable variation in levels and trends of traditional method use.

Figure 3.2. Trends in traditional method use in Asia, the Middle East and North Africa, Latin America, and the Caribbean



Overall, 11 of the 16 countries saw decreases in traditional method use between the 1990s and the most recent survey. The largest declines occurred in Ghana, Colombia, Zimbabwe, and Malawi, where traditional method use fell by over 4 percentage points. In Ghana in 1993, traditional methods were as popular as modern methods (10% each). By 2014, modern method use nearly doubled to 22%. In other countries, the decline in traditional methods was associated with a corresponding rise in the popularity in modern methods. For example, Malawi’s modern contraceptive prevalence rate (mCPR) increased from 7% to 58% over the period, while Zimbabwe saw an increase in modern method use from 42% to 66%, and Colombia from 55% to 76%.

Three countries in the report have more than 10% of women who report use of traditional or folkloric methods in their most recent survey: Jordan (19%), Peru (24%), and the Philippines (18%). These countries have all experienced an increase in traditional method use, ranging from less than 1 percentage point in Peru to over 5 percentage points in Jordan, while at the same time, all three countries saw modern method use grow by more than 10 percentage points.

Popularity of specific traditional methods varies by country and over time. In 1990, Jordanian women were equally likely to report the use of periodic abstinence and withdrawal. More recently, withdrawal increased in popularity, while periodic abstinence use remained relatively unchanged. In the most recent survey (2012), three times as many women report using withdrawal (13%) compared with periodic abstinence (4%). In Peru, periodic abstinence is more popular than withdrawal (15% versus 8% in the 2012 survey)—although the percentage of women reporting withdrawal has more than doubled from the first to most recent DHS survey, while periodic absence has decreased. In almost all countries, folk methods are much less common than traditional methods. The one exception is Senegal, which has low use of both traditional and folk methods. In most surveys, across country and time, use of folk methods is reported by less than 1% of the adult female population.

3.1.1 Method mix

Figures 3.3 and 3.4 present the distribution of currently married women age 15-49 who did not use any family planning method and current users of any modern and traditional family planning methods in five DHS surveys in the 16 countries in this report. Overall, the use of modern methods increased substantially over time in all countries. In seven of the eight countries from Asia, the Middle East, and Latin America, the most recent DHS surveys showed that more than 50% of women used modern contraceptives, whereas only three of the eight countries in Sub-Saharan Africa (Kenya, Malawi, and Zimbabwe) achieved a comparable level of use.

Trends in traditional family planning use by specific method (periodic abstinence, withdrawal, and folkloric methods) are inconsistent. Decline in the use of periodic abstinence was reported in seven countries (Ghana, Kenya, Malawi, the Philippines, Colombia, Peru, and Dominican Republic). In Ghana, for example, use of periodic abstinence declined from 8% in 1993/94 to 3% in 2015, while in Colombia, it decreased from 6% to 2%, and in Peru from 19% in 1996 to 15% in 2012. In contrast, women in Tanzania increased their use of periodic abstinence from 2% in 1996 to 4% in 2015/16.

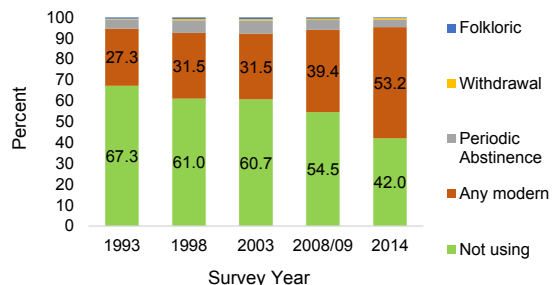
The use of withdrawal increased in the Philippines from 7% in 1993 to 12% in 2013, by more than 3 times in Jordan—from 4% in 1990 to 14% in 2012, and more than doubled in Peru (3% in 1996 to 8% in 2012). A decline in use of withdrawal was observed in Bangladesh (from 4% to 2%) and Colombia (from 5% to 3%).

Examination of the traditional family planning method mix shows that in six countries (Dominican Republic, Ghana, Kenya, Rwanda, and Peru), the proportion of currently married women who use periodic abstinence is somewhat greater than that of withdrawal. In Jordan, the Philippines, Zambia, and Zimbabwe, more women practice withdrawal compared with periodic abstinence.

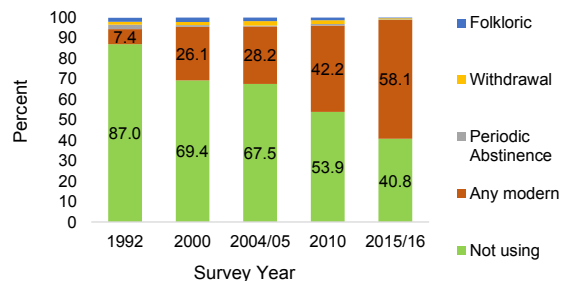
Overall, traditional methods represented a much smaller proportion of the method mix. However, only in three (Peru, the Philippines, and Jordan) of the 16 countries in the analysis, traditional methods had above 10% users. The highest proportion of traditional family planning users were in Peru (between 19% and 24%), followed by the Philippines (between 15% and 20%), and Jordan (ranging between 13% and 19%). In Bangladesh, the Philippines, and Peru, users were shifting from periodic abstinence to withdrawal, with a decrease in one method balanced by an increase in the other. (See Appendix 1 for details.)

Figure 3.3. Percentage of currently married women not using any family planning method and method-mix of those using any modern, traditional, and folkloric family planning methods in Sub-Saharan Africa

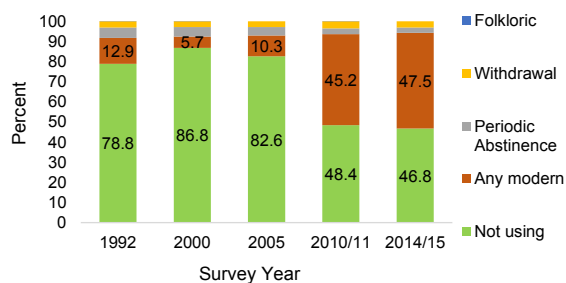
Kenya



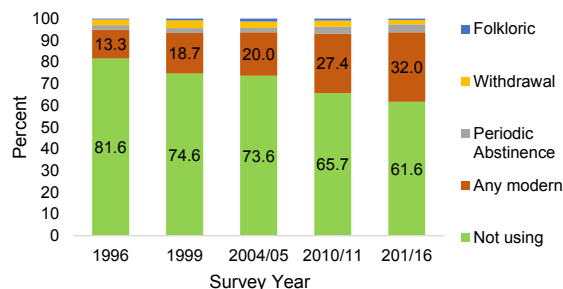
Malawi



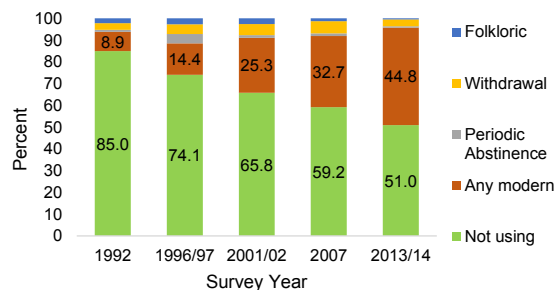
Rwanda



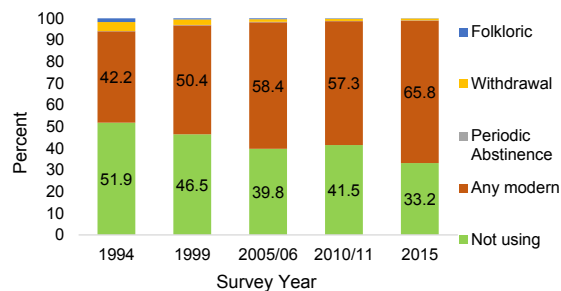
Tanzania



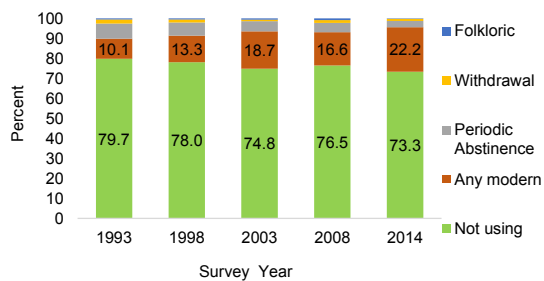
Zambia



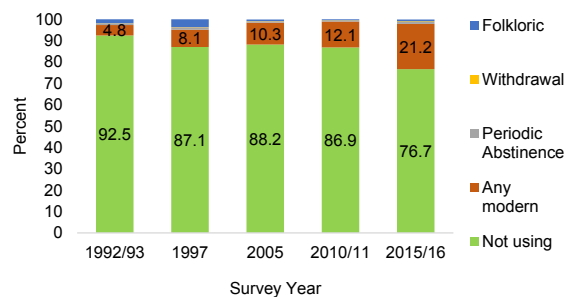
Zimbabwe



Ghana



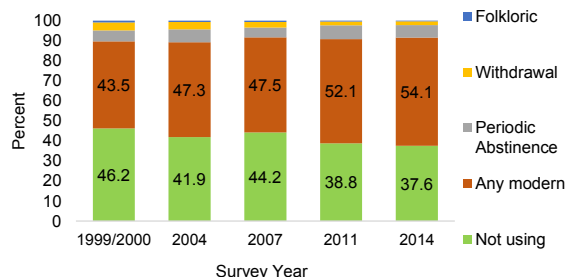
Senegal



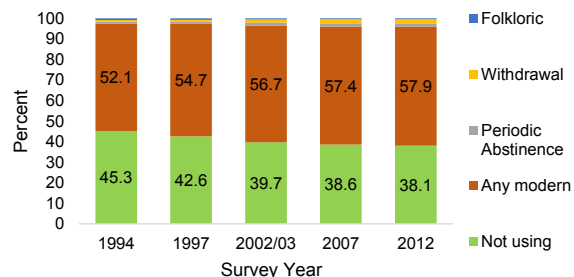
Note: In some countries the percentage of traditional method users (withdrawal, periodic abstinence, and folkloric) is too small to label the pertinent bars in the graph.

Figure 3.4. Percentage of currently married women not using any family planning method and method-mix of those using any modern, traditional, and folkloric family planning methods in Asia, Middle East and North Africa, and Latin America, and the Caribbean

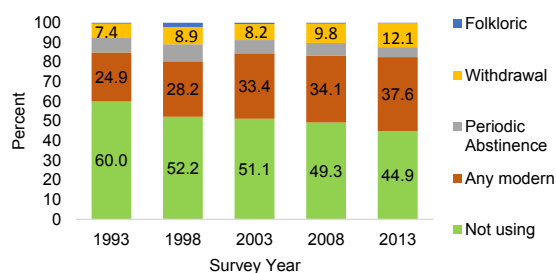
Bangladesh



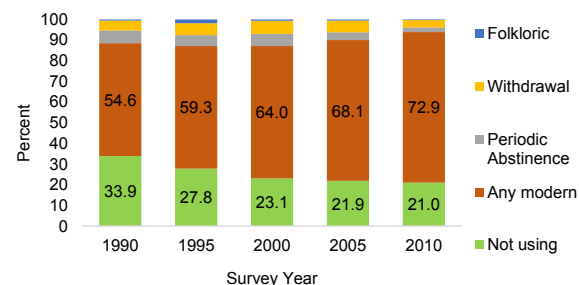
Indonesia



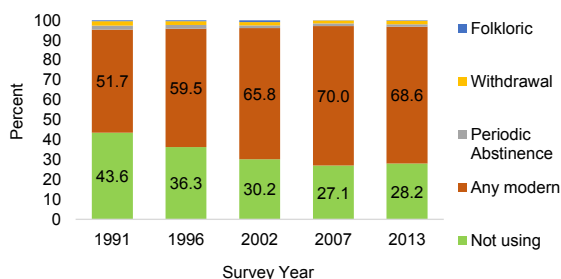
Philippines



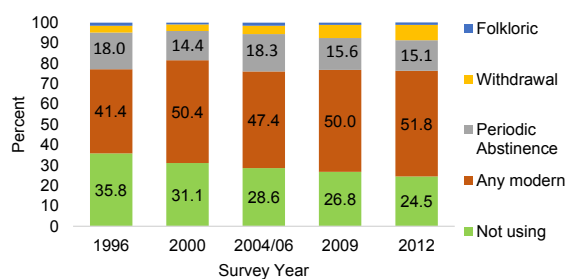
Colombia



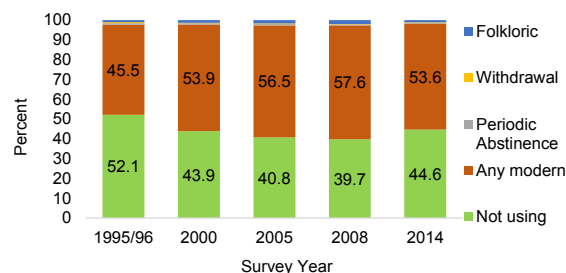
Dominican Republic



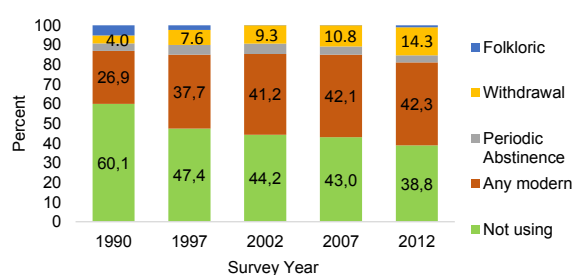
Peru



Egypt



Jordan



Note: In some countries the percentage of traditional method users (withdrawal, periodic abstinence, and folkloric) is too small to label the pertinent bars in the graph.

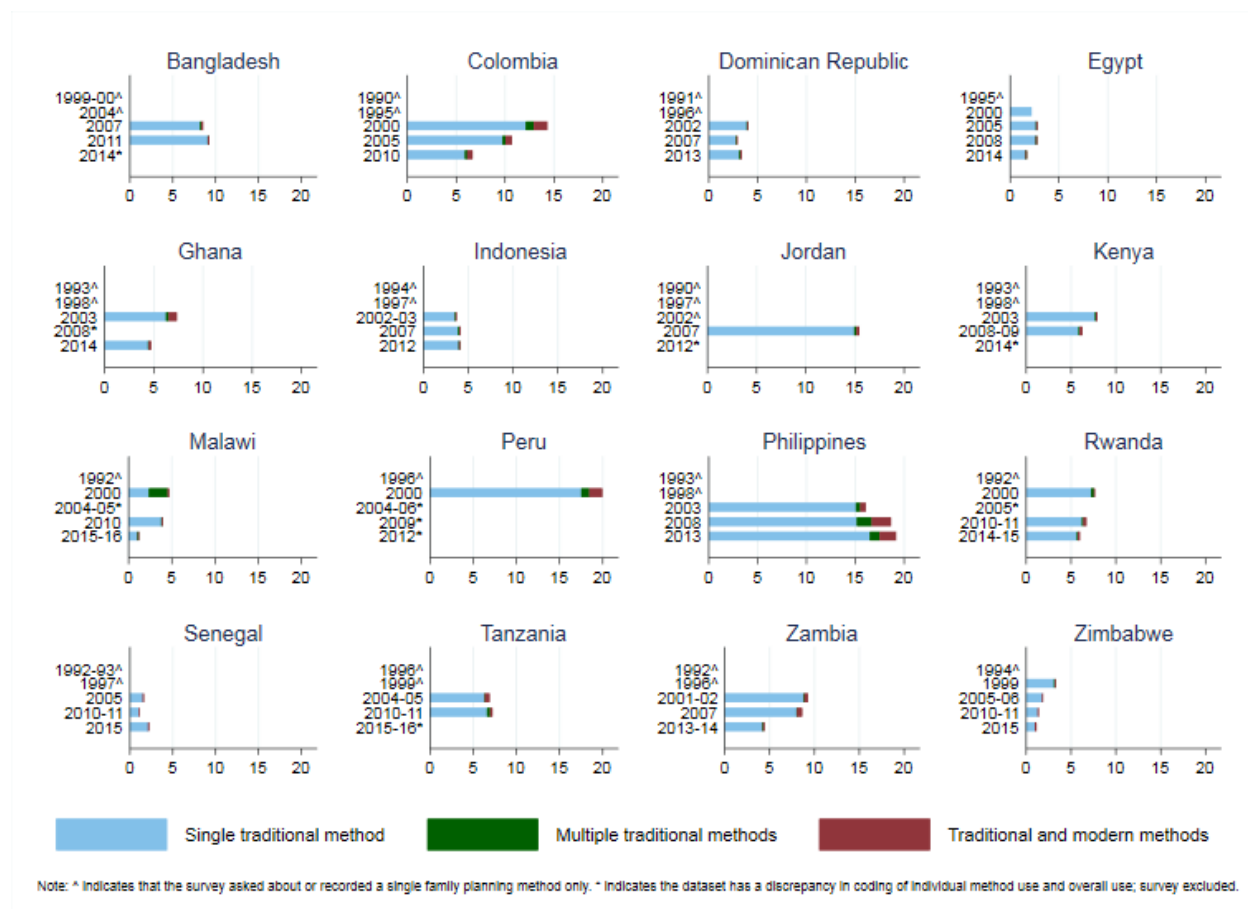
3.2 Multiple Method Use

To examine the use of multiple traditional methods and simultaneous modern and traditional method use, we classified married current traditional method users age 15-49 into three groups based on their item-specific use: users of a single traditional method, users of multiple traditional methods, and simultaneous users of traditional and modern methods. In 28 early DHS surveys, only a single family planning method was recorded because respondents were typically asked only about the last method used. In ten additional surveys, there were internal discrepancies between item-specific method inventories and the composite contraceptive use variable. These surveys were excluded from this analysis. Thus, our estimates of multiple traditional method use and dual modern-traditional use are limited to 42 of 80 surveys. The results of this analysis are shown in Figure 3.5. As shown, except in Malawi in 2000 and to some extent in the Philippines 2008, the vast majority of traditional method use reported in the composite method use variable reflects a single traditional method. In Malawi 2000, multiple traditional method use nearly always involved withdrawal and strings and in the Philippines 2008, a combination of periodic abstinence and withdrawal.

The level of simultaneous traditional and modern method use among married women ages 15-49 is shown by the red bar in Figure 3.5. The extent of dual modern-traditional use ranges from 0% in Egypt 2000⁴ to 2% in Philippines 2008 and 2013. In the Philippines 2008 and 2013 surveys, dual modern-traditional use was typically withdrawal and either pills or condoms. The median value of dual modern-traditional use is two-tenths of one percent. These respondents are excluded from all other analyses of traditional method use in this report because they are classified as users of their more effective (modern) method.

⁴ Although the Egypt DHS 2000 questionnaire allows the interviewer to record multiple family planning methods, only one respondent is coded as using more than one method (both modern).

Figure 3.5. Percent of currently married women age 15-49 using multiple traditional methods and simultaneous modern and traditional method



3.3. Levels and trends of traditional contraceptive use by sociodemographic factors

3.3.1 Age

As shown in Table 3.1, traditional use in 13 of the 16 countries is most popular among women over age 35. Three patterns emerge from the relationship between age and traditional method use across surveys. The first are countries (Bangladesh, Indonesia, Peru and Tanzania) where the level of traditional use by age changes little over time. Most age groups in Jordan also follow this pattern. Although a slight rise occurs in most age groups between the last two surveys, a decline occurred among married women age 15-19, which separated them from the other age groups.

In Senegal and Zambia, changes occur between surveys, although age groups tend to move similarly. In Senegal, traditional use among all ages rises between survey one and two, then decreases by survey three. Similar changes occur in Zambia.

Finally, early surveys in many countries show large disparities in traditional method use by age group, although these gaps decrease with time. Colombia, Dominican Republic, Egypt, Malawi, Philippines, and Zimbabwe all have more similar levels of traditional use among the different ages in the more recent surveys.

Table 3.1. Percentage of currently married women who used traditional methods (with 95% confidence interval [95% CI]) by age and survey year, 16 countries with at least five DHS

Country	Age	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Bangladesh	15-19	6.9	[5.6, 8.5]	8.1	[6.7, 9.8]	4.3	[3.2, 5.6]	4.7	[3.8, 5.9]	4.4	[3.4, 5.8]	4.4	[3.4, 5.8]	4.4	[3.4, 5.8]	
	20-24	7.0	[5.7, 8.5]	6.2	[5.0, 7.5]	4.9	[4.0, 6.1]	4.5	[3.8, 5.4]	4.6	[3.6, 5.9]	4.6	[3.6, 5.9]	4.6	[3.6, 5.9]	
	25-29	9.0	[7.6, 10.7]	7.0	[5.8, 8.5]	5.6	[4.5, 6.9]	5.8	[5.0, 6.8]	5.0	[4.0, 6.1]	5.0	[4.0, 6.1]	5.0	[4.0, 6.1]	
	30-34	11.1	[9.5, 13.0]	12.1	[10.4, 14.0]	8.7	[7.2, 10.4]	9.8	[8.6, 11.1]	9.0	[7.1, 11.2]	9.0	[7.1, 11.2]	9.0	[7.1, 11.2]	
	35-39	13.9	[11.7, 16.4]	15.2	[13.3, 17.4]	14.2	[12.1, 16.6]	14.8	[13.1, 16.7]	12.3	[10.6, 14.3]	12.3	[10.6, 14.3]	12.3	[10.6, 14.3]	
Indonesia	40-44	18.3	[15.8, 21.2]	20.9	[18.2, 23.9]	15.0	[12.8, 17.6]	17.7	[15.8, 19.8]	15.6	[13.5, 18.0]	15.6	[13.5, 18.0]	15.6	[13.5, 18.0]	
	45-49	11.5	[9.2, 14.2]	15.1	[12.6, 18.0]	10.7	[8.4, 13.5]	12.8	[10.9, 14.9]	13.0	[9.9, 17.0]	13.0	[9.9, 17.0]	13.0	[9.9, 17.0]	
	15-19	0.8	[0.3, 2.2]	0.2	[0.1, 0.5]	0.5	[0.2, 1.6]	0.7	[0.3, 1.4]	0.4	[0.2, 0.9]	0.4	[0.2, 0.9]	0.4	[0.2, 0.9]	
	20-24	1.5	[1.1, 2.1]	1.3	[0.9, 1.9]	1.8	[1.2, 2.8]	1.6	[1.1, 2.2]	1.3	[0.9, 1.9]	1.3	[0.9, 1.9]	1.3	[0.9, 1.9]	
	25-29	1.8	[1.4, 2.3]	2.1	[1.6, 2.8]	2.3	[1.7, 3.0]	3.3	[2.7, 4.1]	3.1	[2.5, 4.0]	3.1	[2.5, 4.0]	3.1	[2.5, 4.0]	
The Philippines	30-34	3.4	[2.8, 4.2]	3.3	[2.7, 4.1]	3.7	[3.0, 4.7]	4.4	[3.6, 5.3]	3.9	[3.3, 4.6]	3.9	[3.3, 4.6]	3.9	[3.3, 4.6]	
	35-39	3.5	[2.9, 4.3]	3.6	[2.9, 4.5]	5.0	[4.0, 6.2]	5.5	[4.7, 6.5]	5.4	[4.6, 6.4]	5.4	[4.6, 6.4]	5.4	[4.6, 6.4]	
	40-44	3.9	[3.1, 4.8]	3.5	[2.8, 4.5]	5.6	[4.5, 6.9]	5.0	[4.2, 6.0]	5.7	[4.9, 6.6]	5.7	[4.9, 6.6]	5.7	[4.9, 6.6]	
	45-49	2.8	[2.1, 3.7]	3.0	[2.3, 3.8]	3.8	[2.8, 5.0]	3.9	[3.1, 4.8]	4.2	[3.4, 5.1]	4.2	[3.4, 5.1]	4.2	[3.4, 5.1]	
	15-19	7.6	[4.7, 11.8]	10.4	[7, 15.2]	12.3	[8.6, 17.5]	11.6	[8.2, 16]	15.9	[11.6, 21.4]	15.9	[11.6, 21.4]	15.9	[11.6, 21.4]	
Colombia	20-24	12.9	[11, 15.2]	16.3	[13.8, 19.2]	12.6	[10.5, 15]	13.8	[11.6, 16.2]	16.7	[14.4, 19.3]	16.7	[14.4, 19.3]	16.7	[14.4, 19.3]	
	25-29	15.6	[13.9, 17.4]	21.5	[19.4, 23.9]	16.1	[14.2, 18.2]	15.7	[13.9, 17.7]	16.3	[14.3, 18.4]	16.3	[14.3, 18.4]	16.3	[14.3, 18.4]	
	30-34	16.7	[15, 18.6]	20.3	[18.4, 22.4]	15.4	[13.7, 17.3]	18.6	[16.7, 20.8]	17.5	[15.7, 19.4]	17.5	[15.7, 19.4]	17.5	[15.7, 19.4]	
	35-39	18.8	[16.9, 20.9]	23.7	[21.4, 26.2]	18.0	[16.1, 20.1]	17.5	[15.6, 19.7]	18.5	[16.6, 20.6]	18.5	[16.6, 20.6]	18.5	[16.6, 20.6]	
	40-44	16.2	[14.2, 18.3]	20.4	[18, 23.1]	18.4	[16.2, 20.8]	20.3	[17.9, 23]	19.4	[17.4, 21.5]	19.4	[17.4, 21.5]	19.4	[17.4, 21.5]	
Colombia	45-49	7.9	[6.3, 9.8]	12.8	[10.8, 15.2]	11.4	[9.5, 13.6]	14.0	[11.8, 16.5]	16.4	[14.4, 18.5]	16.4	[14.4, 18.5]	16.4	[14.4, 18.5]	
	15-19	5.0	[2.5, 9.7]	14.0	[10.3, 18.8]	12.2	[9.1, 16.0]	10.0	[7.8, 12.8]	5.5	[4.2, 7.1]	5.5	[4.2, 7.1]	5.5	[4.2, 7.1]	
	20-24	8.3	[6.3, 11.0]	13.2	[11.1, 15.7]	12.3	[10.1, 14.9]	10.5	[9.1, 12.0]	5.7	[4.8, 6.7]	5.7	[4.8, 6.7]	5.7	[4.8, 6.7]	
	25-29	10.1	[7.8, 13.1]	13.4	[11.5, 15.5]	13.5	[11.4, 15.9]	10.5	[9.2, 11.9]	5.8	[5.0, 6.6]	5.8	[5.0, 6.6]	5.8	[5.0, 6.6]	
	30-34	11.7	[9.3, 14.6]	13.0	[11.0, 15.3]	10.8	[9.0, 13.0]	9.4	[8.2, 10.7]	5.3	[4.5, 6.2]	5.3	[4.5, 6.2]	5.3	[4.5, 6.2]	
Colombia	35-39	13.9	[10.7, 17.8]	13.1	[11.1, 15.4]	13.7	[11.5, 16.3]	10.1	[8.9, 11.4]	5.6	[4.8, 6.5]	5.6	[4.8, 6.5]	5.6	[4.8, 6.5]	
	40-44	14.9	[10.7, 20.5]	13.1	[10.6, 16.0]	14.7	[12.3, 17.5]	9.8	[8.5, 11.4]	7.7	[6.7, 8.7]	7.7	[6.7, 8.7]	7.7	[6.7, 8.7]	
	45-49	13.8	[9.6, 19.3]	10.1	[7.9, 12.8]	13.0	[10.6, 15.8]	10.1	[8.6, 11.8]	6.9	[5.9, 7.9]	6.9	[5.9, 7.9]	6.9	[5.9, 7.9]	

Continued...

Table 3.1—Continued

Country	Age	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Dominican Republic	15-19	4.0	[1.8, 9.1]	6.1	[4.0, 9.3]	3.9	[2.6, 5.9]	2.0	[1.2, 3.3]	2.8	[1.2, 6.4]
	20-24	6.7	[4.6, 9.5]	6.9	[5.1, 9.1]	5.7	[4.6, 7.1]	4.1	[2.9, 5.8]	4.0	[2.6, 6.0]
	25-29	4.8	[3.1, 7.3]	4.2	[2.9, 6.0]	5.0	[4.0, 6.3]	4.2	[3.1, 5.8]	4.6	[3.0, 7.0]
	30-34	6.4	[4.3, 9.5]	5.9	[4.4, 7.9]	4.0	[3.0, 5.4]	2.5	[1.7, 3.5]	3.9	[2.5, 6.0]
	35-39	4.2	[2.4, 7.2]	2.7	[1.6, 4.4]	3.4	[2.6, 4.6]	2.9	[1.9, 4.3]	2.6	[1.6, 4.2]
	40-44	1.4	[0.6, 2.9]	2.5	[1.4, 4.4]	2.8	[1.8, 4.4]	2.4	[1.6, 3.7]	2.0	[1.1, 3.7]
	45-49	1.8	[0.7, 4.8]	1.3	[0.5, 3.4]	1.9	[1.1, 3.2]	1.0	[0.5, 1.7]	2.0	[1.0, 3.9]
	15-19	15.0	[12.2, 18.3]	11.6	[9, 14.7]	15.0	[11.2, 19.9]	17.5	[13.9, 21.7]	16.0	[12.7, 19.9]
	20-24	18.5	[16.7, 20.4]	13.6	[12, 15.5]	19.0	[16.5, 21.7]	17.5	[15.3, 19.9]	20.4	[18, 23]
Peru	25-29	21.5	[19.7, 23.4]	16.5	[14.8, 18.3]	23.2	[20.7, 25.9]	22.3	[20.1, 24.6]	22.8	[20.5, 25.3]
	30-34	23.8	[21.9, 25.7]	18.6	[17, 20.3]	26.0	[23.6, 28.7]	23.3	[21.1, 25.6]	25.1	[22.9, 27.5]
	35-39	26.6	[24.7, 28.6]	20.5	[18.6, 22.6]	27.4	[24.8, 30.2]	24.8	[22.7, 27.1]	25.2	[23, 27.7]
	40-44	28.9	[26.5, 31.4]	23.8	[21.7, 26]	26.4	[23.7, 29.3]	29.5	[26.9, 32.2]	28.7	[26.2, 31.3]
	45-49	18.9	[16.7, 21.4]	18.0	[15.9, 20.4]	18.8	[16.4, 21.5]	20.9	[18.6, 23.4]	19.6	[17.5, 21.9]
	15-19	8.4	[5.5, 12.7]	6.7	[3.9, 11.1]	7.9	[4.0, 15.0]	9.3	[4.6, 17.9]	5.7	[3.1, 10.3]
	20-24	11.7	[10.0, 13.8]	12.9	[10.6, 15.6]	14.1	[11.4, 17.4]	11.4	[8.8, 14.6]	16.8	[13.5, 20.8]
	25-29	13.7	[11.8, 16.0]	17.0	[14.8, 19.4]	14.0	[11.9, 16.5]	14.2	[12.1, 16.7]	20.0	[17.4, 23.0]
	30-34	15.1	[12.9, 17.7]	14.7	[12.7, 17.0]	13.6	[11.4, 16.1]	15.7	[13.5, 18.2]	19.2	[16.7, 22.0]
Jordan	35-39	14.5	[12.3, 17.0]	15.7	[13.2, 18.4]	15.2	[12.8, 17.9]	16.2	[13.9, 18.8]	20.2	[17.5, 23.2]
	40-44	14.5	[11.9, 17.6]	15.2	[12.8, 18.1]	16.6	[13.8, 19.9]	19.1	[16.2, 22.4]	19.8	[17.2, 22.8]
	45-49	9.5	[7.3, 12.1]	15.2	[12.1, 18.8]	16.2	[12.9, 20.1]	13.1	[10.4, 16.4]	17.6	[14.4, 21.4]
	15-19	0.3	[0.0, 1.3]	1.4	[0.7, 2.9]	2.2	[1.2, 4.0]	3.7	[2.3, 5.7]	1.6	[0.9, 3.0]
	20-24	2.3	[1.6, 3.2]	2.1	[1.5, 3.0]	3.4	[2.7, 4.3]	3.8	[3.1, 4.6]	1.7	[1.3, 2.4]
	25-29	1.9	[1.3, 2.7]	2.5	[2.0, 3.3]	3.1	[2.4, 3.8]	3.5	[2.8, 4.3]	1.8	[1.4, 2.3]
	30-34	1.9	[1.4, 2.6]	2.6	[1.9, 3.5]	2.6	[2.0, 3.4]	2.7	[2.1, 3.5]	1.8	[1.4, 2.3]
	35-39	2.4	[1.8, 3.2]	1.9	[1.4, 2.5]	2.2	[1.6, 2.9]	1.9	[1.4, 2.5]	1.6	[1.2, 2.3]
	40-44	4.0	[3.0, 5.4]	2.0	[1.4, 2.9]	2.5	[1.8, 3.4]	1.9	[1.3, 2.6]	1.1	[0.7, 1.7]
Egypt	45-49	2.9	[2.0, 4.2]	2.0	[1.4, 3.0]	2.5	[1.8, 3.5]	1.4	[0.9, 2.2]	1.6	[1.1, 2.4]

Continued...

Table 3.1—Continued

Country	Age	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Ghana	15-19	5.0	[2.5, 9.7]	6.6	[3.2, 13.2]	1.6	[0.4, 5.3]	6.0	[2.2, 15.5]	1.9	[0.4, 8.4]					
	20-24	9.5	[7.2, 12.3]	9.2	[6.9, 12.1]	6.0	[4.1, 8.6]	5.1	[3.2, 8.0]	4.8	[2.8, 8.2]					
	25-29	11.0	[8.6, 14.0]	9.6	[7.4, 12.5]	7.1	[5.2, 9.5]	8.8	[6.5, 11.9]	3.8	[2.6, 5.7]					
	30-34	9.9	[7.7, 12.5]	10.9	[8.4, 14.1]	7.4	[5.5, 9.9]	6.0	[4.2, 8.6]	4.6	[3.3, 6.5]					
	35-39	12.1	[9.4, 15.4]	8.7	[6.4, 11.8]	7.2	[5.3, 9.8]	7.1	[4.9, 10.1]	5.1	[3.4, 7.6]					
	40-44	11.8	[8.6, 15.8]	6.1	[3.9, 9.7]	7.1	[4.9, 10.2]	8.6	[5.8, 12.5]	5.8	[4.0, 8.3]					
	45-49	7.5	[4.8, 11.6]	5.6	[3.5, 9.0]	4.5	[2.7, 7.2]	5.4	[3.3, 8.7]	2.6	[1.4, 4.8]					
	15-19	4.1	[2.1, 8.0]	7.9	[5.0, 12.3]	3.7	[2.0, 6.7]	2.9	[1.2, 6.8]	3.4	[1.8, 6.2]					
	20-24	5.3	[3.7, 7.5]	6.4	[4.9, 8.5]	5.4	[4.1, 7.2]	5.2	[3.7, 7.3]	3.7	[2.8, 4.8]					
	25-29	5.7	[4.2, 7.7]	8.0	[6.2, 10.2]	8.0	[6.3, 10.2]	4.0	[2.6, 6.1]	3.6	[2.9, 4.4]					
Kenya	30-34	6.5	[4.8, 8.8]	9.7	[7.7, 12.1]	8.4	[6.6, 10.6]	6.0	[4.1, 8.7]	4.5	[3.6, 5.6]					
	35-39	4.3	[2.8, 6.5]	6.8	[5.0, 9.2]	10.4	[7.8, 13.6]	10.0	[6.4, 15.2]	5.3	[4.3, 6.5]					
	40-44	5.5	[3.6, 8.3]	7.8	[5.4, 11.1]	7.0	[4.9, 9.9]	5.9	[3.5, 9.8]	6.6	[5.4, 8.2]					
	45-49	5.5	[3.3, 9.0]	5.0	[2.9, 8.4]	11.7	[8.2, 16.4]	8.0	[4.6, 13.4]	8.0	[6.5, 9.9]					
	15-19	3.9	[2.3, 6.7]	2.3	[1.4, 3.6]	2.3	[1.4, 3.9]	2.4	[1.5, 3.8]	0.6	[0.2, 1.5]					
Malawi	20-24	6.7	[4.8, 9.3]	3.6	[2.9, 4.5]	3.7	[2.9, 4.8]	3.8	[3, 4.9]	0.8	[0.4, 1.4]					
	25-29	6.4	[4.7, 8.6]	4.7	[3.7, 6]	4.6	[3.5, 6]	2.8	[2.1, 3.6]	0.6	[0.4, 0.9]					
	30-34	8.0	[5.9, 10.6]	5.5	[4.1, 7.4]	3.9	[2.9, 5.4]	4.3	[3.5, 5.3]	1.1	[0.7, 1.7]					
	35-39	5.0	[3.3, 7.6]	5.2	[4, 6.6]	4.8	[3.6, 6.5]	4.4	[3.5, 5.6]	2.2	[1.6, 3.1]					
	40-44	3.9	[2.2, 6.7]	6.0	[4.4, 8.2]	6.2	[4.4, 8.7]	5.4	[4.2, 7]	1.6	[1, 2.5]					
	45-49	2.1	[0.8, 5]	5.3	[3.8, 7.2]	6.3	[4.2, 9.4]	5.2	[3.9, 7]	1.3	[0.8, 2.2]					
	15-19	3.7	[1.4, 9.6]	3.5	[1.5, 8]	50.0	[.]	2.2	[0.6, 8.6]	2.5	[0.6, 9.3]					
	20-24	7.0	[5, 9.6]	5.5	[4.2, 7.3]	5.1	[3.7, 6.8]	2.4	[1.6, 3.6]	3.1	[1.9, 4.8]					
	25-29	6.3	[4.6, 8.6]	7.4	[6, 9.2]	6.5	[5, 8.2]	4.5	[3.5, 5.6]	3.8	[2.9, 5]					
	30-34	9.1	[7.1, 11.5]	7.9	[6.2, 9.9]	7.7	[6.1, 9.5]	6.1	[4.9, 7.6]	3.8	[3, 4.8]					
Rwanda	35-39	7.1	[5.3, 9.4]	7.7	[5.8, 10]	7.3	[5.6, 9.5]	6.8	[5.4, 8.6]	6.7	[5.3, 8.4]					
	40-44	12.3	[9.3, 16]	9.8	[7.6, 12.6]	9.7	[7.5, 12.3]	8.9	[7, 11.3]	10.3	[8.3, 12.7]					
	45-49	11.5	[8.2, 15.7]	10.0	[7.4, 13.5]	8.2	[6.1, 10.9]	15.1	[12.6, 18]	12.1	[9.5, 15.3]					

Continued...

Table 3.1—Continued

Country	Age	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Senegal	15-19	1.7	[0.8, 3.6]	4.0	[2.4, 6.6]	0.4	[0.1, 0.9]	0.8	[0.3, 2.4]	0.7	[0.2, 2.1]					
	20-24	2.6	[1.7, 4.1]	5.4	[3.8, 7.6]	1.1	[0.6, 2.0]	0.7	[0.3, 2.1]	1.1	[0.6, 2.1]					
	25-29	3.5	[2.3, 5.2]	5.3	[3.9, 7.1]	1.6	[1.0, 2.4]	0.8	[0.5, 1.4]	2.7	[1.8, 4.1]					
	30-34	2.7	[1.6, 4.3]	3.5	[2.4, 4.8]	1.7	[1.1, 2.6]	1.2	[0.6, 2.2]	2.5	[1.2, 5.4]					
	35-39	2.6	[1.6, 4.2]	6.1	[4.6, 8.1]	2.3	[1.4, 3.7]	1.4	[0.7, 2.7]	2.3	[1.4, 4.0]					
	40-44	2.7	[1.6, 4.6]	4.5	[3.1, 6.5]	1.7	[1.1, 2.6]	1.3	[0.6, 2.7]	2.8	[1.5, 5.1]					
	45-49	2.3	[1.1, 5.0]	3.8	[2.2, 6.7]	1.7	[0.9, 3.3]	1.1	[0.5, 2.1]	2.0	[1.1, 3.7]					
	15-19	3.0	[1.5, 6.1]	3.0	[1.2, 7.3]	2.7	[1.4, 5.1]	2.9	[1.3, 6.6]	1.4	[0.6, 3.1]					
	20-24	5.3	[4.0, 6.9]	5.6	[2.7, 11.3]	6.5	[5.0, 8.6]	5.7	[4.2, 7.7]	5.5	[4.2, 7.2]					
Tanzania	25-29	5.4	[4.1, 7.2]	7.0	[4.7, 10.4]	7.4	[5.8, 9.3]	7.3	[5.6, 9.4]	5.9	[4.5, 7.6]					
	30-34	6.2	[4.6, 8.2]	8.2	[5.2, 12.6]	7.0	[5.3, 9.3]	8.7	[6.8, 11.1]	8.3	[6.2, 11.0]					
	35-39	5.2	[3.7, 7.4]	6.9	[4.2, 11.0]	7.8	[5.7, 10.4]	7.0	[5.3, 9.2]	6.1	[4.6, 8.1]					
	40-44	5.0	[3.3, 7.6]	12.3	[8.0, 18.5]	5.0	[3.4, 7.2]	9.1	[6.7, 12.4]	8.4	[6.5, 10.9]					
	45-49	3.4	[2.1, 5.5]	3.1	[1.2, 7.9]	5.3	[3.5, 7.9]	5.5	[3.5, 8.5]	7.5	[5.4, 10.5]					
	15-19	5.2	[3.6, 7.6]	8.1	[5.6, 11.6]	6.5	[4.6, 9.1]	6.1	[3.5, 10.4]	1.7	[0.8, 3.3]					
	20-24	5.5	[4.0, 7.3]	10.0	[8.2, 12.1]	8.8	[7.0, 10.9]	7.7	[5.8, 10.2]	2.7	[1.8, 3.9]					
	25-29	6.6	[5.0, 8.7]	12.3	[10.1, 15.0]	8.8	[6.9, 11.1]	7.8	[5.7, 10.5]	4.0	[3.1, 5.2]					
	30-34	7.6	[5.7, 10.1]	13.8	[11.2, 16.8]	11.1	[8.8, 13.8]	7.4	[5.4, 10.1]	3.8	[2.9, 5.1]					
Zambia	35-39	8.4	[6.3, 11.2]	14.0	[11.3, 17.2]	9.8	[7.6, 12.5]	9.3	[6.7, 12.7]	4.9	[3.7, 6.5]					
	40-44	6.4	[4.4, 9.2]	11.9	[9.3, 15.3]	8.7	[6.3, 11.8]	10.6	[7.7, 14.5]	7.8	[5.9, 10.3]					
	45-49	2.7	[1.4, 5.3]	9.3	[6.7, 12.8]	6.1	[4.0, 9.2]	8.3	[5.6, 12.0]	5.3	[3.6, 7.8]					
	15-19	1.6	[0.7, 3.8]	3.5	[2.0, 6.3]	1.0	[0.3, 3.1]	0.8	[0.3, 2.5]	0.9	[0.3, 2.8]					
	20-24	2.5	[1.6, 3.9]	1.4	[0.8, 2.5]	1.1	[0.7, 1.8]	1.1	[0.6, 2.0]	0.4	[0.1, 1.1]					
	25-29	5.1	[3.6, 7.1]	1.5	[0.7, 3.0]	1.2	[0.7, 2.2]	1.4	[0.8, 2.3]	0.8	[0.4, 1.6]					
	30-34	7.9	[5.4, 11.3]	2.1	[1.2, 3.8]	1.8	[1.1, 2.9]	0.9	[0.4, 1.8]	0.9	[0.5, 1.7]					
	35-39	8.7	[6.5, 11.6]	3.1	[1.8, 5.4]	2.8	[1.8, 4.5]	1.0	[0.4, 2.3]	1.5	[0.9, 2.6]					
	40-44	9.6	[6.8, 13.5]	7.8	[5.6, 10.8]	3.7	[2.3, 5.9]	1.5	[0.7, 3.2]	1.3	[0.6, 2.5]					
45-49	6.7	[4.2, 10.6]	9.0	[5.6, 14.2]	2.7	[1.5, 5.0]	3.0	[1.7, 5.4]	2.0	[0.9, 4.3]						

¹ Survey 1 to Survey 5 refer to the earliest to the most recent DHS data. To match with the survey year, please refer to Table 2.1.

3.3.2 *Parity*

Table 3.2 provides the proportion of currently married women who used traditional method by parity. Six countries had the highest level of traditional use among women with five or more children. In five of these six countries, high parity women have experienced a decline in traditional method use (Bangladesh, Colombia, Malawi, Zambia, and Zimbabwe), while traditional use in high parity women in Rwanda has remained high and declines are seen among women with lower parities. One group that witnessed a large decrease in traditional method use is high parity women in Zimbabwe. While use at low parity has consistently been around 1%, at parity 2-4, traditional use fell from 5% to 1% between survey one and five, and even further from 11% to 2% for women with five or more children. In four countries (Indonesia, Jordan, Peru, and Philippines), women with two to four children and those with five or more have maintained similar levels of traditional method use, with women with no or one child at lower levels of use. In only one country, the Dominican Republic, has traditional method use been higher among low parity (0-1) women than higher parity women (2-4 and 5+).

Table 3.2. Percentage of currently married women who used traditional methods (with 95% confidence interval [95% CI]) by parity and survey year, 16 countries with at least five DHS

Country	Parity	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Bangladesh	0-1	7.9	[6.8, 9.1]	7.3	[6.3, 8.5]	5.2	[4.4, 6.1]	5.1	[4.3, 5.9]	5.4	[4.7, 6.1]	5.1	[4.3, 5.9]			
	2-4	9.7	[8.7, 10.9]	10.5	[9.5, 11.5]	8.7	[7.8, 9.8]	9.6	[8.6, 10.6]	9.7	[9.0, 10.6]	9.6	[8.6, 10.6]			
	5+	14.4	[12.7, 16.2]	16.1	[14.3, 18.1]	12.4	[10.7, 14.3]	15.1	[13.3, 17.0]	15.1	[13.3, 17.0]	11.6	[9.9, 13.7]			
Indonesia	0-1	1.5	[1.2, 1.9]	1.4	[1.1, 1.8]	1.8	[1.4, 2.3]	2.4	[1.9, 3.0]	2.4	[1.9, 3.0]	2.4	[2.0, 2.9]			
	2-4	3.3	[2.9, 3.9]	3.4	[3.0, 4.0]	4.4	[3.7, 5.3]	4.8	[4.3, 5.3]	4.7	[4.2, 5.3]	4.8	[4.3, 5.3]			
	5+	2.7	[2.2, 3.3]	2.8	[2.3, 3.5]	4.3	[3.3, 5.5]	5.0	[4.2, 6.1]	5.0	[4.2, 6.1]	5.2	[4.2, 6.3]			
The Philippines	0-1	9.4	[8.1, 11.0]	14.0	[12.2, 15.9]	12.1	[10.6, 13.8]	13.3	[11.8, 14.9]	13.3	[11.8, 14.9]	14.4	[13.0, 16.0]			
	2-4	17.1	[15.8, 18.4]	21.2	[19.8, 22.7]	16.4	[15.3, 17.5]	18.2	[16.9, 19.5]	18.2	[16.9, 19.5]	18.4	[17.2, 19.6]			
	5+	15.7	[14.3, 17.2]	21.2	[19.3, 23.2]	17.3	[15.4, 19.3]	17.4	[15.6, 19.3]	17.4	[15.6, 19.3]	19.4	[17.5, 21.5]			
Colombia	0-1	9.6	[7.8, 11.8]	12.5	[10.9, 14.3]	12.6	[10.9, 14.4]	11.2	[10.2, 12.4]	11.2	[10.2, 12.4]	7.0	[6.3, 7.7]			
	2-4	11.8	[10.0, 13.8]	12.2	[11.0, 13.5]	11.9	[10.7, 13.2]	9.1	[8.4, 9.8]	9.1	[8.4, 9.8]	5.5	[5.1, 6.0]			
	5+	13.2	[9.9, 17.4]	16.0	[13.7, 18.6]	18.4	[15.6, 21.6]	12.1	[10.5, 14.0]	12.1	[10.5, 14.0]	7.2	[6.1, 8.6]			
Dominican Rep.	0-1	6.7	[4.9, 9.1]	5.8	[4.5, 7.5]	5.6	[4.6, 6.7]	4.3	[3.4, 5.4]	4.3	[3.4, 5.4]	4.1	[2.9, 5.7]			
	2-4	3.9	[2.9, 5.2]	4.3	[3.5, 5.4]	3.6	[3.1, 4.3]	2.5	[2.0, 3.1]	2.5	[2.0, 3.1]	2.9	[2.2, 3.8]			
	5+	4.2	[2.7, 6.6]	2.8	[1.9, 4.3]	2.7	[1.9, 3.9]	1.6	[0.9, 2.8]	1.6	[0.9, 2.8]	2.4	[1.2, 4.6]			
Peru	0-1	20.1	[18.5, 21.8]	16.1	[14.6, 17.7]	20.1	[18.1, 22.2]	19.8	[18.0, 21.6]	19.8	[18.0, 21.6]	20.2	[18.5, 22.0]			
	2-4	24.3	[23.1, 25.5]	18.9	[17.8, 20.1]	24.4	[22.8, 26.0]	24.1	[22.7, 25.5]	24.1	[22.7, 25.5]	24.0	[22.5, 25.5]			
	5+	22.6	[21.1, 24.2]	19.7	[18.1, 21.4]	26.2	[24.0, 28.6]	26.2	[24.0, 28.4]	26.2	[24.0, 28.4]	29.4	[27.0, 31.9]			
Egypt	0-1	1.2	[0.8, 1.7]	1.0	[0.7, 1.5]	2.0	[1.6, 2.6]	2.2	[1.8, 2.8]	2.2	[1.8, 2.8]	1.1	[0.8, 1.5]			
	2-4	3.0	[2.5, 3.7]	2.7	[2.3, 3.2]	3.0	[2.6, 3.5]	3.0	[2.6, 3.4]	3.0	[2.6, 3.4]	1.7	[1.5, 2.0]			
	5+	2.2	[1.7, 2.7]	2.2	[1.7, 2.8]	2.7	[2.2, 3.4]	2.3	[1.8, 2.9]	2.3	[1.8, 2.9]	2.0	[1.5, 2.8]			
Jordan	0-1	7.7	[6.2, 9.6]	8.8	[7.1, 10.9]	9.8	[8.0, 12.0]	8.8	[6.8, 11.3]	8.8	[6.8, 11.3]	10.7	[8.6, 13.1]			
	2-4	14.6	[12.9, 16.3]	16.7	[15.0, 18.5]	15.6	[14.0, 17.4]	16.6	[15.0, 18.3]	16.6	[15.0, 18.3]	21.6	[19.9, 23.4]			
	5+	14.2	[12.9, 15.6]	15.8	[14.3, 17.5]	15.7	[14.0, 17.6]	16.7	[15.0, 18.6]	16.7	[15.0, 18.6]	19.9	[17.7, 22.2]			
Ghana	0-1	7.8	[5.9, 10.2]	8.5	[6.5, 11.0]	6.0	[4.3, 8.1]	6.8	[4.9, 9.3]	6.8	[4.9, 9.3]	6.0	[4.0, 8.9]			
	2-4	11.8	[10.1, 13.9]	10.2	[8.4, 12.2]	6.8	[5.5, 8.4]	7.3	[5.8, 9.1]	7.3	[5.8, 9.1]	4.8	[3.8, 6.0]			
	5+	9.4	[7.6, 11.5]	6.7	[4.9, 9.0]	6.5	[5.0, 8.3]	6.5	[4.6, 9.1]	6.5	[4.6, 9.1]	2.9	[1.9, 4.2]			
Kenya	0-1	5.5	[3.8, 7.7]	6.9	[5.3, 9.1]	4.9	[3.5, 6.7]	4.9	[3.4, 7.2]	4.9	[3.4, 7.2]	3.9	[3.1, 4.9]			
	2-4	5.4	[4.2, 6.8]	8.5	[7.1, 10.2]	7.6	[6.4, 9.0]	6.0	[4.6, 7.7]	6.0	[4.6, 7.7]	4.9	[4.4, 5.5]			
	5+	5.5	[4.4, 6.9]	6.6	[5.3, 8.2]	9.8	[8.0, 11.9]	6.8	[5.2, 8.9]	6.8	[5.2, 8.9]	5.1	[4.3, 6.0]			

Continued...

Table 3.2—Continued

Country	Parity	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Malawi	0-1	3.4	[2.3, 5.1]	2.1	[1.5, 2.9]	1.8	[1.3, 2.5]	2.7	[2.0, 3.7]	0.7	[0.4, 1.3]
	2-4	6.5	[4.9, 8.6]	4.0	[3.3, 4.7]	4.2	[3.4, 5.2]	3.5	[2.9, 4.2]	1.0	[0.8, 1.3]
	5+	6.1	[4.8, 7.8]	7.0	[5.9, 8.1]	6.4	[5.3, 7.7]	5.0	[4.3, 5.8]	1.6	[1.2, 2.1]
Rwanda	0-1	5.0	[3.5, 6.9]	5.3	[4.1, 7.0]	4.4	[3.2, 6.1]	3.4	[2.6, 4.5]	2.9	[2.0, 4.1]
	2-4	7.7	[6.3, 9.5]	7.7	[6.5, 9.0]	6.8	[5.8, 8.0]	5.7	[4.8, 6.7]	4.4	[3.6, 5.2]
	5+	10.0	[8.4, 11.9]	8.6	[7.4, 10.1]	8.5	[7.2, 10.1]	9.1	[8.0, 10.4]	10.1	[8.7, 11.7]
Senegal	0-1	0.9	[0.5, 1.8]	2.7	[1.8, 4.1]	1.0	[0.6, 1.7]	0.9	[0.4, 2.1]	1.1	[0.6, 2.2]
	2-4	3.3	[2.4, 4.6]	5.4	[4.1, 7.0]	1.2	[0.8, 1.7]	1.0	[0.7, 1.6]	2.3	[1.5, 3.5]
	5+	3.0	[2.1, 4.2]	5.4	[4.4, 6.7]	2.3	[1.7, 3.1]	1.1	[0.6, 2.0]	2.9	[2.2, 3.9]
Tanzania	0-1	3.5	[2.5, 4.8]	4.0	[2.4, 6.6]	4.0	[2.9, 5.4]	5.6	[4.1, 7.6]	5.1	[3.9, 6.7]
	2-4	6.2	[5.1, 7.7]	5.8	[3.8, 8.7]	6.6	[5.3, 8.2]	7.1	[5.9, 8.6]	7.5	[6.2, 9.1]
	5+	5.0	[3.9, 6.4]	9.6	[7.4, 12.5]	7.7	[6.0, 9.9]	7.6	[6.2, 9.2]	5.7	[4.6, 7.0]
Zambia	0-1	3.2	[2.2, 4.6]	4.3	[3.1, 6.0]	5.1	[3.8, 6.7]	5.4	[3.8, 7.8]	1.7	[1.1, 2.6]
	2-4	5.5	[4.4, 7.0]	11.6	[9.9, 13.7]	8.6	[7.3, 10.2]	8.0	[6.4, 10.0]	3.7	[2.9, 4.6]
	5+	8.8	[7.4, 10.6]	15.7	[13.8, 17.9]	11.4	[9.7, 13.4]	9.4	[7.7, 11.5]	6.1	[5.0, 7.4]
Zimbabwe	0-1	1.2	[0.6, 2.2]	1.6	[0.9, 2.8]	0.8	[0.5, 1.5]	1.0	[0.5, 1.7]	0.7	[0.4, 1.4]
	2-4	4.7	[3.6, 6.1]	1.4	[0.9, 2.1]	1.5	[1.1, 2.1]	1.1	[0.8, 1.7]	0.8	[0.6, 1.2]
	5+	11.0	[9.0, 13.3]	8.4	[6.4, 10.9]	4.0	[2.9, 5.5]	2.4	[1.4, 4.0]	1.9	[1.2, 3.0]

¹ Survey 1 to Survey 5 refer to the earliest to the most recent DHS data. To match with the survey year, please refer to Table 2.1.

3.3.3 Education

Education plays a role in determining the use of traditional methods among women in many countries. Table 3.3 presents trends in traditional contraceptive use (proportion and 95% confidence interval) by education level of married women for each country. One common pattern shown in Table 3.3 is that the higher use of traditional methods among the most educated women in the earlier surveys (Bangladesh, Dominican Republic, Egypt, Ghana, Indonesia, Jordan, Kenya, Philippines, Rwanda, Senegal, Tanzania), followed by a decrease in the later surveys among this group (in 8 of the 11 surveys, education classified as secondary plus is no longer the most common educational group for traditional use). The decline in traditional method use is also accompanied by an increase in modern methods. In some countries (Malawi, Peru, and Zambia), changes in traditional method use are similar for all education groups.

Table 3.3. Percentage of currently married women who used traditional methods (with 95% confidence interval [95% CI]) by education level and survey year, 16 countries with at least five DHS

Country	Education	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Bangladesh	None	9.5	[8.5, 10.7]	10.6	[9.4, 11.8]	8.3	[7.0, 9.7]	11.2	[10.1, 12.5]	11.0	[9.0, 13.3]					
	Primary	10.1	[8.8, 11.5]	11.5	[10.2, 12.9]	8.5	[7.4, 9.7]	10.1	[9.1, 11.1]	8.0	[7.0, 9.1]					
	Secondary+	12.0	[10.6, 13.5]	10.5	[9.4, 11.7]	8.2	[7.3, 9.3]	7.3	[6.6, 8.1]	7.4	[6.5, 8.4]					
Indonesia	None	1.5	[1.0, 2.2]	1.5	[0.9, 2.5]	2.3	[1.4, 3.6]	2.2	[1.4, 3.4]	1.7	[0.9, 3.2]					
	Primary	2.0	[1.7, 2.4]	1.8	[1.6, 2.2]	2.7	[2.1, 3.5]	2.8	[2.4, 3.3]	2.2	[1.9, 2.6]					
	Secondary+	5.1	[4.4, 5.9]	5.0	[4.3, 5.8]	5.1	[4.4, 5.9]	5.4	[4.9, 6.1]	5.4	[4.9, 5.9]					
The Philippines	None	3.6	[1.8, 6.8]	7.7	[4.7, 12.4]	6.3	[3.1, 12.5]	9.8	[6.0, 15.8]	13.3	[8.7, 19.6]					
	Primary	13.0	[11.8, 14.2]	17.0	[15.5, 18.6]	13.8	[12.3, 15.3]	15.0	[13.4, 16.7]	16.7	[15.0, 18.6]					
	Secondary+	17.2	[16.0, 18.4]	21.3	[20.1, 22.6]	16.5	[15.5, 17.6]	17.4	[16.3, 18.6]	17.8	[16.8, 18.8]					
Colombia	None	8.6	[3.7, 18.5]	12.6	[9.4, 16.7]	17.2	[12.9, 22.6]	9.7	[7.6, 12.4]	8.9	[6.6, 11.7]					
	Primary	11.5	[9.2, 14.3]	13.8	[12.4, 15.3]	14.9	[13.1, 16.9]	11.0	[10.1, 12.0]	6.6	[5.9, 7.3]					
	Secondary+	11.8	[10.3, 13.5]	12.1	[10.9, 13.5]	11.2	[10.1, 12.4]	9.5	[8.8, 10.2]	5.8	[5.4, 6.3]					
Dominican Republic	None	3.7	[1.9, 7.3]	2.5	[1.4, 4.4]	2.4	[1.5, 4.0]	1.8	[0.7, 4.3]	1.5	[0.4, 5.5]					
	Primary	2.9	[2.1, 3.9]	3.4	[2.8, 4.2]	3.2	[2.7, 3.8]	1.9	[1.4, 2.5]	1.7	[1.1, 2.6]					
	Secondary+	7.7	[5.8, 10.2]	6.5	[5.2, 8.1]	5.1	[4.3, 6.0]	3.7	[3.1, 4.5]	4.2	[3.4, 5.3]					
Peru	None	19.5	[17.1, 22.1]	17.1	[14.7, 19.9]	26.1	[22.4, 30.2]	24.9	[21.0, 29.2]	26.0	[22.3, 30.0]					
	Primary	24.2	[22.8, 25.6]	19.8	[18.4, 21.2]	27.0	[25.0, 29.1]	27.2	[25.5, 29.1]	29.3	[27.4, 31.2]					
	Secondary+	22.5	[21.4, 23.7]	17.8	[16.7, 18.9]	21.6	[20.2, 23.1]	21.2	[19.9, 22.5]	21.0	[19.8, 22.3]					
Jordan	None	10.9	[9.2, 12.9]	10.8	[8.3, 13.8]	7.6	[5.4, 10.7]	7.8	[5.2, 11.5]	13.8	[9.1, 20.3]					
	Primary	12.0	[10.3, 14.0]	12.1	[9.8, 14.9]	11.8	[9.3, 14.9]	12.5	[9.3, 16.6]	16.8	[12.8, 21.6]					
	Secondary+	14.4	[13.3, 15.7]	15.9	[14.7, 17.2]	15.4	[14.2, 16.7]	15.7	[14.6, 16.8]	19.1	[18.0, 20.3]					
Egypt	None	1.5	[1.2, 2.0]	1.8	[1.4, 2.4]	2.5	[2.0, 3.2]	2.2	[1.7, 2.7]	1.3	[1.0, 1.8]					
	Primary	2.4	[1.9, 3.1]	2.2	[1.7, 3.0]	2.2	[1.6, 3.1]	2.4	[1.7, 3.3]	1.2	[0.7, 1.9]					
	Secondary+	3.4	[2.7, 4.2]	2.5	[2.1, 3.1]	3.0	[2.6, 3.4]	3.0	[2.6, 3.5]	1.8	[1.6, 2.1]					
Ghana	None	4.6	[3.5, 5.9]	4.3	[3.2, 5.7]	4.2	[3.1, 5.8]	2.7	[1.7, 4.5]	1.1	[0.6, 2.1]					
	Primary	12.9	[11.1, 14.9]	7.4	[5.3, 10.2]	5.3	[3.8, 7.4]	8.7	[6.5, 11.4]	2.0	[1.2, 3.5]					
	Secondary+	23.3	[18.8, 28.6]	12.5	[10.6, 14.7]	9.1	[7.4, 11.2]	8.7	[7.2, 10.5]	7.1	[5.7, 8.7]					
Kenya	None	4.2	[2.8, 6.4]	6.7	[4.4, 10.2]	4.0	[2.5, 6.3]	2.1	[1.1, 4.1]	2.4	[1.5, 3.8]					
	Primary	5.5	[4.4, 6.8]	6.4	[5.3, 7.6]	7.7	[6.4, 9.4]	5.9	[4.7, 7.4]	4.1	[3.6, 4.6]					
	Secondary+	6.7	[5.2, 8.7]	10.3	[8.7, 12.3]	10.1	[8.4, 12.2]	7.7	[5.9, 10.0]	6.3	[5.5, 7.2]					

Continued...

Table 3.3—Continued

Country	Education	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Malawi	None	5.2	[4.1, 6.7]	4.2	[3.5, 5.1]	4.0	[3.2, 5.1]	3.1	[2.4, 4.1]	1.0	[0.6, 1.5]					
	Primary	6.2	[5.0, 7.6]	4.8	[4.2, 5.6]	4.7	[3.9, 5.6]	3.9	[3.4, 4.4]	1.0	[0.8, 1.3]					
	Secondary+	5.1	[2.8, 9.1]	3.5	[2.1, 5.6]	3.2	[1.9, 5.2]	4.7	[3.7, 5.9]	1.4	[1.0, 2.0]					
Rwanda	None	6.8	[5.5, 8.5]	5.8	[4.8, 7.1]	5.0	[3.9, 6.2]	6.0	[4.8, 7.5]	7.3	[5.8, 9.2]					
	Primary	9.4	[8.0, 11.1]	7.2	[6.2, 8.4]	7.6	[6.6, 8.7]	6.3	[5.6, 7.1]	5.4	[4.8, 6.2]					
	Secondary+	9.8	[6.8, 14.0]	15.5	[13.0, 18.3]	11.2	[8.6, 14.6]	8.0	[6.3, 10.1]	5.6	[3.9, 7.9]					
Senegal	None	1.9	[1.3, 2.9]	4.5	[3.5, 5.6]	1.0	[0.8, 1.4]	0.8	[0.5, 1.3]	2.0	[1.5, 2.8]					
	Primary	6.5	[4.6, 8.9]	4.8	[3.6, 6.5]	1.9	[1.3, 2.9]	1.6	[0.9, 2.7]	2.8	[1.8, 4.4]					
	Secondary+	7.2	[4.3, 12.0]	8.5	[5.5, 12.9]	4.2	[2.6, 6.8]	1.4	[0.6, 3.6]	1.9	[0.9, 3.6]					
Tanzania	None	2.3	[1.6, 3.3]	6.9	[4.7, 10.1]	5.1	[3.2, 8.2]	4.4	[3.1, 6.3]	2.5	[1.7, 3.5]					
	Primary	6.1	[5.1, 7.4]	6.2	[4.7, 8.2]	6.4	[5.4, 7.7]	6.8	[5.8, 8.0]	5.7	[4.8, 6.6]					
	Secondary+	13.7	[9.6, 19.3]	11.3	[7.0, 17.7]	12.4	[8.9, 17.0]	16.5	[12.1, 22.0]	14.3	[11.7, 17.4]					
Zambia	None	5.3	[3.7, 7.5]	11.4	[8.9, 14.6]	12.2	[9.7, 15.3]	7.9	[5.4, 11.5]	4.9	[3.2, 7.3]					
	Primary	6.5	[5.4, 7.8]	12.0	[10.4, 13.7]	9.1	[7.9, 10.5]	8.9	[7.3, 10.6]	4.8	[3.9, 5.9]					
	Secondary+	6.7	[5.1, 8.8]	10.3	[8.3, 12.6]	6.4	[5.0, 8.1]	6.4	[5.0, 8.1]	3.2	[2.5, 4.0]					
Zimbabwe	None	6.9	[4.8, 9.9]	5.7	[3.6, 8.9]	4.5	[2.5, 7.8]	1.0	[0.1, 6.4]	50.0	[,]					
	Primary	7.5	[6.2, 9.2]	4.4	[3.3, 6.0]	1.9	[1.4, 2.6]	1.6	[1.0, 2.6]	1.1	[0.6, 1.8]					
	Secondary+	3.0	[2.1, 4.3]	1.5	[0.9, 2.4]	1.5	[1.1, 2.0]	1.1	[0.8, 1.5]	1.0	[0.7, 1.3]					

¹Survey 1 to Survey 5 refer to the earliest to the most recent DHS data. To match with the survey year, please refer to Table 2.1.

3.3.4 Residence

Results of the relationship between residence and traditional method use show that urban women tend to have a higher percentage of use compared with those who live in rural areas. Table 3.4 shows that in 10 of the 16 countries, the relationship between urban and rural traditional method use remained unchanged—either both increased (Indonesia and Philippines), both decreased (Bangladesh, Dominican Republic, Ghana, Malawi, Rwanda, Zambia, and Zimbabwe), or stayed the same (Kenya). Only one country, Jordan, experienced a shift with traditional methods being more common in urban areas to rural areas. In the second to last survey, there was no statistical difference between women in rural and urban areas. However, between the last two surveys, the prevalence in urban areas grew by 3 percentage points, while rural areas grew by almost 6 percentage points.

Table 3.4. Percentage of currently married women who used traditional methods (with 95% confidence interval [95% CI]) by residence and survey year, 16 countries with at least five DHS

Country	Residence	Survey 1 ¹			Survey 2			Survey 3			Survey 4			Survey 5		
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
Bangladesh	Urban	11.3	[10.1, 12.7]	11.4	[10.2, 12.6]	9.6	[8.5, 10.8]	10.0	[9.1, 11.0]	10.0	[9.1, 11.0]	9.7	[8.3, 11.2]			
	Rural	10.1	[9.1, 11.2]	10.7	[9.8, 11.7]	8.0	[7.1, 8.9]	8.9	[8.1, 9.7]	8.9	[8.1, 9.7]	7.9	[7.1, 8.8]			
Indonesia	Urban	4.4	[3.7, 5.2]	4.6	[3.9, 5.4]	4.1	[3.5, 4.7]	5.3	[4.6, 6.1]	5.3	[4.6, 6.1]	5.1	[4.5, 5.7]			
	Rural	2.0	[1.7, 2.3]	2.0	[1.7, 2.4]	3.2	[2.4, 4.2]	3.0	[2.6, 3.5]	3.0	[2.6, 3.5]	3.0	[2.5, 3.4]			
The Philippines	Urban	15.4	[14.1, 16.7]	20.3	[19.0, 21.7]	16.3	[15.1, 17.5]	18.0	[16.6, 19.5]	18.0	[16.6, 19.5]	18.7	[17.4, 20.1]			
	Rural	14.9	[13.8, 16.0]	18.9	[17.6, 20.2]	14.7	[13.4, 16.1]	15.3	[14.1, 16.5]	15.3	[14.1, 16.5]	16.3	[15.1, 17.6]			
Colombia	Urban	11.4	[10.2, 12.7]	11.8	[10.7, 12.9]	11.4	[10.4, 12.6]	9.7	[9.0, 10.3]	9.7	[9.0, 10.3]	5.8	[5.4, 6.3]			
	Rural	11.6	[8.3, 15.9]	15.4	[13.6, 17.4]	16.8	[14.6, 19.2]	11.1	[10.1, 12.1]	11.1	[10.1, 12.1]	6.9	[6.2, 7.7]			
Dominican Republic	Urban	5.0	[4.0, 6.4]	5.1	[4.2, 6.1]	4.2	[3.6, 4.9]	3.5	[2.9, 4.1]	3.5	[2.9, 4.1]	3.5	[2.7, 4.4]			
	Rural	4.1	[2.8, 5.9]	3.5	[2.7, 4.4]	3.5	[2.9, 4.2]	1.5	[1.1, 2.0]	1.5	[1.1, 2.0]	2.5	[1.6, 4.0]			
Peru	Urban	22.5	[21.4, 23.6]	16.9	[15.9, 18.0]	21.0	[19.5, 22.6]	21.2	[19.9, 22.6]	21.2	[19.9, 22.6]	20.9	[19.6, 22.3]			
	Rural	23.8	[22.2, 25.4]	21.2	[19.6, 22.8]	28.3	[26.2, 30.5]	27.7	[25.8, 29.8]	30.2	[28.4, 32.0]	30.2	[28.4, 32.0]			
Jordan	Urban	13.6	[12.5, 14.8]	15.0	[13.8, 16.2]	14.5	[13.3, 15.9]	15.1	[14.0, 16.2]	15.1	[14.0, 16.2]	18.3	[17.2, 19.5]			
	Rural	11.6	[9.8, 13.6]	14.6	[12.4, 17.2]	14.6	[12.5, 17.0]	15.6	[13.7, 17.8]	15.6	[13.7, 17.8]	21.6	[19.5, 23.8]			
Egypt	Urban	2.7	[2.2, 3.4]	2.3	[1.8, 2.8]	2.8	[2.4, 3.3]	2.7	[2.3, 3.2]	2.7	[2.3, 3.2]	1.8	[1.5, 2.2]			
	Rural	2.0	[1.7, 2.5]	2.1	[1.7, 2.6]	2.7	[2.3, 3.1]	2.7	[2.3, 3.1]	2.7	[2.3, 3.1]	1.6	[1.3, 1.8]			
Ghana	Urban	14.8	[12.6, 17.4]	13.0	[10.6, 15.9]	7.2	[5.6, 9.2]	8.5	[6.9, 10.5]	8.5	[6.9, 10.5]	6.0	[4.7, 7.7]			
	Rural	7.9	[6.6, 9.5]	6.7	[5.5, 8.1]	6.0	[4.8, 7.5]	5.8	[4.5, 7.4]	5.8	[4.5, 7.4]	2.9	[2.1, 4.1]			
Kenya	Urban	5.5	[3.8, 7.9]	8.6	[6.7, 11.0]	7.7	[6.1, 9.6]	6.5	[4.7, 8.8]	6.5	[4.7, 8.8]	4.9	[4.2, 5.7]			
	Rural	5.4	[4.5, 6.5]	7.2	[6.1, 8.5]	7.8	[6.6, 9.2]	5.9	[4.7, 7.4]	5.9	[4.7, 7.4]	4.6	[4.1, 5.2]			
Malawi	Urban	5.6	[4.2, 7.5]	3.0	[2.0, 4.6]	2.5	[1.6, 3.9]	4.1	[3.2, 5.3]	4.1	[3.2, 5.3]	1.7	[1.2, 2.6]			
	Rural	5.6	[4.7, 6.8]	4.8	[4.2, 5.4]	4.7	[4.0, 5.5]	3.8	[3.4, 4.4]	3.8	[3.4, 4.4]	1.0	[0.8, 1.2]			
Rwanda	Urban	8.7	[6.5, 11.4]	10.8	[9.0, 12.9]	10.4	[7.9, 13.6]	6.0	[4.8, 7.7]	6.0	[4.8, 7.7]	5.4	[4.0, 7.1]			
	Rural	8.2	[7.1, 9.5]	7.0	[6.2, 8.0]	6.6	[5.8, 7.5]	6.5	[5.8, 7.2]	6.5	[5.8, 7.2]	5.8	[5.2, 6.6]			
Senegal	Urban	4.3	[3.3, 5.6]	4.4	[3.4, 5.8]	2.3	[1.7, 3.1]	1.8	[1.2, 2.8]	1.8	[1.2, 2.8]	2.8	[1.9, 4.0]			
	Rural	1.9	[1.2, 3.1]	5.0	[3.9, 6.5]	1.0	[0.7, 1.4]	0.5	[0.3, 0.7]	0.5	[0.3, 0.7]	1.8	[1.4, 2.3]			
Tanzania	Urban	6.0	[4.6, 7.8]	4.5	[2.7, 7.3]	7.6	[5.9, 9.7]	11.9	[9.4, 14.9]	11.9	[9.4, 14.9]	10.9	[9.1, 13.0]			
	Rural	4.9	[3.9, 6.0]	7.3	[5.7, 9.3]	6.0	[4.8, 7.6]	5.4	[4.5, 6.4]	5.4	[4.5, 6.4]	4.3	[3.7, 5.1]			
Zambia	Urban	5.5	[4.4, 6.8]	9.7	[8.1, 11.6]	4.6	[3.5, 6.0]	6.3	[5.0, 8.0]	6.3	[5.0, 8.0]	3.2	[2.5, 4.2]			
	Rural	7.0	[5.6, 8.9]	12.7	[10.8, 14.8]	11.2	[9.8, 12.8]	9.0	[7.3, 11.1]	9.0	[7.3, 11.1]	5.0	[4.0, 6.1]			
Zimbabwe	Urban	3.7	[2.3, 5.9]	1.2	[0.6, 2.4]	1.5	[1.0, 2.3]	1.1	[0.7, 1.8]	1.1	[0.7, 1.8]	0.8	[0.5, 1.3]			
	Rural	6.9	[5.7, 8.3]	4.3	[3.3, 5.7]	2.0	[1.5, 2.5]	1.3	[0.9, 1.9]	1.3	[0.9, 1.9]	1.1	[0.8, 1.5]			

¹ Survey 1 to Survey 5 refer to the earliest to the most recent DHS data. To match with the survey year, please refer to Table 2.1.

3.3.5 Wealth

Two distinct patterns emerge with analysis of traditional method use by wealth quintile in Table 3.5. In some countries (Bangladesh, Dominican Republic, Ghana, Indonesia, Rwanda, and Tanzania), traditional method use, as with modern method use, is more common among richer women. The top two wealth quintiles maintained the highest use of traditional methods across all surveys. The opposite relationship between wealth and traditional method use (with poorer women more likely to use traditional methods) was found in Colombia, Peru, Zambia, and Zimbabwe. In Egypt, women in the top and bottom wealth quintiles have the highest level of use of traditional methods. Decline took place in all wealth groups in Colombia, Egypt, Kenya, Zambia, and Zimbabwe.

Table 3.5. Percentage of currently married women who used traditional methods (with 95% confidence interval [95% CI]) by wealth quintiles and survey year, 16 countries with at least five DHS

Country	Wealth quintiles ²	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Bangladesh	Lowest	9.0	[7.5, 10.7]	7.9	[6.4, 9.8]	8.6	[7.4, 10.0]	7.4	[6.2, 8.9]		
	Second	10.0	[8.5, 11.8]	7.5	[6.2, 9.2]	9.2	[8.0, 10.5]	8.0	[6.8, 9.4]		
	Middle	11.4	[9.9, 13.0]	8.1	[6.7, 9.7]	9.3	[8.2, 10.5]	8.2	[6.9, 9.7]		
	Fourth	11.1	[9.7, 12.7]	7.6	[6.2, 9.1]	8.9	[7.8, 10.0]	8.2	[6.6, 10.2]		
	Highest	12.6	[11.1, 14.2]	10.5	[9.1, 12.1]	9.8	[8.6, 11.0]	9.9	[8.6, 11.4]		
Indonesia	Lowest			3.9	[2.5, 6.0]	3.1	[2.6, 3.8]	3.2	[2.6, 3.8]		
	Second			2.2	[1.7, 2.9]	3.0	[2.5, 3.7]	2.9	[2.4, 3.4]		
	Middle			2.9	[2.1, 4.0]	3.5	[2.8, 4.2]	3.6	[3.0, 4.4]		
	Fourth			3.6	[2.8, 4.6]	4.7	[3.9, 5.6]	4.3	[3.6, 5.1]		
	Highest			5.4	[4.5, 6.3]	5.6	[4.7, 6.6]	5.9	[5.1, 6.9]		
The Philippines	Lowest			13.6	[11.8, 15.6]	14.8	[13.2, 16.7]	16.9	[15.1, 18.8]		
	Second			15.0	[13.3, 16.9]	16.9	[15.2, 18.9]	17.9	[16.2, 19.8]		
	Middle			17.0	[15.2, 19.1]	17.4	[15.6, 19.4]	18.2	[16.4, 20.2]		
	Fourth			16.5	[14.7, 18.5]	17.3	[15.0, 19.9]	17.9	[16.0, 20.0]		
	Highest			15.3	[13.5, 17.3]	16.9	[14.9, 19.1]	16.3	[14.4, 18.4]		
Colombia	Lowest					12.5	[11.3, 13.9]	7.0	[6.2, 7.9]		
	Second					10.5	[9.4, 11.7]	6.2	[5.5, 7.0]		
	Middle					9.3	[8.2, 10.5]	6.7	[5.9, 7.5]		
	Fourth					9.2	[8.1, 10.5]	5.5	[4.7, 6.3]		
	Highest					8.9	[7.6, 10.4]	5.2	[4.3, 6.2]		
Dominican Republic	Lowest					1.0	[0.7, 1.5]	2.4	[1.4, 4.1]		
	Second					2.0	[1.4, 2.9]	2.7	[1.6, 4.3]		
	Middle					2.6	[1.9, 3.6]	2.3	[1.5, 3.6]		
	Fourth					4.6	[3.5, 6.1]	4.3	[2.9, 6.3]		
	Highest					3.8	[2.8, 5.1]	4.5	[3.1, 6.5]		
Peru	Lowest			28.2	[25.6, 31.0]	27.9	[25.7, 30.1]	31.7	[29.5, 34.1]		
	Second			29.5	[27.1, 32.0]	26.4	[24.5, 28.5]	24.5	[22.7, 26.4]		
	Middle			23.4	[21.1, 25.9]	22.8	[20.8, 24.9]	24.7	[22.5, 27.0]		
	Fourth			20.5	[18.3, 22.9]	21.1	[19.1, 23.3]	21.5	[19.4, 23.8]		
	Highest			17.6	[15.2, 20.3]	17.8	[15.6, 20.2]	15.8	[13.3, 18.6]		

Continued...

Table 3.5—Continued

Country	Wealth quintiles ²	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Jordan	Lowest	13.4	[11.5, 15.5]					17.4	[15.2, 19.8]		
	Second	14.3	[12.5, 16.4]					19.1	[16.7, 21.6]		
	Middle	18.9	[16.4, 21.7]					18.9	[16.4, 21.6]		
	Fourth	14.3	[11.9, 17.0]					19.1	[16.4, 22.0]		
	Highest	14.9	[12.5, 17.6]					19.8	[16.8, 23.3]		
Egypt	Lowest	3.3	[2.6, 4.3]	3.3	[2.6, 4.3]	3.6	[2.9, 4.4]	1.7	[1.2, 2.2]		
	Second	2.2	[1.6, 3.0]	2.2	[1.6, 3.0]	2.3	[1.8, 3.0]	1.4	[1.0, 1.9]		
	Middle	2.3	[1.8, 2.9]	2.3	[1.8, 2.9]	2.4	[1.9, 3.0]	1.4	[1.0, 1.9]		
	Fourth	2.5	[1.9, 3.2]	2.5	[1.9, 3.2]	2.1	[1.6, 2.8]	1.7	[1.3, 2.2]		
	Highest	3.3	[2.7, 4.0]	3.1	[2.7, 4.0]	3.1	[2.5, 3.9]	2.1	[1.6, 2.7]		
Ghana	Lowest	5.4	[3.8, 7.6]	2.6	[1.4, 4.8]	2.6	[1.4, 4.8]	0.9	[0.4, 1.8]		
	Second	4.8	[3.3, 7.0]	6.0	[4.1, 8.6]	6.0	[4.1, 8.6]	2.3	[1.5, 3.6]		
	Middle	6.3	[4.4, 8.9]	6.0	[4.0, 8.9]	6.0	[4.0, 8.9]	2.7	[1.7, 4.3]		
	Fourth	7.7	[5.4, 11.1]	9.0	[6.8, 11.8]	6.8	[4.9, 9.5]	6.8	[4.9, 9.5]		
	Highest	8.3	[6.3, 10.8]	10.8	[8.1, 14.1]	8.5	[6.2, 11.4]				
Kenya	Lowest	6.0	[4.3, 8.5]	3.2	[1.8, 5.4]	3.1	[2.3, 4.1]				
	Second	7.8	[5.8, 10.2]	6.6	[4.7, 9.4]	4.1	[3.3, 5.0]				
	Middle	8.5	[6.4, 11.2]	6.6	[4.7, 9.0]	4.7	[3.9, 5.6]				
	Fourth	9.7	[7.6, 12.3]	6.5	[4.6, 9.3]	5.0	[4.1, 6.1]				
	Highest	7.0	[5.7, 8.7]	6.8	[4.9, 9.3]	6.2	[5.3, 7.3]				
Malawi	Lowest	3.5	[2.5, 4.8]	3.8	[3.0, 4.9]	0.8	[0.5, 1.3]				
	Second	3.8	[2.9, 4.9]	4.2	[3.4, 5.1]	0.9	[0.6, 1.3]				
	Middle	5.3	[4.2, 6.5]	3.6	[2.9, 4.5]	0.9	[0.6, 1.5]				
	Fourth	5.7	[4.5, 7.2]	3.1	[2.5, 3.9]	1.0	[0.7, 1.5]				
	Highest	3.0	[2.0, 4.6]	4.6	[3.8, 5.6]	1.8	[1.3, 2.4]				
Rwanda	Lowest	5.0	[3.7, 6.7]	4.6	[3.6, 5.9]	3.5	[2.6, 4.7]				
	Second	7.8	[6.1, 9.8]	6.2	[4.9, 7.7]	4.2	[3.3, 5.3]				
	Middle	7.3	[5.7, 9.2]	5.7	[4.5, 7.2]	6.5	[5.2, 8.0]				
	Fourth	6.4	[4.9, 8.2]	8.0	[6.6, 9.8]	7.7	[6.2, 9.7]				
	Highest	9.4	[7.4, 11.8]	7.6	[6.2, 9.2]	6.9	[5.4, 8.6]				

Continued...

Table 3.5—Continued

Country	Wealth quintiles ²	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Senegal	Lowest	0.8	[0.5, 1.3]	0.4	[0.2, 0.7]	2.3	[1.5, 3.6]				
	Second	1.5	[1.0, 2.2]	0.6	[0.4, 1.0]	1.8	[1.2, 2.6]				
	Middle	1.2	[0.8, 1.8]	1.0	[0.5, 1.9]	2.8	[1.7, 4.7]				
	Fourth	1.6	[0.9, 2.8]	1.6	[0.9, 3.1]	2.3	[1.2, 4.4]				
	Highest	2.5	[1.7, 3.9]	1.6	[0.9, 2.8]	1.6	[0.5, 4.6]				
Tanzania	Lowest	4.9	[3.6, 6.6]	3.7	[2.6, 5.3]	2.7	[1.9, 4.0]				
	Second	6.1	[4.2, 8.7]	4.8	[3.4, 6.8]	4.2	[3.1, 5.7]				
	Middle	5.8	[4.2, 8.1]	5.4	[4.0, 7.3]	4.1	[3.0, 5.6]				
	Fourth	5.8	[4.2, 7.9]	8.0	[6.2, 10.2]	5.8	[4.5, 7.3]				
	Highest	9.2	[7.4, 11.2]	12.9	[10.2, 16.2]	13.8	[11.6, 16.4]				
Zambia	Lowest	9.8	[7.2, 13.2]	7.3	[5.6, 9.5]						
	Second	10.1	[7.8, 13.0]	4.0	[3.1, 5.3]						
	Middle	8.9	[6.7, 11.6]	3.7	[2.7, 5.1]						
	Fourth	5.7	[4.1, 7.9]	3.0	[1.9, 4.6]						
	Highest	5.9	[4.1, 8.4]	3.5	[2.5, 4.8]						
Zimbabwe	Lowest	2.8	[1.9, 4.2]	1.9	[1.2, 3.1]	1.0	[0.5, 1.9]				
	Second	2.2	[1.4, 3.3]	1.2	[0.6, 2.2]	1.2	[0.7, 2.1]				
	Middle	1.7	[1.0, 2.8]	1.1	[0.6, 2.1]	1.0	[0.5, 2.2]				
	Fourth	1.0	[0.5, 1.7]	1.2	[0.5, 2.6]	0.7	[0.3, 1.5]				
	Highest	1.6	[1.0, 2.5]	1.0	[0.5, 1.8]	1.1	[0.7, 1.8]				

¹ Survey 1 to Survey 5 refer to the earliest to the most recent DHS data. To match with the survey year, please refer to Table 2.1.

² Empty cells indicate that wealth quintiles were not generated for the survey year.

3.3.6 Fertility intentions

In most countries, the highest level of traditional use is among women who say they want no more children (see Table 3.6). The proportion of users among this group of women is far above those who want another child, either soon or in the future in Bangladesh, Indonesia, and Rwanda. Women who desire to stop childbearing have higher contraceptive use overall (data not shown here); traditional methods may be no exception. In Ghana, Jordan, the Philippines, Tanzania, and Zambia, traditional use is similar for women who want to space (delay their next birth by 2 years) and limit. In a few countries, namely Peru and recent surveys in Zimbabwe, no differences are observed in traditional use by fertility intentions.

Table 3.6. Percentage of currently married women who used traditional methods (with 95% confidence interval [95% CI]) by fertility desires and survey year, 16 countries with at least five DHS

Country	Future fertility desires	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Bangladesh	Want sooner	6.2	[4.8, 8.0]	4.4	[3.3, 5.8]	4.1	[3.0, 5.4]	4.6	[3.6, 5.8]	4.1	[3.1, 5.3]
	Want later	9.0	[7.8, 10.3]	9.0	[7.8, 10.3]	5.9	[5.0, 7.0]	6.3	[5.5, 7.3]	5.3	[4.5, 6.3]
	Want no more	12.2	[11.0, 13.4]	13.6	[12.5, 14.6]	10.4	[9.4, 11.4]	11.2	[10.4, 12.0]	10.5	[9.6, 11.5]
Indonesia	Want sooner	1.8	[1.4, 2.4]	1.6	[1.2, 2.2]	2.2	[1.6, 3.1]	2.4	[1.8, 3.1]	2.7	[2.2, 3.4]
	Want later	2.2	[1.8, 2.8]	2.3	[1.9, 2.8]	2.4	[1.9, 3.0]	3.8	[3.2, 4.5]	3.2	[2.7, 3.7]
	Want no more	3.3	[2.8, 3.8]	3.3	[2.9, 3.9]	4.7	[4.0, 5.6]	4.5	[4.1, 5.1]	5.0	[4.5, 5.6]
The Philippines	Want sooner	6.1	[4.6, 8.1]	7.6	[6.0, 9.7]	7.6	[6.0, 9.5]	9.3	[7.5, 11.4]	8.7	[7.2, 10.5]
	Want later	15.9	[14.4, 17.7]	23.0	[20.9, 25.2]	17.8	[15.9, 19.8]	18.3	[16.4, 20.3]	19.7	[17.9, 21.6]
	Want no more	16.7	[15.6, 17.8]	21.1	[19.9, 22.4]	16.7	[15.6, 17.9]	17.7	[16.5, 18.9]	18.7	[17.7, 19.9]
Colombia	Want sooner	14.8	[11.1, 19.6]	12.6	[10.4, 15.1]	12.2	[9.8, 15.2]	12.1	[10.3, 14.2]	7.8	[6.7, 9.1]
	Want later	11.7	[9.2, 14.7]	17.4	[15.2, 19.9]	14.9	[12.7, 17.5]	13.1	[11.7, 14.6]	7.6	[6.7, 8.6]
	Want no more	11.0	[9.3, 12.9]	12.1	[11.0, 13.2]	12.9	[11.7, 14.1]	9.4	[8.7, 10.0]	5.7	[5.2, 6.1]
Dominican Republic	Want sooner	4.7	[3.0, 7.4]	6.8	[5.0, 9.3]	8.3	[6.4, 10.6]	2.8	[2.0, 3.8]	6.3	[4.2, 9.3]
	Want later	8.5	[6.0, 12.0]	8.4	[6.5, 10.7]	6.4	[5.3, 7.7]	5.2	[4.1, 6.7]	4.3	[3.0, 6.1]
	Want no more	3.6	[2.8, 4.7]	2.8	[2.2, 3.6]	2.6	[2.2, 3.1]	2.1	[1.6, 2.8]	2.2	[1.6, 2.9]
Peru	Want sooner	27.0	[24.2, 29.9]	20.8	[18.1, 23.8]	22.8	[19.5, 26.5]	25.1	[22.0, 28.5]	26.4	[23.5, 29.5]
	Want later	22.7	[20.9, 24.8]	18.6	[17.1, 20.3]	26.4	[24.2, 28.8]	23.0	[21.1, 25.0]	24.4	[22.6, 26.4]
	Want no more	23.4	[22.4, 24.4]	18.8	[17.8, 19.9]	23.9	[22.5, 25.5]	24.3	[23.0, 25.7]	24.2	[22.7, 25.7]
Jordan	Want sooner	8.7	[6.9, 10.9]	10.1	[8.2, 12.5]	10.2	[8.1, 12.7]	11.9	[9.6, 14.7]	13.1	[10.9, 15.6]
	Want later	14.1	[12.4, 16.1]	17.0	[15.2, 19.0]	16.4	[14.7, 18.3]	15.6	[13.7, 17.7]	21.9	[19.6, 24.4]
	Want no more	14.7	[13.4, 16.2]	15.8	[14.3, 17.3]	16.1	[14.6, 17.8]	16.5	[15.1, 18.1]	20.5	[18.9, 22.2]
Egypt	Want sooner	0.7	[0.3, 1.3]	0.6	[0.3, 1.2]	1.0	[0.6, 1.5]	1.3	[0.9, 1.9]	0.9	[0.6, 1.4]
	Want later	2.3	[1.7, 3.1]	3.1	[2.4, 4.1]	4.1	[3.3, 5.1]	4.5	[3.8, 5.4]	2.4	[1.9, 3.0]
	Want no more	2.8	[2.4, 3.3]	2.3	[1.9, 2.7]	2.8	[2.4, 3.2]	2.5	[2.2, 2.9]	1.6	[1.4, 1.9]
Ghana	Want sooner	6.9	[5.0, 9.4]	6.9	[4.9, 9.5]	4.3	[2.9, 6.4]	6.8	[4.6, 10.0]	2.8	[1.7, 4.4]
	Want later	10.4	[8.7, 12.4]	9.5	[7.8, 11.5]	7.3	[5.8, 9.2]	6.5	[5.1, 8.3]	4.7	[3.6, 6.1]
	Want no more	12.6	[10.6, 14.9]	9.5	[7.6, 11.8]	7.0	[5.6, 8.8]	7.9	[6.1, 10.2]	5.4	[4.0, 7.1]
Kenya	Want sooner	5.6	[3.7, 8.3]	8.9	[6.5, 12.1]	5.4	[4.0, 7.3]	4.4	[2.8, 6.7]	5.2	[3.7, 7.3]
	Want later	5.4	[4.1, 7.2]	8.5	[6.9, 10.4]	7.5	[6.2, 9.2]	6.2	[4.5, 8.5]	3.5	[2.7, 4.4]
	Want no more	5.8	[4.7, 7.0]	6.8	[5.7, 8.0]	9.0	[7.6, 10.6]	6.4	[5.2, 8.0]	5.5	[4.6, 6.4]

Continued...

Table 3.6—Continued

Country	Future Fertility Desires	Survey 1 ¹		Survey 2		Survey 3		Survey 4		Survey 5	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Malawi	Want sooner	4.7	[3.2, 6.8]	3.7	[2.7, 4.9]	1.8	[1.1, 2.9]	2.7	[1.9, 3.9]	1.0	[0.5, 1.7]
	Want later	6.2	[5.0, 7.7]	3.9	[3.3, 4.8]	4.7	[3.8, 5.8]	4.0	[3.3, 4.7]	0.9	[0.6, 1.3]
	Want no more	6.7	[5.1, 8.9]	5.5	[4.7, 6.5]	4.8	[4.0, 5.9]	4.2	[3.6, 4.8]	1.3	[1.0, 1.7]
Rwanda	Want sooner	6.5	[4.5, 9.2]	6.2	[4.6, 8.4]	5.9	[4.3, 8.1]	4.0	[2.6, 6.2]	4.3	[2.9, 6.4]
	Want later	7.3	[6.0, 8.8]	6.7	[5.7, 7.8]	5.7	[4.7, 7.0]	5.4	[4.6, 6.4]	4.3	[3.5, 5.2]
	Want no more	10.7	[8.9, 12.9]	9.7	[8.4, 11.2]	9.2	[7.9, 10.7]	7.6	[6.8, 8.6]	7.4	[6.4, 8.4]
Senegal	Want sooner	1.1	[0.6, 2.1]	2.7	[1.9, 3.9]	0.8	[0.5, 1.5]	0.7	[0.3, 1.3]	1.2	[0.6, 2.3]
	Want later	3.0	[2.1, 4.3]	5.6	[4.4, 7.1]	1.5	[1.1, 2.0]	1.0	[0.6, 1.7]	1.9	[1.3, 2.8]
	Want no more	4.4	[3.0, 6.4]	5.9	[4.6, 7.7]	2.6	[1.8, 3.8]	1.6	[0.9, 3.0]	4.5	[3.2, 6.4]
Tanzania	Want sooner	3.2	[2.2, 4.5]	5.0	[3.3, 7.5]	4.8	[3.2, 7.2]	5.1	[3.6, 7.2]	3.9	[2.9, 5.2]
	Want later	6.4	[5.3, 7.8]	10.8	[8.2, 14.0]	6.8	[5.5, 8.4]	7.5	[6.3, 8.9]	6.5	[5.4, 7.8]
	Want no more	5.2	[4.0, 6.8]	9.6	[7.1, 12.8]	7.3	[5.8, 9.2]	7.9	[6.5, 9.6]	8.5	[7.1, 10.2]
Zambia	Want sooner	3.0	[2.2, 4.2]	5.9	[4.6, 7.6]	5.1	[3.8, 6.8]	5.8	[4.2, 8.1]	3.1	[2.2, 4.4]
	Want later	7.7	[6.1, 9.6]	14.0	[12.0, 16.4]	11.3	[9.6, 13.2]	8.7	[7.0, 10.9]	4.1	[3.3, 5.2]
	Want no more	8.0	[6.5, 9.8]	14.1	[12.1, 16.3]	8.6	[7.2, 10.2]	8.3	[6.7, 10.3]	5.0	[4.1, 6.1]
Zimbabwe	Want sooner	3.2	[2.0, 5.2]	1.6	[0.8, 2.9]	1.7	[1.0, 3.1]	1.0	[0.6, 1.9]	1.8	[1.1, 2.8]
	Want later	6.2	[4.9, 7.8]	2.5	[1.5, 4.1]	1.6	[1.1, 2.3]	1.3	[0.8, 2.1]	0.6	[0.3, 1.1]
	Want no more	7.6	[6.1, 9.4]	4.7	[3.6, 6.1]	1.9	[1.4, 2.6]	1.3	[0.9, 2.0]	1.0	[0.7, 1.5]

¹ Survey 1 to Survey 5 refer to the earliest to the most recent DHS data. To match with the survey year, please refer to Table 2.1.

4. Case Studies

In this section, we examine four countries with distinct patterns of change in traditional method use in the surveys examined by this report. These countries include one with high and increasing levels of traditional method use, Jordan, where traditional use increased from 13% in 1990 to 17% in 2012, mainly from increased use of withdrawal; one that has maintained high traditional method use, Peru, where traditional use remained stable from 23% in 1996 to 24% in 2012, and where periodic abstinence remains the most common method; one that has seen a decrease in traditional methods, Ghana, where traditional use declined from 10% in 1993 to 5% in 2014; and one country that has maintained low levels of traditional family planning, Indonesia, where traditional use remained stable from 3% in 1994 to 4% in 2012. For each country, we focus on the first and most recent survey included in this analysis. The results show changes in method mix, and the results of multivariate analyses to determine the changing features of women who use traditional methods. In the following regressions, we are interested in the role of age, fertility intentions, education, parity, and residence on the likelihood that a woman is using any method of family planning, if a woman is using a traditional or modern method, and if a woman employs withdrawal or periodic abstinence when using a traditional method. Wealth is not included as a predictor because the wealth index for the earlier surveys is not available.

4.1. Method mix

Table 4.1 presents the distribution of currently married women age 15-49 not using and currently using traditional and modern contraceptive methods by DHS survey year for the four countries in the case studies.

Peru has maintained high levels of traditional method use between the 1996 and 2012 surveys. Periodic abstinence remains the most common traditional method (Table 4.1). The use of withdrawal and injectables doubled while condom use tripled. The use of longer-term methods has decreased, with prevalence of IUDs dropping from 12% to 3%, and female sterilization from 10% to 8%.

Jordan has high increasing levels of traditional method use, although the distribution of these methods has shifted. In the 1990 survey, traditional methods are evenly split between withdrawal (4%), periodic abstinence (4%), and prolonged breastfeeding (5%). Prolonged breastfeeding is considered a folk method of family planning. In the 2012 survey, prolonged breastfeeding is no longer listed as a method, although LAM, a more effective form of prolonged breastfeeding, is included as a modern method. Less than 2% report using this method. Another change is the rise of withdrawal (from 4% to 13% of women). Modern methods increased as well (especially pills, IUDs, and condoms), and the overall level of modern method use has increased from 27% to 42%.

Ghana has experienced a large decline in the use of traditional methods of family planning between 1993 and 2014, from 10% to 5%. This decline is seen in users of periodic abstinence and withdrawal. At the same time, use of modern methods has more than doubled, from 10% to 22%. The methods that gained the most in popularity are injectables and implants.

Indonesia has a low level of traditional method use, as it has for the previous 20 years. From 1994 to 2012, traditional method use rose from 3% to 4%, which was attributed to a small increase in the use of withdrawal. Unlike many other surveys, the 1994 Indonesia DHS records specific folk methods, including herbs and massage, although in total, less than 1% of women report a folk method. The largest change in modern contraceptive popularity is among injectable use, which rose from 15% to 32%. Overall, modern method use rose from 52% to 58% between the two surveys.

Table 4.1. Percent distribution of currently married women age 15-49 not using and currently using contraceptive methods by DHS survey year

Method mix	Peru		Jordan		Indonesia		Ghana	
	1996	2012	1990	2012	1994	2012	1993	2014
Traditional	22.9	23.7	13.1	17.3	2.7	4.0	10.1	4.5
Withdrawal	3.2	7.6	4.0	12.8	0.8	2.3	2.1	1.1
Periodic abstinence	18.0	15.0	3.9	4.0	1.1	1.3	7.5	3.2
Prolonged breastfeeding	--	--	5.0	--	--	--	--	--
Folk methods (herbs, massage)	--	--	--	--	0.6	--	--	--
Other	1.6	1.1	0.2	0.5	0.2	0.4	0.5	0.2
Any Modern	41.3	51.8	26.9	42.1	52.2	57.9	10.1	21.9
Pill	6.2	9.4	4.6	8.2	17.1	13.6	3.2	4.7
IUD	12.0	2.8	15.3	22.6	10.3	3.9	0.9	0.8
Injections	8.0	18.2	0.0	0.7	15.2	31.9	1.6	8
Diaphragm	0.7	--	0.6	--	--	--	1.2	--
Condom	4.4	12.3	0.8	6.3	0.9	1.8	2.2	1.2
Female sterilization	9.5	8.1	5.6	2.6	3.1	3.2	0.9	1.9
Male sterilization	0.2	0.5	0.0	0.0	0.7	0.2	--	--
Norplant	0.3	--	--	0.1	4.9	--	--	--
Implants	--	--	--	--	--	3.3	--	5.2
LAM	--	0.1	--	1.5	--	--	--	0.2
Foam or jelly	--	0.4	--	--	--	--	--	--
Female condoms	--	--	--	0.1	--	--	--	--
Emergency contraception	--	0.0	--	--	--	--	--	--
Other modern	--	--	--	--	--	--	--	0.3
Not using	35.8	24.5	60.0	40.7	45.3	38.1	79.7	73.3

-- Not reported.

4.2. Determinants of Contraceptive Use and Choice of Traditional Methods

In this section, we examine predictors of use of any method (modern or traditional), the use of traditional versus modern methods (among contraceptive users), and use of withdrawal versus periodic abstinence (among traditional method users) by using binary logistic regression. The sociodemographic characteristics of interest include age, parity, education, and residence. Adjusted odds ratios and 95% confidence intervals are shown for each country.

Peru

Table 4.2 presents the profile of users of contraception. The results show that age has been and remains a driver of contraceptive use, and that women age 20-44 are statistically more likely to use any method than women age 45-49. Among contraceptive users, older users have a higher odds ratio of using a traditional method than younger users. When looking at traditional method users, in 1996 younger women had higher odds ratio of reporting withdrawal (compared with periodic abstinence) than older women, although in 2012, there was no significant difference between women under age 35 compared with women over age 45 (although women age 35-44 have lower odds of use of withdrawal compared with women age 45-49).

Table 4.2. Predictors of current contraceptive use by survey year, adjusted odds ratios and 95% confidence interval (CI) from binary logistic regression, Peru

	Any Method versus No Method			
	1996		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	1.13	(0.87, 1.46)	1.21	(0.90, 1.62)
20-24	1.39 ***	(1.13, 1.70)	1.78 ***	(1.38, 2.29)
25-29	1.94 ***	(1.60, 2.35)	1.80 ***	(1.44, 2.25)
30-34	2.16 ***	(1.81, 2.58)	2.07 ***	(1.69, 2.54)
35-39	2.71 ***	(2.28, 3.21)	2.20 ***	(1.82, 2.65)
40-44	2.41 ***	(2.01, 2.87)	2.08 ***	(1.72, 2.52)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	2.02 ***	(1.75, 2.32)	1.32 **	(1.03, 1.68)
Secondary+	3.13 ***	(2.67, 3.67)	1.51 ***	(1.17, 1.94)
Residence				
Urban	1.80 ***	(1.61, 2.02)	1.15 **	(1.00, 1.31)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	2.05 ***	(1.78, 2.35)	2.33 ***	(1.94, 2.79)
5+	1.75 ***	(1.45, 2.10)	1.84 ***	(1.47, 2.30)
Fertility Intentions				
Wants soon	0.44 ***	(0.36, 0.54)	0.25 ***	(0.20, 0.30)
Wants later	Ref.		Ref.	
Wants no more	0.66 ***	(0.58, 0.76)	0.58 ***	(0.49, 0.69)
N	17,337		13,757	

Significance level:

** p < .05

*** p < .01

Ref. = Reference category

Continued...

Table 4.2 (Peru)—Continued

	Traditional versus Modern Method (Among Method Users)			
	1996		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	0.34 ***	(0.23, 0.49)	0.50 ***	(0.34, 0.74)
20-24	0.41 ***	(0.31, 0.53)	0.66 ***	(0.51, 0.85)
25-29	0.44 ***	(0.35, 0.56)	0.78 **	(0.61, 0.99)
30-34	0.53 ***	(0.42, 0.67)	0.90	(0.73, 1.11)
35-39	0.65 ***	(0.52, 0.82)	0.90	(0.74, 1.10)
40-44	0.89	(0.71, 1.12)	1.17	(0.95, 1.42)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	0.75 **	(0.60, 0.94)	1.16	(0.91, 1.48)
Secondary+	0.55 ***	(0.43, 0.70)	0.83	(0.64, 1.08)
Residence				
Urban	0.55 ***	(0.48, 0.64)	0.62 ***	(0.54, 0.72)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	0.77 ***	(0.65, 0.92)	0.96	(0.8, 1.14)
5+	0.60 ***	(0.48, 0.76)	1.19	(0.93, 1.51)
Fertility intentions				
Wants soon	1.70 ***	(1.37, 2.11)	1.94 ***	(1.53, 2.47)
Wants later	Ref.		Ref.	
Wants no more	0.90	(0.76, 1.07)	0.76 ***	(0.64, 0.89)
N	11,195		10,622	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

Continued...

Table 4.2 (Peru)—Continued

	Withdrawal versus Periodic Abstinence (Traditional Users of Withdrawal and Periodic Abstinence)			
	1996		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	2.20	(0.96, 5.04)	1.24	(0.62, 2.48)
20-24	2.69 ***	(1.47, 4.91)	1.53	(0.93, 2.53)
25-29	1.78 **	(1.04, 3.05)	1.17	(0.77, 1.79)
30-34	1.17	(0.71, 1.93)	0.81	(0.55, 1.19)
35-39	1.05	(0.64, 1.72)	0.55 ***	(0.38, 0.80)
40-44	0.93	(0.56, 1.55)	0.56 ***	(0.41, 0.78)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	1.08	(0.67, 1.76)	0.90	(0.56, 1.44)
Secondary+	1.03	(0.62, 1.72)	0.52 ***	(0.32, 0.85)
Residence				
Urban	1.50 ***	(1.11, 2.02)	1.84 ***	(1.45, 2.32)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.76 ***	(1.20, 2.59)	0.85	(0.62, 1.15)
5+	2.41 ***	(1.45, 3.98)	0.87	(0.56, 1.35)
Fertility Intentions				
Wants soon	0.88	(0.55, 1.39)	0.83	(0.55, 1.24)
Wants later	Ref.		Ref.	
Wants no more	0.98	(0.71, 1.33)	1.07	(0.80, 1.44)
N	3,667		3,237	
Significance level:				
** p < .05				
*** p < .01				
Ref. = Reference category				

In both 1996 and 2012, women who want to have a child soon or want no more children have a lower odds ratio of using any method of contraception compared with women who would like to have a child after 2 years. Of contraceptive users, women who would like a child within 2 years are more likely to use traditional methods relative to modern methods compared with women who would like to space their next pregnancy. In the most recent survey, women who want no more children have a lower odds ratio of traditional versus modern use compared with women who would like to space.

When examining parity of women during both time periods, women with more children are more likely to use a method than women with none or one child. However, in the early survey, among method users, these women are less likely to use traditional methods than the low parity women. In the most recent survey, there is no distinction by parity for the likelihood of practicing withdrawal compared with periodic abstinence—although in 1996, women with more children had a higher odds ratio of practicing withdrawal.

As expected, women with higher levels of education are more likely to use a method of contraception. This pattern remains consistent in the two periods. In the earlier survey, odds ratios of traditional use are highest among users with no education (among women using a method), although there is no difference in the odds ratios of traditional method use by educational status in the most recent survey.

In the 1996 DHS, there is a clear distinction between urban and rural women in the odds ratio of using a contraceptive method, although this distinction is not as strong in 2012. Among method users, traditional method use is less common in the urban areas in both surveys. In both time periods, among traditional users, the odds of withdrawal, compared with periodic abstinence, are more common in urban settings.

Jordan

Adjusted odds ratios and 95% confidence intervals from the regression analysis are presented in Table 4.3. Results show that in the earlier survey, younger women have approximately the same odds of using any method as women age 45-49, while women age 35-44 had a higher odds ratio when controlling for other characteristics. In 2012, all age groups are more likely to use contraception than the oldest age group. There is a shift in traditional use among contraceptive users by age. In 1990, younger contraceptive users (age 15-19) had a statistically higher likelihood of using traditional methods versus modern methods, compared with women age 45-49. However, in 2012, women age 20-39 have statistically lower odds ratios of traditional method use, if they are using any method. Because of the small group of traditional method users in the 1990 survey, age groups were combined into women under age 30 and women age 30 and over. In both surveys, women age 15-29 are statistically less likely to use withdrawal compared with periodic abstinence, compared with women age 30 and older.

In both the older and more recent surveys, contraceptive use is associated with desired timing of future births. Women who want a child within the next 2 years have a lower odds ratio of using any method versus no method of contraception, compared with women who want to wait 2 years for a birth. Women who want to have no more children have a higher odds ratio compared with these women. While neither time period shows a significant difference between women who want be pregnant and give birth soon and those who want to wait in terms of traditional versus modern method use, women who want no more children have a lower odds ratio of traditional use.

Women with more children were more likely to use any method of contraception compared with women with no or one child. When looking at only contraceptive users, those with more children have lower odds ratios of using traditional methods compared with modern methods. These patterns do not change over time. The only change over time is among traditional method users. In 1990, women with five or more children have statistically higher odds ratios of practicing withdrawal compared with periodic abstinence. By 2012, the distinction is no longer statistically significant.

In both surveys, women with primary or more education have higher odds ratios of contraceptive use than women with no education. In 2012, women with primary, secondary, or more education have much lower odds ratios of practicing withdrawal versus periodic abstinence compared with women with no education.

The differences between urban and rural women do not change between surveys. Urban women are more likely to use any method of contraception, and among users of family planning methods, urban women have lower odds ratios of using a traditional method. There is no significant difference in the choice of traditional method.

Table 4.3. Predictors of current contraceptive use by survey year, adjusted odds ratios and 95% confidence interval (CI) from binary logistic regression, Jordan

	Any Method versus No Method			
	1990		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	0.63	(0.39, 1.01)	3.20 ***	(1.69, 6.06)
20-24	0.89	(0.65, 1.22)	2.76 ***	(1.87, 4.08)
25-29	0.91	(0.69, 1.20)	3.06 ***	(2.13, 4.40)
30-34	1.20	(0.92, 1.57)	2.43 ***	(1.71, 3.45)
35-39	1.51 ***	(1.18, 1.94)	2.36 ***	(1.75, 3.19)
40-44	1.80 ***	(1.39, 2.33)	2.23 ***	(1.65, 3.03)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	1.59 ***	(1.29, 1.95)	2.46 ***	(1.67, 3.61)
Secondary+	2.47 ***	(1.99, 3.06)	4.29 ***	(3.17, 5.80)
Residence				
Urban	1.81 ***	(1.47, 2.23)	1.25 ***	(1.08, 1.44)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	3.81 ***	(3.03, 4.79)	5.78 ***	(4.49, 7.42)
5+	4.25 ***	(3.17, 5.70)	9.02 ***	(6.82, 11.94)
Fertility Intentions				
Wants soon	0.49 ***	(0.39, 0.62)	0.48 ***	(0.39, 0.60)
Wants later	Ref.		Ref.	
Wants no more	1.54 ***	(1.30, 1.82)	1.63 ***	(1.33, 1.99)
N	5,919		9,512	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

Continued...

Table 4.3 (Jordan)—Continued

	Traditional versus Modern Method (Among Method Users)			
	1990		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	2.31	(0.87, 6.14)	0.42	(0.14, 1.27)
20-24	1.27	(0.77, 2.09)	0.36 ***	(0.21, 0.62)
25-29	1.24	(0.78, 1.96)	0.46 ***	(0.29, 0.73)
30-34	1.08	(0.72, 1.63)	0.69	(0.45, 1.07)
35-39	1.02	(0.68, 1.52)	0.66 **	(0.44, 0.99)
40-44	1.02	(0.69, 1.51)	0.87	(0.60, 1.26)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	0.74 **	(0.55, 0.99)	1.63	(0.91, 2.91)
Secondary+	0.80	(0.59, 1.08)	1.31	(0.79, 2.19)
Residence				
Urban	0.67 ***	(0.50, 0.88)	0.78 ***	(0.65, 0.92)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	0.37 ***	(0.24, 0.57)	0.37 ***	(0.25, 0.55)
5+	0.41 ***	(0.25, 0.66)	0.28 ***	(0.17, 0.46)
Fertility intentions				
Wants soon	1.30	(0.87, 1.94)	1.09	(0.80, 1.48)
Wants later	Ref.		Ref.	
Wants no more	0.61 ***	(0.47, 0.79)	0.73 **	(0.55, 0.98)
N	2,349		5,509	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

Continued...

Table 4.3 (Jordan)—Continued

	Withdrawal versus Periodic Abstinence (Traditional Users of Withdrawal and Periodic Abstinence)			
	1990		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age¹				
15-29	0.50 **	(0.27, 0.93)	0.46 **	(0.22, 0.98)
30-49	Ref.			
Education				
None	Ref.		Ref.	
Primary	0.96	(0.50, 1.83)	0.12 **	(0.02, 0.67)
Secondary+	0.60	(0.34, 1.08)	0.06 ***	(0.01, 0.26)
Residence				
Urban	1.18	(0.69, 1.99)	0.81	(0.55, 1.19)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.49	(0.71, 3.13)	2.31	(0.84, 6.34)
5+	2.72 **	(1.11, 6.63)	1.86	(0.63, 5.47)
Fertility Intentions				
Wants soon	0.71	(0.32, 1.54)	0.60	(0.27, 1.29)
Wants later	Ref.		Ref.	
Wants no more	0.83	(0.46, 1.51)	0.43 ***	(0.23, 0.79)
N	457		1,655	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				
¹ Age groups were combined into women under age 30 and women age 30 and over, due to small number of traditional method users.				

Ghana

Table 4.4 shows that the age patterns of contraceptive use (controlling for other characteristics) have changed. In 1993, there is little variation in the odds of using a method of family planning by age. However, in 2014, women age 20-44 have significantly higher odds ratios of using contraceptive methods than women age 45-49 (there was no significant difference for women age 15-19).

In addition, among contraceptive users, there is little difference by age in the odds ratio of using traditional versus modern methods in 1993. In 2014, however, the odds ratios of traditional use are statistically lower for younger women (age 15-29) compared with women age 45-49. Because of the small number of traditional users in both surveys, age groups were combined to examine the choice of method among traditional users. Results show that there is no significant difference in the type of traditional method used by age.

In 1993, contraceptive use follows the same pattern seen in other countries, with women who want a child in the near future having a statistically lower odds ratio of contraceptive use compared with women who

want to space her next birth, and with women who want to avoid future childbearing having a higher odds ratio. Among contraceptive users in the earlier survey, the odds ratio of traditional versus modern use is lower for women who want to limit childbearing, compared with those who wish to space, although no significant difference is seen in the later survey.

While women with more children in both surveys are found to be more likely to use contraception than women with no or one child, the odds ratio of using traditional methods compared with modern methods is higher for the low parity women in the most recent survey.

Table 4.4. Predictors of current contraceptive use by survey year, adjusted odds ratios and 95% confidence interval (CI) from binary logistic regression, Ghana

	Any Method versus No Method			
	1993		2014	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	0.90	(0.45, 1.79)	0.88	(0.42, 1.84)
20-24	0.97	(0.58, 1.60)	1.71 **	(1.10, 2.65)
25-29	1.12	(0.71, 1.76)	1.80 ***	(1.28, 2.53)
30-34	0.97	(0.63, 1.51)	1.44 **	(1.04, 1.99)
35-39	1.26	(0.82, 1.95)	1.36	(0.97, 1.89)
40-44	1.22	(0.77, 1.95)	1.32	(0.95, 1.85)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	3.63 ***	(2.83, 4.65)	1.82 ***	(1.44, 2.30)
Secondary+	8.94 ***	(6.27, 12.76)	2.03 ***	(1.67, 2.48)
Residence				
Urban	1.58 ***	(1.30, 1.93)	0.85	(0.70, 1.04)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.53 ***	(1.12, 2.09)	1.19	(0.78, 1.81)
5+	1.53 **	(1.02, 2.27)	1.23	(0.77, 1.98)
Fertility Intentions				
Wants soon	0.55 ***	(0.38, 0.78)	0.37 ***	(0.28, 0.49)
Wants later	Ref.		Ref.	
Wants no more	1.41 ***	(1.11, 1.8)	1.13	(0.93, 1.37)
N	3,085		5,269	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

Continued...

Table 4.42 (Ghana)—Continued

	Traditional versus Modern Method (Among Method Users)			
	1993		2014	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	0.33	(0.09, 1.14)	0.16	(0.02, 1.14)
20-24	0.70	(0.30, 1.61)	0.34 **	(0.12, 0.91)
25-29		(0.28, 1.45)	0.25 ***	(0.10, 0.62)
30-34	0.64	(0.31, 1.32)	0.54	(0.23, 1.29)
35-39	0.72	(0.34, 1.55)	0.86	(0.37, 1.99)
40-44	0.92	(0.42, 2.05)	1.10	(0.47, 2.58)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	0.78	(0.51, 1.22)	1.10	(0.48, 2.51)
Secondary+	0.77	(0.43, 1.37)	3.47 ***	(1.71, 7.04)
Residence				
Urban	0.91	(0.64, 1.30)	1.80 **	(1.11, 2.92)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.01	(0.55, 1.85)	0.36 ***	(0.21, 0.63)
5+	0.89	(0.41, 1.90)	0.25 ***	(0.11, 0.57)
Fertility intentions				
Wants soon	1.16	(0.66, 2.03)	1.06	(0.57, 1.99)
Wants later	Ref.		Ref.	
Wants no more	0.57 **	(0.37, 0.89)	1.00	(0.61, 1.62)
N	648		1,411	

Significance level:
 ** p < .05
 *** p < .01
 Ref. = Reference category

Continued...

Table 4.4 (Ghana)—Continued

	Withdrawal versus Periodic Abstinence (Traditional Users of Withdrawal and Periodic Abstinence)			
	1993		2014	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age¹				
15-29	0.38 **	(0.18, 0.83)	0.85	(0.18, 3.94)
30-49	Ref.			
Education				
None	Ref.		Ref.	
Primary	1.96	(0.85, 4.50)	0.07 **	(0.01, 0.76)
Secondary+	1.33	(0.34, 5.27)	0.28	(0.06, 1.38)
Residence				
Urban	0.54	(0.29, 1.04)	0.88	(0.35, 2.21)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.03	(0.43, 2.49)	1.15	(0.24, 5.47)
5+	2.11	(0.58, 7.72)	1.31	(0.16, 11.03)
Fertility Intentions				
Wants soon	0.74	(0.24, 2.30)	0.82	(0.24, 2.80)
Wants later	Ref.		Ref.	
Wants no more	0.96	(0.40, 2.30)	0.70	(0.23, 2.17)
N	308		170	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				
¹ Age groups were combined into women under age 30 and women age 30 and over, due to small number of traditional method users.				

Indonesia

The regression analyses showed (Table 4.5) no change in the relationship between age and contraceptive use, age and traditional method versus modern method use, or age and type of traditional method used. Women under age 45 had a higher odds ratio of using a method than women age 45-49. Among users, younger women had a lower odds ratio of traditional method use compared with modern, in reference to women age 45-49.

Similar to the other case studies, women who want a child soon have a lower odds ratio of method use in both surveys, and women who want no more children have a higher odds ratio, compared with women who are hoping to space their next birth. In 1994, among contraceptive users, women who want to limit had a lower odds ratio of traditional versus modern use compared with those who want to space, but in 2012, this difference was no longer statistically significant.

Education shows a different pattern compared with the other three countries in this case study. While overall contraceptive use is higher (in both surveys) among women with any education compared with women with no education, in both 1994 and 2012, among women who use a method of contraception, more educated

women (those with at least a secondary education) have a higher odds ratio of traditional use (compared with modern use), compared with women with no education.

While there is a significant difference in contraceptive use between urban and rural women in the 1994 survey, the statistical significance disappears in 2012. Urban women have a higher odds ratio of traditional method use (versus modern methods) compared with rural women who use contraception.

Table 4.5. Predictors of current contraceptive use by survey year, adjusted odds ratios and 95% confidence interval (CI) from binary logistic regression, Indonesia

	Any Method versus No Method			
	1994		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	2.00 ***	(1.50, 2.66)	2.85 ***	(2.21, 3.67)
20-24	3.31 ***	(2.69, 4.07)	4.06 ***	(3.40, 4.84)
25-29	3.00 ***	(2.51, 3.58)	3.95 ***	(3.38, 4.63)
30-34	3.01 ***	(2.55, 3.56)	3.30 ***	(2.86, 3.81)
35-39	2.77 ***	(2.37, 3.23)	3.04 ***	(2.66, 3.48)
40-44	2.12 ***	(1.79, 2.50)	2.31 ***	(2.02, 2.63)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	1.77 ***	(1.53, 2.05)	1.75 ***	(1.42, 2.15)
Secondary+	2.40 ***	(2.01, 2.88)	1.94 ***	(1.57, 2.40)
Residence				
Urban	1.16 ***	(1.04, 1.30)	0.96	(0.87, 1.05)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.81 ***	(1.58, 2.08)	2.37 ***	(2.11, 2.65)
5+	1.12	(0.93, 1.35)	1.33 ***	(1.13, 1.55)
Fertility Intentions				
Wants soon	0.22 ***	(0.19, 0.26)	0.13 ***	(0.11, 0.14)
Wants later	Ref.		Ref.	
Wants no more	1.37 ***	(1.20, 1.55)	1.18 ***	(1.06, 1.31)
N	25,797		32,305	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

Continued...

Table 4.5 (Indonesia)—Continued

	Traditional versus Modern Method (Among Method Users)			
	1994		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	0.18 ***	(0.05, 0.65)	0.05 ***	(0.02, 0.13)
20-24	0.22 ***	(0.11, 0.43)	0.14 ***	(0.08, 0.24)
25-29	0.25 ***	(0.16, 0.39)	0.33 ***	(0.22, 0.48)
30-34	0.58 ***	(0.40, 0.84)	0.45 ***	(0.32, 0.62)
35-39	0.68 **	(0.47, 0.98)	0.71 **	(0.53, 0.95)
40-44	0.88	(0.60, 1.28)	0.85	(0.65, 1.11)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	1.12	(0.74, 1.70)	1.19	(0.59, 2.40)
Secondary+	2.40 ***	(1.54, 3.74)	3.28 ***	(1.63, 6.60)
Residence				
Urban	1.43 ***	(1.11, 1.86)	1.34 ***	(1.10, 1.63)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.08	(0.72, 1.62)	0.87	(0.66, 1.15)
5+	1.04	(0.63, 1.70)	1.41	(0.97, 2.05)
Fertility intentions				
Wants soon	1.78 ***	(1.24, 2.55)	2.64 ***	(1.94, 3.60)
Wants later	Ref.		Ref.	
Wants no more	0.68 **	(0.49, 0.94)	0.87	(0.69, 1.10)
N	13,673		19,525	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

Continued...

Table 4.5 (Indonesia)—Continued

	Withdrawal versus Periodic Abstinence (Traditional Users of Withdrawal and Periodic Abstinence)			
	1994		2012	
	Odds Ratio	95% CI	Odds Ratio	95% CI
Age				
15-19	2.58	(0.14, 47.49)	3.50	(0.83, 14.70)
20-24	3.48	(0.82, 14.73)	6.54 **	(2.38, 18.03)
25-29	1.53	(0.41, 5.73)	4.11 **	(1.78, 9.53)
30-34	1.85	(0.67, 5.14)	2.50 **	(1.31, 4.76)
35-39	1.01	(0.37, 2.77)	2.15 **	(1.21, 3.82)
40-44	0.99	(0.36, 2.74)	1.09	(0.64, 1.84)
45-49	Ref.		Ref.	
Education				
None	Ref.		Ref.	
Primary	0.86	(0.31, 2.41)	0.51	(0.08, 3.34)
Secondary+	0.37	(0.13, 1.07)	0.17	(0.03, 1.09)
Residence				
Urban	0.56	(0.29, 1.08)	0.63 **	(0.43, 0.93)
Rural	Ref.		Ref.	
Parity				
0-1	Ref.		Ref.	
2-4	1.16	(0.52, 2.58)	0.98	(0.57, 1.68)
5+	1.55	(0.51, 4.76)	1.59	(0.74, 3.42)
Fertility Intentions				
Wants soon	0.98	(0.42, 2.28)	0.78	(0.44, 1.40)
Wants later	Ref.		Ref.	
Wants no more	0.56	(0.27, 1.15)	1.41	(0.89, 2.22)
N	613		1,297	
Significance level: ** p < .05 *** p < .01 Ref. = Reference category				

5. Discontinuation and switching

5.1. Reasons for Discontinuation

Table 5.1 shows the distribution of the reasons for discontinuation for traditional and any modern contraceptive methods (excluding sterilization) separately by country for all episodes of discontinuation during the 5 years before the survey. Reasons for discontinuation are grouped into two categories: (1) not in need of contraception—wanted to become pregnant, infrequent sex/husband away, marital dissolution/separation, and difficulty getting pregnant/menopausal; and (2) in need of contraception—became pregnant while using (failure), health concerns or side effects, wanted more effective method, method inconvenient to use, costs too much/lack of access, husband disapproval, and other reasons/don't know.

In all 16 countries in this study, among reasons for discontinuation of traditional and any modern contraceptive methods, the top two reasons reported by women were that they wanted to become pregnant and they became pregnant while using a method (contraceptive failure).

The most common reason reported for discontinuation among currently married women not in need of contraception was that the woman wants to become pregnant. For those who used traditional methods, the percentage of discontinuations ranged from 17% in Colombia to 45% in Senegal. Similarly, for those who used modern methods, the percentage of discontinuations ranged from 13% in Peru to 44% in Tanzania. The difference in percentage of discontinuations between traditional and modern methods due to women who want to become pregnant, separately by country ranged from around 1% in Jordan, Kenya, and Rwanda to 24% in Egypt (19% for traditional and 23% for modern methods). Overall, for women in 11 of the 16 countries in the study who discontinued a method because they wanted to become pregnant, the difference in percentage of discontinuations between traditional and modern methods is less than 5%.

Among traditional contraceptive users, less than 5% of discontinuations were reported due to difficulty in becoming pregnant or being menopausal. In Bangladesh, 12% of discontinuation events reported resulted from difficulty getting pregnant or being menopausal. In most countries in the study, the proportion of discontinuations of modern contraceptive methods due to difficulty getting pregnant or being menopausal is less than 1%, except in Bangladesh, where about 3% of discontinuations were reported for this reason.

Across all countries, discontinuations due to infrequent sex or husband away for traditional methods ranged from 0.5% in Zambia to 11% in Zimbabwe. For modern methods, discontinuations due to infrequent sex or husband away ranged from 1% in Zambia to 11% in Senegal and Zimbabwe. The share of episodes of discontinuation due to marital dissolution and difficulty getting pregnant in both the traditional and modern methods was very low in most countries.

Among currently married women in need of contraception, the most common reasons to discontinue a traditional method were that women became pregnant while using the method (contraceptive failure) or the women wanted a more effective method. Overall, the percentage of discontinuations due to failure was the highest in the Philippines and Rwanda, where about half of episodes of discontinuation were due to contraceptive failure (became pregnant while using). The proportion of discontinuations due to method failure was also high among traditional methods users in Ghana (48%), Kenya (43%), and Tanzania (41%), while the percentage of discontinuations of a traditional method for women who wanted a more effective contraceptive method ranged from 3% in Senegal to 30% in Malawi.

Considerations of reasons for discontinuation while in need showed that health concerns or side effects were the main reason to discontinue a modern method, whereas method failure was the most common reason to discontinue a traditional method. For example, 46% of the discontinuations in Peru, 42% in the Philippines, 37% in Rwanda, 35% in Kenya, and 33% in Egypt were due to health concerns or side effects.

Table 5.1 also shows that in 8 of the 16 countries in the study, currently married women age 15-49 who used modern methods attributed about 3% to 7% of discontinuations to a lack of access or higher cost of obtaining a contraceptive method.

Table 5.1. Percent distribution of discontinuations of traditional and modern contraceptive methods in the 5 years before the survey by main reason stated for discontinuation, most recent DHS with contraceptive calendar data

Countries	Survey year	Contra- ceptive method	Infrequent				Health				Inconve- nient to use	Access/ Cost	Husband dis- approval	Other/ don't know	Number of episodes
			Wanted preg- nancy	Husband sex/ away	Marital disso- lution	Difficult to get pregnant	Failure/ Became pregnant	Side effect	concern/ method	Wanted more effective method					
Bangladesh	2014	Traditional	29.9	5.8	0.3	12.2	20.4	1.4	17.3	7.7	0.1	4.1	0.8	720	
		Any Modern	33.4	8.3	0.1	2.8	14.5	28.7	3.9	4.6	1.1	1.8	1.0	8,970	
Indonesia	2012	Traditional	33.4	1.8	0.1	1.0	28.6	5.8	11.8	3.4	0.3	0.4	13.5	861	
		Any Modern	31.3	5.0	0.8	1.3	6.2	31.0	5.3	3.0	1.8	0.4	14.0	17,564	
The Philippines	2003	Traditional	18.7	3.3	0.2	1.0	50.2	5.8	10.7	3.9	0.2	3.8	2.2	1,455	
		Any Modern	16.0	7.3	0.1	0.7	11.2	41.8	5.6	5.4	5.6	2.2	4.3	2,486	
Colombia	2010	Traditional	17.4	5.0	1.0	0.4	35.9	1.6	26.5	4.8	0.5	2.6	4.4	2,900	
		Any Modern	19.7	4.3	1.0	0.3	12.1	30.2	13.2	5.5	5.6	1.6	6.7	16,547	
Dominican Republic	2002	Traditional	20.3	2.6	1.1	0.2	27.1	2.2	19.8	6.1	0.9	6.3	13.5	1,724	
		Any Modern	23.1	4.6	1.8	0.3	12.3	34.0	4.8	4.7	3.3	2.2	9.0	7,349	
Peru	2012	Traditional	19.4	3.8	0.7	3.2	36.6	1.0	25.6	2.4	0.3	1.4	5.7	5,127	
		Any Modern	13.1	4.1	0.7	0.9	6.7	46.4	6.3	7.0	6.1	2.3	6.6	12,685	
Egypt	2014	Traditional	18.8	1.6	0.0	0.3	26.4	2.9	27.7	19.3	0.1	0.5	2.5	580	
		Any Modern	42.0	8.4	0.2	0.9	10.8	32.9	2.3	1.0	0.3	0.6	0.6	13,097	
Jordan ¹	2012	Traditional	40.2	2.7	0.0	1.1	31.1	1.2	20.9	0.7	0.0	1.7	0.4	3,252	
		Any Modern	39.2	2.6	0.0	0.5	13.8	25.9	11.2	3.4	0.3	1.9	1.2	9,075	

Continued...

Table 5.1—Continued

Countries	Survey year	Contra- ceptive Method	Infrequent			Health			Access/ Cost	Husband dis- approval	Other/ don't know	Number of episodes
			Wanted preg- nancy	Wanted sex/ Husband away	Marital disso- lution	Difficult to get pregnant	Failure/ Became pregnant	Side effect				
Ghana	2014	Traditional	38.9	5.4	0.0	0.0	47.5	0.6	5.3	0.0	1.1	281
		Any Modern	34.8	5.9	0.1	0.2	14.1	32.3	2.2	3.2	2.5	979
Kenya	2014	Traditional	31.7	3.0	0.0	0.9	42.6	1.3	17.4	1.4	0.8	528
		Any Modern	32.8	3.4	0.2	0.6	9.3	34.7	8.8	2.2	1.7	4,931
Malawi	2015/ 2016	Traditional	26.0	5.0	1.2	2.0	18.3	2.4	27.5	1.9	0.7	381
		Any Modern	30.4	6.0	0.7	0.4	3.4	27.9	9.6	3.2	6.9	9,440
Rwanda	2015	Traditional	32.3	0.7	0.0	0.0	50.4	0.0	10.7	3.4	1.0	317
		Any Modern	31.2	2.7	0.1	0.4	9.4	37.4	11.9	1.5	1.8	4,193
Senegal	2015	Traditional	44.7	2.7	0.0	0.0	37.8	1.0	3.6	0.0	1.4	140
		Any Modern	33.9	11.3	0.8	0.2	4.4	24.7	6.8	1.1	7.2	1,301
Tanzania	2015/ 2016	Traditional	34.2	1.8	0.0	1.2	40.5	0.8	17.2	1.6	1.1	690
		Any Modern	43.6	2.4	0.2	0.4	6.3	29.7	7.0	0.9	3.0	3,517
Zambia	2014	Traditional	35.9	0.6	0.4	0.2	35.7	0.2	20.8	1.3	4.4	774
		Any Modern	41.0	1.4	0.4	0.2	11.0	26.0	8.1	2.3	3.8	4,875
Zimbabwe	2015/ 2016	Traditional	40.8	10.8	0.0	0.0	23.5	0.5	18.7	0.0	2.6	101
		Any Modern	43.3	3.5	0.4	0.4	12.2	20.6	8.2	3.3	2.5	4,708

¹ In Jordan 2012 DHS, country-specific reasons for discontinuation, such as "Ramadan" and "contraceptive expired" were excluded from the analysis.

5.2. Rates of discontinuation, failure, and switching

Table 5.2 presents the cumulative 1-year (12-month) contraceptive discontinuation and switching rates for women age 15-49. Discontinuation rates due to failure and stopping are presented separately. To examine trends, discontinuation rates for each country were calculated for two DHS surveys conducted approximately 10 years apart. Two countries—Senegal and Rwanda—have calendar data that are 5 years apart and four countries (the Philippines, Dominican Republic, Ghana, and Zambia) have data from only one survey.

Results in Table 5.2 show that in all countries, failure rates are higher for traditional methods compared with modern contraceptive methods. Failure rates for traditional methods range between 4% and 21% in the earlier and most recent surveys. In the earlier surveys, Bangladesh has the lowest failure rate, while Peru, Senegal, Jordan, and Colombia have the highest (about 15%). In contrast, stopping rates are higher for modern methods in 14 of the 16 countries in this report (except Egypt and Zimbabwe). In Senegal, data from the 2010 DHS showed that 48% of the 12-month discontinuations were due to stopping contraceptive method.

Examination of trends shows that in 5 of the 16 countries, stopping rates for traditional methods declined in Bangladesh, Egypt, Colombia, Senegal, and Tanzania. The rate did not change over time in Kenya, but increased in the remaining six countries.

One-year switching rates by broad categories of contraceptive methods were calculated for currently married women who switched to another method if she used a different method in the month after discontinuation or if she gave “wanted a more effective method” as the reason for discontinuation and started another method within 1 month of discontinuation. The rates are a subset of the discontinued episodes included in the discontinuation rate.

Fewer than 10% of switching events were reported in the first year during both time points in Indonesia, Kenya, Rwanda, Senegal, and Tanzania by women who used traditional methods. In contrast, among modern contraceptive users, switching rates were less than 10% in Malawi, Senegal, Tanzania, and Zimbabwe.

The examination of trends in the 1-year switching rate for countries with two time points in Table 5.2 shows that for traditional method users in Bangladesh, the percentage of switching events decreased from 24% to 10% between 2004 and 2014. A similar pattern is observed for Egypt, Colombia, Senegal, and Tanzania. Switching rates rose in Indonesia, Jordan, Peru, Kenya, Malawi, Rwanda, and Zimbabwe. For women who used any modern contraceptive methods, the largest change was a decrease from 25% in 2004 to 12% in 2014 in Bangladesh. In contrast, the largest increase in switching rate was in Jordan, where the rate rose from 17% in 2002 to 28% in 2012.

Table 5.2. One-year contraceptive stopping, failure, all reasons for discontinuation, and switching rates by survey year and country, among currently married women age 15-49

Country	Survey year	Stopping ¹		Failure		Discontinuation for any reason				Switching ²		Number of episodes		
		Traditional		Modern		Traditional		Modern		Traditional			Modern	
Bangladesh	2014	15.5	28.2	3.7	3.6	19.2	31.8	9.7	12.3	1046				
	2004	37.9	46.4	9.9	3.5	47.8	49.9	23.5	25.0	1717		8,436		
Indonesia	2012	15.8	26.3	5.2	1.3	21.0	27.5	7.2	13.7	1480		20,450		
	2002/03	14.0	19.0	4.8	2.0	18.8	21.0	5.0	9.4	998		15,836		
The Philippines ³	2003	23.2	38.4	15.3	3.6	38.5	42.0	10.0	16.6	2104		3,421		
	2012	36.9	40.6	14.9	5.2	51.8	45.8	17.6	28.2	4900		8,274		
Jordan	2002	29.6	32.8	20.5	6.4	50.0	39.1	10.5	17.1	1899		4,223		
	2014	29.5	25.7	11.0	3.9	40.5	29.6	18.8	7.7	794		14,482		
Egypt	2005	36.3	28.0	6.8	2.9	43.2	30.9	43.2	30.9	1358		13,770		
	2010	30.1	40.1	14.9	4.8	45.0	45.0	16.6	20.8	2917		16,687		
Colombia	2000	39.7	42.7	20.8	6.5	60.5	49.2	28.1	27.4	1917		4,334		
	2002	46.5	47.3	14.5	5.9	61.0	53.2	25.8	13.9	1696		7,597		
Dominican Republic ³	2012	27.0	46.9	15.8	3.2	42.8	50.1	17.9	31.4	5654		12,722		
	2004/06	25.8	47.7	15.5	3.0	41.2	50.7	16.6	33.4	4482		8,661		
Ghana ⁴	2014	11.4	22.2	11.2	3.2	22.6	25.4	2.5	2.3	274		1,640		
	2014	18.3	27.3	11.2	2.7	29.6	29.9	7.5	12.2	654		5,665		
Kenya	2003	18.1	34.2	15.7	2.5	33.8	36.7	3.7	9.4	634		2,096		
	2015	45.4	36.9	5.6	0.8	51.0	37.6	14.7	5.7	424		12,124		
Malawi	2004/05	27.8	34.4	11.1	2.2	38.9	36.6	5.6	3.8	869		3,525		
	2015	14.8	24.2	13.2	2.8	28.0	27.0	7.6	11.1	504		5,070		
Rwanda	2010/11	13.5	23.7	13.3	2.3	26.8	26.0	6.4	11.4	618		4,584		

Continued...

Table 5.2—Continued

Country	Survey year	Stopping ¹		Failure		Discontinuation for any reason				Switching ²		Number of episodes		
		Traditional		Modern		Traditional		Modern		Traditional			Modern	
Senegal	2015	12.0	34.8	15.6	1.6	27.6	36.4	1.9	7.0	201	1,772			
	2010	33.6	47.9	7.7	3.2	41.4	51.2	4.0	5.7	180	2,043			
Tanzania	2015/16	13.9	25.9	10.4	1.4	24.3	27.4	8.3	6.4	781	3,816			
	2004/05	26.7	36.9	9.1	2.3	35.8	39.2	9.2	9.8	885	2,591			
Zambia ⁴	2014	20.3	24.8	9.1	2.5	29.4	27.4	11.7	7.3	891	6,892			
Zimbabwe	2006	18.0	15.4	5.0	2.1	23.0	17.5	4.5	4.6	205	4,140			
	2015/16	21.1	18.4	5.1	2.3	26.2	20.7	8.9	6.7	106	5,554			

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months before the survey.

¹ Includes all reasons except becoming pregnant (failure).

² The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 12 months of discontinuation.

³ The recent DHS survey did not include the calendar module.

⁴ Of the five DHS surveys included in this study, only one survey collected reproductive calendar data.

5.3. Events prior to starting a family planning method

Tables 5.3 and 5.4 present the percentage distribution of prior events before the destination family planning method, and all episodes among currently married women that began in the past 5 years, by method type. The proportion of most preferred destination method for women who were non-users or started use after birth/termination for each specific method (modern and traditional) is included separately for each country.

Table 5.3 shows the proportion of prior events before switching to the destination traditional methods. In most of the countries, similar to modern destination methods, the prior events before starting a traditional method are episodes of non-use, except in Egypt (77%) and Zimbabwe (53%), where births or terminations contributed to the starting of a traditional method. The most preferred traditional method in many countries in this study was withdrawal (9 out of the 16). Periodic abstinence was the preferred method in Bangladesh, Peru, Ghana, Kenya, Senegal, and Tanzania. In Egypt, prolonged breastfeeding was the preferred method for episodes of non-use and birth/termination. In the case of the event immediately after a birth, the uptake of contraceptives is not in the month immediately after the birth. A woman may use a traditional method 2 or 3 months after birth, especially if she is practicing postpartum abstinence.

Table 5.3. Percentage distribution of prior events before starting traditional method and most popular destination traditional method, currently married women age 15-49

	Survey year	No use	Any modern	Traditional	Birth/Termination	Number of episodes	Most popular
Bangladesh	2014	68.9	23.2	0.5	7.5	823	Periodic Abstinence (52.7%)
Indonesia	2012	46.7	27.6	0.6	25.1	1,209	Withdrawal (42.3%)
The Philippines	2003	56.5	12.3	3.4	27.8	1,948	Withdrawal (53%)
Colombia	2010	53.1	32.5	1.7	12.7	2,313	Withdrawal (38.2%)
Dominican Republic	2002	33.1	24.1	5.0	37.9	1,733	Withdrawal (22.9%)
Peru	2012	48.7	31.8	5.7	13.8	4,553	Periodic Abstinence (32.3%)
Egypt	2014	19.5	2.9	0.1	77.6	794	Prolonged Breastfeeding (83.7%)
Jordan	2012	47.3	35.3	3.5	13.9	4,871	Withdrawal (50.7%)
Ghana	2014	68.4	4.2		27.4	314	Periodic Abstinence (71.1%)
Kenya	2014	56.8	18.3	0.7	24.1	565	Periodic Abstinence (64.1%)
Malawi	2015	73.9	11.2		15.0	424	Withdrawal (52.5%)
Rwanda	2015	61.5	17.9	0.0	20.5	553	Withdrawal (45.3%)
Senegal	2015	68.5	11.9	0.4	19.3	222	Periodic Abstinence (60.0%)
Tanzania	2015/16	74.3	9.1	0.5	16.1	866	Periodic Abstinence (46.2)
Zambia	2014	83.8	6.4	0.3	9.5	985	Withdrawal (77.0%)
Zimbabwe	2015/16	35.7	10.0		54.3	111	Withdrawal (85.7%)

In Table 5.4, for most countries, women who were non-users contributed to the largest share of switching to modern methods followed by those who were prior users of other modern methods. For example, in Egypt and Ghana, 84% and 85% of prior events of non-use, respectively, switched to a modern method. However, in Zimbabwe, birth/termination events contributed to nearly 50% of those who started a modern method. In 10 of the 16 countries in this study, an injectable was the preferred destination method, followed by the pill. The IUD was the most preferred destination method in Jordan.

Table 5.4. Percentage distribution of prior events before starting any modern contraceptive method and most popular destination modern method, currently married women age 15-49

	Survey year	No use	Any modern	Traditional	Birth/Termination	Number of episodes	Most popular
Bangladesh	2014	73.4	18.3	1.6	6.8	8,835	Pill (49.0%)
Indonesia	2012	61.1	21.2	0.7	17.0	19,045	Injection (55.1%)
The Philippines	2003	61.0	12.7	5.6	20.8	3,099	Pill (54.0%)
Colombia	2010	53.1	23.8	4.0	19.2	13,745	Injection (27.8%)
Dominican Republic	2002	60.9	11.9	6.0	21.2	6,987	Pill (55.5%)
Peru	2012	34.0	34.7	9.2	22.1	10,967	Injection (30.7%)
Egypt	2014	81.2	10.7	1.3	6.9	14,776	Pill (37.2%)
Jordan	2012	46.2	13.4	8.9	31.5	9,028	IUD (21.7%)
Ghana	2014	85.3	2.7	0.3	11.7	1,478	Injection (45.3%)
Kenya	2014	65.4	17.1	1.1	16.4	6,116	Injection (48.9%)
Malawi	2015	79.7	5.7	0.5	14.1	13,173	Injection (66.0%)
Rwanda	2015	72.4	15.4	0.8	11.4	5,359	Injection (50.1%)
Senegal	2015	74.8	6.0	0.3	18.9	2,031	Injection (42.3%)
Tanzania	2015/16	79.9	9.5	2.8	7.9	4,201	Injection (44.6%)
Zambia	2014	74.8	10.1	2.1	13.1	7,553	Injection (38.0%)
Zimbabwe	2015/16	39.6	11.5	0.3	48.7	6,148	Pill (63.2%)

6. Summary and policy implications

With a global decline in desired family size (Westoff 2010), women have a need for family planning. Much of this need is being met with modern methods, although gaps remain. Global use of traditional methods of contraception has declined from 11% in 1970 to 5% today, and from 31% of all methods used to just 8% (United Nations 2016). In developing countries, the rate has risen, from 4% to 5% over the same time, although in the future, the rate is expected to decrease.

In this report we have examined levels and trends in the use of traditional methods, multiple traditional methods and simultaneous modern and traditional method use; discontinuation and switching; and case studies that focused on four countries with unique patterns in traditional methods use over time. For the four countries, we looked at determinants of contraceptive use, method choice (traditional vs. modern), and choice of traditional method (withdrawal vs. periodic abstinence) by using binary logistic regressions.

While traditional method users are considered to be a shrinking group, findings from this study indicate that traditional methods still have a role in the global family planning method mix and that use has actually increased in some countries. While the study included less effective traditional methods (prolonged breastfeeding) and ineffective folkloric methods such as herbs and massage, findings from the case study show that these methods represent a negligible fraction of traditional method use.

We find that overall, use of traditional methods is most popular among women over age 35. With respect to parity, currently married women with five or more children (high parity) tend to have a higher use of traditional methods compared with women with low parity or no children. This pattern remains the same over time for most countries in this study.

Results from an analysis of multiple traditional method use and simultaneous modern and traditional method use indicate that the vast majority of traditional method use reported in the composite method use variable reflects a single traditional method. In addition, the findings show that a sizeable minority of women were using a combination of periodic abstinence and withdrawal only in two countries (the Philippines and Malawi).

Traditional method use is higher among the most educated women than among women with no education. This may be driven by more educated women's greater use of contraception in general, as shown in the case studies. In some countries, this pattern reverses over time. Results of the relationship between residence and traditional method use show that urban women tend to have a higher percentage of traditional method use compared with rural residents. Examining traditional method use by wealth quintile indicates two distinct patterns: in some countries, traditional method use is more common among richer women, and in others, women in the low quintiles (poorer) are more likely to use traditional methods. Higher use among urban, educated, and wealthy women runs counter to conventional wisdom that traditional methods are preferred by uneducated and rural women and women who may lack access to modern methods. Such higher levels of use may reflect greater motivation to use contraception overall or a distinct preference for these methods among urban educated women as recorded in qualitative and mixed methods surveys in Cameroon and Ghana (Johnson-Hanks 2002; Staveteig 2017).

Findings from the multivariate analyses for the four countries in the case studies indicate that regardless of whether traditional method use is increasing, decreasing, or remaining stable, shifts occurred in the popularity of individual methods. In Peru, which maintained high levels of traditional methods use, results from the regression analysis indicate a change in who was using traditional compared with modern methods over time. The significant difference in traditional use by age declined between the 1996 and 2012 surveys, while the distinction by education disappeared. In Jordan, which experienced an increase in traditional method use, we see in the earlier survey little difference in use by age group, although in the more recent

survey there were much lower odds ratios of use among younger women. In Ghana, the country with a large decline in traditional use, we see the greatest change among parity groups. In 1993, there were no significant differences by parity, although by 2014, there are significantly lower odds ratios of use among women with more than two children and much higher reliance among these women on modern methods. In Indonesia, which has maintained a low level of traditional method use, we see little change in predictors of traditional use among contraceptive users.

The contrast between traditional and modern methods is more apparent when considering women who stopped using the method because of health concerns or side effects. In 15 of the 16 countries, over 25% of women report discontinuing a modern method because of health concerns or side effects, while in 12 countries, less than 2% of women who discontinued traditional methods give this reason. In addition, with proper knowledge, traditional methods (excluding folkloric methods such as herbs) are easily available and free. Traditional method users in the majority of countries in this study have lower discontinuation and switching rates compared with modern method users. Traditional methods can also be a popular choice for postpartum women—who may want to avoid hormonal contraceptive use while breastfeeding. Over half of women who begin using a traditional method in Egypt and Zimbabwe start after giving birth.

There are two negatives with traditional methods. First, in the case of the two most popular traditional methods—withdrawal and periodic abstinence—husbands must be cooperative for correct method use. They must understand their bodies in order to withdraw prior to ejaculation, and/or abstain from intercourse during a woman's fertile period. Second, traditional methods have lower effectiveness in preventing pregnancy than modern methods. Traditional method users are much more likely than modern method users to discontinue a method due to pregnancy. The literature has shown that proper counseling and knowledge of traditional methods can increase their effectiveness (Che et al. 2004).

Traditional method users, while overlooked in most contemporary literature on family planning, are an important user demographic. Hence, even among policymakers interested in promoting modern method use, traditional method use is an important part of the global landscape of family planning. Users of traditional methods, almost by definition, practice their contraceptive method outside of the modern medical sector. However, they may be reachable through other medical services such as vaccinations or antenatal care, or at times when they switch to and from modern methods. Broad-scale community outreach is another way to reach traditional users. To the extent that women and couples who use traditional methods are motivated to use contraception, they may be an important demographic for modern method programs that are interested in increasing their user base. In particular, the Standard Days Method is a formal implementation of a traditional practice (periodic abstinence). Users of periodic abstinence may be empowered by trying a more effective implementation of their existing contraceptive approach. Similarly, the Lactational Amenorrhea Method is a formal implementation of prolonged breastfeeding practices and may be taught to women during antenatal care or at the time of delivery.

This report has shown that although traditional methods have become a smaller part of the contraceptive mix for women in developing countries, they continue to play a role in the lives of millions of women. Qualitative studies find that traditional method users may be well aware of and able to access modern methods but find that the advantages of traditional methods outweigh the disadvantages (Johnson-Hanks 2002; Staveteig 2017). Our quantitative data confirm the persistence of traditional method use even among urban, educated, wealthy women in the study countries. We recommend a two-pronged strategy. First, consistent with a rights-based approach to family planning that empowers women and couples to make independent and informed decisions about contraceptive methods and provides respectful services, traditional methods should not be completely excluded from family planning programs. Instead, programs should educate users who prefer these methods about their correct and consistent use. Users of folkloric methods should be informed about these methods' lack of effectiveness. It is worth emphasizing the importance of non-coercive approaches to communicating this information. Second, programs should continue to ensure that traditional method users are aware of modern approaches such as the Standard Days Method and other even more effective modern methods that can be used covertly and do not interrupt pleasure so that they are empowered to make fully informed decisions about the most suitable method.

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Appendix

Appendix A.1. Percent of married women 15-49 using any modern method, periodic abstinence, withdrawal, folkloric methods, and not using a method of family planning

Country	DHS Survey year	Not using	Using a method of family planning			
			Any modern	Periodic Abstinence	Withdrawal	Folkloric
Bangladesh	1999/2000	46.2	43.5	5.4	4.1	0.9
	2004	41.9	47.3	6.5	3.6	0.6
	2007	44.2	47.5	4.9	2.9	0.6
	2011	38.8	52.1	6.9	1.9	0.4
	2014	37.6	54.1	6.2	1.9	0.3
Indonesia	1994	45.3	52.1	1.1	0.8	0.8
	1997	42.6	54.7	1.1	0.8	0.8
	2002/03	39.7	56.7	1.6	1.5	0.5
	2007	38.6	57.4	1.5	2.1	0.4
	2012	38.1	57.9	1.3	2.3	0.4
Philippines	1993	60.0	24.9	7.3	7.4	0.4
	1998	52.2	28.2	8.7	8.9	2.1
	2003	51.1	33.4	6.7	8.2	0.6
	2008	49.3	34.1	6.4	9.8	0.4
	2013	44.9	37.6	5.1	12.1	0.3
Jordan	1990	60.1	26.9	3.9	4.0	5.2
	1997	47.4	37.7	4.9	7.6	2.4
	2002	44.2	41.2	5.2	9.3	0.1
	2007	43.0	42.1	4.1	10.8	0.0
	2012	38.8	42.3	3.5	14.3	1.0
Egypt	1995	52.1	45.5	0.8	0.5	1.1
	2000	43.9	53.9	0.6	0.2	1.3
	2005	40.8	56.5	0.7	0.3	1.7
	2008	39.7	57.6	0.5	0.2	2.0
	2014	44.6	53.6	0.4	0.3	1.1
Colombia	1990	33.9	54.6	6.1	4.9	0.5
	1995	27.8	59.3	5.2	5.8	1.8
	2000	23.1	64.0	6.0	6.3	0.7
	2005	21.9	68.1	3.8	5.7	0.6
	2010	21.0	72.9	2.3	3.5	0.3

Continued...

Appendix A.1—Continued

	1991	43.6	51.7	2.0	2.2	0.5
	1996	36.3	59.5	1.8	1.9	0.5
Dominican Republic	2002	30.2	65.8	1.4	1.7	0.9
	2007	27.1	70.0	1.3	1.5	0.1
	2013	28.2	68.6	1.2	1.8	0.2
	1996	35.8	41.4	18.0	3.3	1.6
	2000	31.1	50.4	14.4	3.2	0.9
Peru	2004/06	28.6	47.4	18.3	4.1	1.5
	2009	26.8	50.0	15.6	6.6	1.1
	2012	24.5	51.8	15.1	7.6	1.1
	1993	79.7	10.1	7.5	2.1	0.5
	1998	78.0	13.3	6.6	1.5	0.6
Ghana	2003	74.8	18.7	5.1	0.8	0.6
	2008	76.5	16.6	4.7	1.4	0.8
	2014	73.3	22.2	3.2	1.1	0.2
	1993	67.3	27.3	4.4	0.4	0.6
	1998	61.0	31.5	6.1	0.6	0.8
Kenya	2003	60.7	31.5	6.3	0.7	0.8
	2008/09	54.5	39.4	4.7	0.7	0.7
	2014	42.0	53.2	3.8	0.7	0.3
	1992	87.0	7.4	2.2	1.5	2.0
	2000	69.4	26.1	0.9	1.5	2.1
Malawi	2004/05	67.5	28.2	0.5	2.1	1.7
	2010	53.9	42.2	0.8	1.8	1.2
	2015/16	40.8	58.1	0.3	0.5	0.3
	1992	78.8	12.9	5.1	3.1	0.1
	2000	86.8	5.7	4.7	2.9	0.1
Rwanda	2005	82.6	10.3	4.2	3.0	0.0
	2010/11	48.4	45.2	2.9	3.5	0.1
	2014/15	46.8	47.5	2.7	3.1	0.0
	1992/93	92.5	4.8	0.8	0.1	1.8
	1997	87.1	8.1	1.1	0.2	3.6
Senegal	2005	88.2	10.3	0.6	0.1	0.8
	2010/11	86.9	12.1	0.4	0.2	0.5
	2015	76.7	21.2	0.9	0.3	0.9
	1996	81.6	13.3	2.0	2.6	0.5
	1999	74.6	18.7	2.2	3.5	0.9
Tanzania	2004/05	73.6	20.0	2.0	3.0	1.3
	2010/11	65.7	27.4	3.2	2.9	0.9
	2015/16	61.6	32.0	3.7	2.0	0.6

Continued...

Appendix A.1—Continued

	1992	85.0	8.9	0.9	3.0	2.2
	1996	74.1	14.4	4.4	4.5	2.7
Zambia	2001/02	65.8	25.3	1.1	5.1	2.7
	2007	59.2	32.7	1.2	5.6	1.3
	2013/14	51.0	44.8	0.7	3.2	0.4
	1994	51.9	42.2	0.1	4.2	1.7
	1999	46.5	50.4	0.2	2.6	0.4
Zimbabwe	2005/06	39.8	58.4	0.2	1.2	0.4
	2010/11	41.5	57.3	0.1	1.0	0.2
	2015	33.2	65.8	0.1	0.9	0.0