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MLE Measurement, Learning & Evaluation Project for the Urban Reproductive Health Initiative

Measurement, Learning & Evaluation of the Kenya Urban Reproductive Health Initiative (Tupange):

Kenya Endline Household Survey 2014

September 2015

Tupange imarisha maisha

KNBS Kenya National Bureau of Statistics Keeping you informed

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This report presents the findings from an analysis of the endline survey results from women in five cities in Kenya. The report was written by the Measurement, Learning & Evaluation (MLE) Project of the Urban Reproductive Health Initiative. The MLE Project was implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill (UNC-CH) in partnership with IntraHealth International. Data were collected by the Kenya National Bureau of Statistics and the African Institute for Health and Development. The Tupange program was implemented in Kenya by a consortium led by Jhpiego.

The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the donor organization, the Bill & Melinda Gates Foundation. Additional information about this report may be obtained from:

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Cover photo: *A young mother receives family planning counseling at a local government facility in Nairobi, Kenya.*

Preface

The Bill & Melinda Gates Foundation launched the Urban Reproductive Health Initiative (URHI) as part of its family planning (FP)/reproductive health (RH) strategy, with the goal of increasing modern contraceptive prevalence rates in selected urban areas of Kenya, Nigeria, Senegal, and Uttar Pradesh, India. The primary objective of the Kenya Urban Reproductive Health Initiative (locally named *Tupange,* or "Let's plan" in Swahili) was to increase and sustain the use of FP among vulnerable urban populations in Kenya. The Tupange program aimed to achieve a 20-percentage-point increase in the modern contraceptive prevalence rate (CPR) in five cities in Kenya, namely, Nairobi, Mombasa, Kisumu, Machakos, and Kakamega. The Measurement, Learning & Evaluation (MLE) Project was simultaneously funded as part of the URHI to undertake a rigorous impact evaluation of the Tupange project. This report provides up-to-date results of the evaluation for policymakers, planners, researchers, and program managers. This type of information is pertinent in giving direction to the planning, implementation, monitoring, and evaluation of RH programs, especially FP, in Kenya.

This report uses longitudinal MLE/Tupange data and presents trends in RH and FP in Kenya among a cohort of women over a four-year period. The MLE Project also includes service delivery point (SDP) data, which allows for triangulating datasets to analyze research questions on family planning. The MLE/Tupange data complements existing datasets in Kenya, such as the Demographic and Health Survey (DHS), yet also provides key information on changes in contraceptive use and collects information on exposure to the Tupange program that is not available in other datasets. Further, the MLE's oversampling of the urban poor population in the study cities permitted in-depth analysis of this population.

The results of the endline survey show a significant increase in modern contraceptive use in all study cities over the four-year period between surveys. The percentage of women aged 15 to 49 reporting current use of modern methods at the endline phase of the study is as follows: Nairobi 55 percent (up from 44 percent at the baseline); Mombasa 44 percent (up from 29 percent at the baseline); Kisumu 59 percent (up from 44 percent at the baseline); Kakamega 54 percent (up from 46 percent at the baseline); and Machakos 58 percent (up from 45 percent at the baseline). Some of these increases are expected since the longitudinal sample aged four years in the follow-up period and thus may have had greater FP needs over time.

Other RH and FP indicators also showed improvement over the four-year follow-up period. The proportion of home deliveries decreased in most cities. By endline, public facilities became the main source of implants in all cities. Male condoms were mainly obtained from pharmacies, worksite clinics, mobile clinics, and kiosks. Unmet need for FP and spacing decreased in most cities. Common misconceptions about FP decreased, and the proportion of women married or in union who reported ever discussing the number of children they would like to have with their spouse/partner increased between surveys.

Tupange developed specific print materials, radio programs, television spots, outreach activities, and internet messages to increase the use of modern contraceptives. Respondents who recognized the Tupange logo mostly saw it at health facilities. The percentage of women who had read any articles on

FP increased in Kisumu, Nairobi, and Mombasa since midterm. Print readership was low as compared to radio listenership and television viewership, and access to internet remained low across cities. The majority of the women who had spoken about FP with community health volunteers (CHVs) reported that FP methods and benefits and places to obtain FP were discussed during these contacts.

We would like to acknowledge the Bill & Melinda Gates Foundation for funding and providing technical support to the URHI. We recognize the Tupange team for implementing Tupange interventions, KNBS for leading data collection and processing of the household data, the National Council for Population and Development (NCPD) and the Ministry of Health for providing technical support for the project, the African Institute for Health and Development (AIHD) for taking the lead in tracking the study cohort, IntraHealth International for providing leadership and logistical support, and the Financial Management Agency, DMC Limited.

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Abbreviations and Acronyms

AIHD	African Institute for Health and Development
CHV	community health volunteer
CPR	contraceptive prevalence rate
CsPro	Census and Survey Processing System
EC	emergency contraception
FP	family planning
GDP	gross domestic product
GPS	global positioning system
HIV/AIDS	human immunodeficiency virus/acquired immune deficiency syndrome
IUD	intrauterine device
KDHS	Kenya Demographic and Health Survey
KNBS	Kenya National Bureau of Statistics
LAM	lactational amenorrhea method
LAPM	long-acting and permanent methods
MLE	Measurement, Learning & Evaluation
MNH	maternal and newborn health
PAC	postabortion care
PP	postpartum
RH	reproductive health
SDM	Standard Days Method
SDP	service delivery point
STI	sexually transmitted infection
TFR	total fertility rate
TOT	training of trainers
URHI	Urban Reproductive Health Initiative

Acknowledgements

The Measurement, Learning & Evaluation (MLE) project's endline longitudinal survey among women of reproductive age for the evaluation of the Kenya Urban Reproductive Health Initiative (Tupange) was successfully conducted in five cities of Kenya from September 2014 to January 2015. We take this opportunity to thank all of our partners for their invaluable support and contributions.

It is a great pleasure for us to present the household endline survey report for Kenya. This report is a product of joint efforts of MLE Project constituents: the Carolina Population Center at the University of North Carolina at Chapel Hill (UNC-CH), IntraHealth International, the Kenya National Bureau of Statistics (KNBS), the African Institute for Health and Development (AIHD), and Tupange.

The household endline survey was implemented in Nairobi, Mombasa, Kisumu, Kakamega, and Machakos Cities by two organizations, namely AIHD and KNBS, with oversight by the MLE team. AIHD was responsible for tracking the study cohort, while KNBS interviewed the longitudinal respondents and household heads and also conducted data processing.

It is worthwhile to mention the invaluable contributions of the AIHD and KNBS staff at different levels. We would like to particularly thank the following AIHD management team, who provided oversight to the tracking process: Dr. Mary Amuyunzu-Nyamongo, project lead; Monica Wabuke, project coordinator; Gabriel Oguda, project supervisor; Valerie Odera-Monari, logistics and planning coordinator; and the city coordinators and trackers. Importantly, we wish to acknowledge the KNBS management team, which provided oversight of the data collection and data processing. We particularly wish to thank Mr. Macdonald G. Obudho, deputy survey director; Mr. Samuel Ogola, KURHI coordinator; Mr. Robert C. B. Buluma, technical coordinator; Mr. Michael Mwavu Musyoka, technical coordinator; and the data processing team, survey coordinators, survey supervisors, editors, research assistants, and support team. Additionally, we acknowledge the oversight provided by the National Council for Population and Development (NCPD) under the leadership of the Director General, Dr. Josephine Mbaru.

We need to emphasize the invaluable contributions to the project of the entire MLE team at UNC-CH and IntraHealth International: Dr. David Guilkey, Project Director; Mr. Meshack Ndolo, the IntraHealth Country Director; Mr. John Otsola, Kenya Country Manager; Ms. Mercelline Ogolla, Kenya Deputy Country Manager; Ms. Aimee Benson, Survey and Data Management Officer; Ms. Lisa Calhoun, Technical Officer; Dr. Jennifer Winston, GIS Analyst; Dr. Peter Lance, Impact Evaluation Analyst; Mr. Rick O'Hara, Data Manager; Ms. Essete Kebede, Research Associate; and Mrs. Lucy Njenga, Program Assistant.

The household endline survey would not have been successful without the insights from the Tupange team: Dr. Linda Archer, Jhpiego Kenya Head of Programs; Dr. Antony Gichangi, MER Director; Mr. Kenneth Owino, Tupange Monitoring, Evaluation and Research Officer; Dr. Raymond Mutisya, RH Advisor; Mr. Paul Nyachae, Technical Officer for Service Delivery; Dr. Michael Njuma, Deputy Director of Programs MSK/Private Sector Advisor; Mr. James Mwenda Riungu, Senior Technical Advisor, Commodity Security; Ms. Jane Otai, Senior Program Advisor; Ms. Rael Odengo, Senior Behavior Change Communication Advisor; Ms. Margaret Kilonzo, Tupange Program Manager, Nairobi

City; Ms. Feddis Mumba, Tupange Program Manager, Mombasa City; Mr. Peter Kagwe, Tupange Program Manager, Kisumu City. Most importantly, we wish to acknowledge the support provided by the JHPIEGO team: Mr. Nelson Keyonzo, Project Director, Tupange; and Dr. Isaac Malonza, Kenya Regional Director.

We strongly believe that the *Measurement, Learning & Evaluation of the Kenya Urban Reproductive Health Initiative (Tupange): Kenya Endline Household Survey 2014* report has helped document Tupange's activities and successes in meeting its goal to increase the modern contraceptive prevalence rate in the intervention cities. Additionally, family planning programs will find an evidence base in this report for future programmatic planning.

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EXECUTIVE SUMMARY

The Bill & Melinda Gates Foundation is committed to reducing unintended pregnancy in developing countries by increasing access to high-quality, voluntary family planning (FP) services. The Kenya Urban Reproductive Health Initiative (KURHI), termed Tupange, is a multi-year (2010–2015) FP program implemented in five cities of Kenya: Nairobi, Mombasa, Kisumu, Kakamega, and Machakos. Tupange aims to increase the contraceptive prevalence rates (CPR) in these cities by increasing access to quality FP services and to sustain use of contraceptive methods, especially among urban poor residents. The Measurement, Learning & Evaluation (MLE) Project, led by the Carolina Population Center housed at the University of North Carolina at Chapel Hill, designed a rigorous evaluation to assess the impact of Tupange's interventions..

Methodology

The endline survey was designed to provide high-quality data to monitor the progress of Tupange's interventions and to evaluate the impact that the interventions have had on modern contraceptive use in the study cities as well as other key reproductive health (RH) indicators. The endline survey is composed of a longitudinal survey of women and surveys of health facilities, providers, and clients at service delivery points (SDPs). This report, however, provides only the findings from the household-based individual survey.

The endline survey collected data from women and their households in the five cities from September 2014 to January 2015. Women who had successfully completed the baseline interviews and who were not visitors in the homes at that time were tracked using the contact information collected in previous survey waves. A midterm survey was conducted in which all eligible respondents were tracked, and those that were found in Nairobi, Mombasa, and Kisumu were interviewed. At endline, of the 8,850 eligible baseline women, 64 percent of the women were found within the study cities, 13 percent had moved outside of the study cities, 4 percent refused to participate, 2 percent had died, and 18 percent were not found during tracking. In total, 5,217 were interviewed at endline, a response rate of 59 percent overall.

Summary of Findings

Background characteristics

By endline, most of the women found and interviewed were in the 25–29 age group across all cities; the smaller proportions of women in the age groups 15–19, 50–54, and 55–59 were expected, given that the baseline enrollment ages were 15–49. Over 93 percent of the women had some schooling across cities, about one-third had completed either primary or secondary school, and about one-fourth had completed higher schooling than secondary. The wealth index, calculated from the household data, categorized about 20 percent of the respondents into each of five wealth quintiles: poorest, poor, middle, rich, or richest. The majority of the women were married or living with a partner, ranging from 60 percent in Nairobi to 69 percent in Kakamega. Less than one-fifth of the women across all cities had never given birth. The percentage of women who had one child ranged from 16 percent in Mombasa to 25 percent in Machakos, and women who had two or three children ranged from 40 percent in Kisumu to 45 percent in Nairobi.

Family planning

There were appreciable increases in the contraceptive prevalence rate (CPR) in all cities over the four-year period between surveys. In Nairobi in particular, the percentage of women reporting current use of modern methods increased from 44 percent at baseline to 55 percent at endline. The modern CPR increased from 29 percent at baseline to 44 percent at endline in Mombasa, from 44 to 59 percent in Kisumu, from 45 to 58 percent in Machakos, and from 46 to 54 percent in Kakamega. The increases between surveys observed in CPR and modern CPR in all cities are statistically significant ($p<0.05$).

Injectables were the most prevalent method in all cities at baseline and remained so at endline in all cities except Kisumu, where implants had become the most prevalent method. Among women in the poorest households in all cities, implant use increased more than that of any other FP method between surveys. The same was true for women in poor households in all cities, except in Nairobi, where injectable use increased most.

At baseline, the main sources of implants in Mombasa and Kisumu were private facilities and, in Machakos and Kakamega, public facilities; in Nairobi, there was an even split between public and private facilities. However, by endline, public facilities had become the main source of implants in all cities. The main source of IUDs remained the same from baseline to endline in Nairobi and Kisumu (private facilities) and in Machakos and Kakamega (public facilities); in Mombasa, however, the most commonly used source for IUDs shifted from private facilities at baseline to public facilities at endline. The main source of injectables remained the same between surveys in Mombasa (private facilities) and in Kisumu, Machakos, and Kakamega (public facilities); in Nairobi, injectables were mostly obtained from public facilities at baseline but private facilities at endline.

Overall, the unmet need for FP decreased between surveys in all cities except Kakamega, where it increased. The most significant decreases in unmet need were in Nairobi (from 16 to 9 percent between surveys) and Kisumu (from 18 to 8 percent). In comparison, the decreases observed in Mombasa (from 20 to 17 percent) and Machakos (from 9 to 5 percent) were minimal. In contrast, the unmet need for FP increased in Kakamega from 13 percent at baseline to 15 percent at endline.

The most frequently cited reasons for using a contraceptive method across cities were the desire not to get pregnant, the method's safety or lack of side effects, and the method's convenience of use. On the other hand, the most prevalent reasons women gave for not using any contraceptive methods were health concerns, a fear of side effects, and having infrequent/no sex or no partner.

Maternal and child health

The largest increase in public facility delivery was observed in Kakamega, 15 percentage points up since baseline; public facility deliveries increased by 10 percentage points in Kisumu and Machakos, while there was little change observed in Mombasa and a slight decrease in Nairobi by endline. Home deliveries were somewhat common at baseline, ranging from 9 percent of all deliveries in Nairobi to just over a quarter of deliveries in Kakamega; at endline, however, the proportion of home deliveries had decreased noticeably in most cities. The greatest change was observed in Machakos, with a 12-percentage-point decrease in home deliveries between baseline and endline, while the city with the smallest decrease was Mombasa (2 percentage points).

Women who reported that their most recent birth had been delivered at a health facility were asked whether they had received any information or counseling on FP before or after delivery while still at the facility. At endline, the largest percentage of women who reported having received any FP information or counseling before delivery was observed in Mombasa (56 percent); in all other cities, less than 50 percent of women reported having received these services before delivery. At baseline, the percentage of women who had received FP information or counseling both before and after delivery was under 10 percent in each city. At endline, however, considerable increases in the percentage of women receiving these services both before and after delivery were observed in all cities, ranging from a 19-percentage-point increase in Kisumu to a 42-percentage-point increase in Mombasa. Over the four years between baseline and endline, women's exposure to FP/childbirth spacing information or counseling during child health visits remained fairly unchanged in Nairobi, Kisumu, and Machakos, and there was a decrease in Kakamega.

Exposure to Kenya Urban Reproductive Health Initiative (Tupange)

Tupange has developed print materials, radio programs, television spots, outreach activities, and internet messages to promote the use of modern contraceptives. The midterm and endline surveys inquired about recognition of the word "Tupange" and the Tupange logo. At endline, between 42 and 74 percent of the women remembered having heard or seen the word "Tupange" in the previous year; the percentage increased only in Nairobi from 64 percent at midterm to 69 percent at endline. Likewise, between 44 and 77 percent of the women recalled ever having seen the Tupange logo, with the percentage having slightly improved in Nairobi (by 5 percentage points) and in Kisumu (by 1 percentage point) since midterm, two years earlier.

Overall, exposure to Tupange-specific printed materials in the previous year had declined at endline as compared to midterm. The percentage of women who recalled having seen or read the "Celebrate Life" Tupange poster in the previous year decreased by 17 to 10 percentage points from midterm to endline. Exposure to the Shujaaz comic book decreased in Mombasa (by 15 percentage points) and Kisumu (by 7 percentage points) but increased by nearly 3 percentage points in Nairobi. The percentage of women who had heard or listened to the Tupange radio program Jongo Love declined from midterm to endline; the percentages decreased 11 percentage points in Nairobi and Mombasa and 19 percentage points in Kisumu. At endline, only 15–30 percent of the women in each city recognized scenes from the television program Matatu in the previous year, while at midterm, 34–65 percent had recognized the scenes.

The highest percentage of women who had been visited by a community health volunteer (CHV) in the previous year was in Kakamega, at 28 percent, and the lowest percentage was in Nairobi, at 10 percent. Among women contacted by CHVs in the previous year, a higher percentage of the women in Nairobi (12 percent) reported having received oral pills, while in other cities only 5 percent or less had received oral pills from CHVs. Similarly, 22 percent of the women in Nairobi had ever received condoms from CHVs, compared to only 6 to 15 percent in the other cities. Referrals to a health facility by CHVs were more common across cities than distribution of pills or condoms; the percentage of women ever having received a referral to a health facility for FP ranged from 21 percent in Machakos to 51 percent in Kakamega.

CHAPTER 1: INTRODUCTION

1.1 Background

Kenya is situated in East Africa, bordering the Indian Ocean, Ethiopia, Somalia, South Sudan, Tanzania, and Uganda. The Kenya 2009 Population and Housing Census reported a population of 38,610,097, with roughly equal proportions of males and females; moreover, the rural population constituted 68 percent, while 32 percent of the population resided in urban areas (KNBS, 2010). Kenya's population density is approximately 68 people per square kilometer. This is higher than the world average of 49 people per square kilometer (KNBS & ICF Macro, 2010). Kenya is divided into three agroecological zones: the coastal lowlands, the highlands, and the arid and semiarid lands. The country is ethnically diverse, with more than 40 distinct groups, the major populations being the Kikuyu, Luhya, Luo, Kalenjin, Kamba, Kisii, and Meru. The Kenyan population is dominated by Christians (90 percent) and Muslims (7 percent) (KNBS & ICF Macro, 2010). The country operates with two official languages, English and Swahili.

Kenya gained independence from Britain on December 12, 1963. Immediately after the 2013 general elections, 47 county governments replaced the provincial and local government administration systems, which had been created at the time of independence. Under the current administration, there are two levels of government—national and county—governed by the senate and the national assembly, respectively. The county governance structure includes county assemblies, executive committees, and public service. Each county is headed by a governor (Government of Kenya, 2010).

The 2010 Constitution of Kenya provides an all-embracing legal framework to ensure a comprehensive rights-based approach to health services delivery. It stipulates that every person has a right to the highest attainable standard of health, which includes reproductive health (RH). The constitution makes provisions for state organs and public officers to be obliged to address the needs of vulnerable groups in society and to adopt on a domestic level the provisions of the international treaties and conventions that Kenya has ratified (Government of Kenya, 2014).

Notably, the 2010 Constitution of Kenya introduced a devolved system of government that provides for both the national government and the 47 county governments. The Kenya Health Policy 2014−2030 takes into account the objectives of devolution through the following strategies: democracy and accountability in delivery of healthcare; participatory decision making on matters of health; recognizing the right of communities to manage their own health affairs; protection and promotion of the health interests and rights of under-served populations; provision of proximate, easily accessible health services throughout Kenya; enhancing health equity; and enhancing the capacities of the two levels of governments to effectively deliver health services in accordance with their respective mandates (Government of Kenya, 2014).

The policy stipulates the functions assigned to the two levels of government. The national government's key responsibilities include leadership of health policy development, management of national referral health facilities, capacity building and technical assistance to counties, and consumer protection. The county governments' key responsibilities, meanwhile, include county health facilities, pharmacies, ambulance services, and primary healthcare (Government of Kenya, 2014).

Kenya's gross domestic product (GDP) grew by 6.9 percent in 2012 and by 5.7 percent in 2013, while 2015 projections suggest further GDP growth of 6.5 percent (Odero, Reeves, & Kipyego, 2015, p. 2). The current economic growth, according to the Kenyan central bank, was mainly driven by expansion in "construction, manufacturing, finance and insurance, information, communications and technology, and wholesale and retail trade" (Odero, Reeves, & Kipyego, 2015, p. 2).

Over the past decade, there has been general improvement in Kenya's health profile. Life expectancy at birth in Kenya dropped from 58 years in 1993 to 50 years in 2000 but rose to 60 years by 2009. Some indicators have stagnated over time, especially those related to neonatal and maternal health (Government of Kenya, 2014).

The 2014 Kenya Demographic and Household Survey (KDHS) shows that the total fertility rate (TFR) in the country declined from 8.1 in the mid-1970s to 4.7 in

1998 before reaching its 2014 rate of 3.9 births per woman overall, 4.5 in rural areas, and 3.1 in urban areas. Among currently married women, 58 percent were using a contraceptive method in 2014, a remarkable increase over 1989 and 1998 (when 27 and 39 percent of women were using a contraceptive method, respectively) (KNBS & ICF Macro, 2014). Despite the decline in TFR and the increase in contraceptive use, the 2014 Kenya DHS results showed that 18 percent of currently married women still had an unmet need for family planning (FP).

The United Nations projects that the urban population will double in the next 30 years due to rural-urban migration, natural population increase among urban residents, and increased urbanization rates. There has been a gradual increase in the size of the urban population in Africa; the percentage of Africans living in urban areas increased from 15 percent in 1950 to 39 percent in 2010 and is projected to rise to 43 percent in 2020 (United Nations, 2011). UN estimates indicate that Kenya's urban population will grow to 38 million by 2030, the same size as the total population in the 2009 Census, and account for 63 percent of the national population (Ngayu, 2011). In Kenya it is estimated that 60 to 80 percent of urban residents live in slum or slum-like conditions (Amendah et al., 2014). This will present challenges for public service provision for this rapidly growing urban population, including ensuring access to health, education, and security services, among others. The Urban Reproductive Health Initiative (URHI) is the Bill & Melinda Gates Foundation's RH strategy that aims to increase modern contraceptive use in selected areas of Kenya, Nigeria, Senegal, and India. The Kenya Urban Reproductive Health Initiative, termed Tupange, is a multi-year (2010–2015) FP program implemented in five cities in Kenya: Nairobi, Mombasa, Kisumu, Kakamega, and Machakos. Tupange seeks to increase access to quality FP services and to sustain use of contraceptive methods, especially among urban poor residents. Tupange's key elements include:

- Integrating high-quality FP services with maternal and newborn health services, especially postabortion, postpartum, antenatal care, and HIV/AIDS services;
- Improving the overall quality of FP services, particularly in high-volume settings;
- Increasing access to FP services for the urban poor through public-private partnerships and other private-sector approaches;
- Creating sustained demand for FP services among the urban poor; and
- Creating a supportive policy environment for ensuring access to FP supplies and services, particularly for the urban poor.

The Measurement, Learning & Evaluation (MLE) Project, led by the Carolina Population Center at the University of North Carolina at Chapel Hill, applied rigorous evaluation methods and state-of-the-art methods to evaluate the impact of Tupange on modern contraceptive use in selected urban areas of Kenya. This report presents descriptive findings from the endline household-based individual survey conducted in the five cities of Kenya in 2014.

Map of Tupange project cities

1.2 Overview of Previous Survey Waves

1.2.1 Baseline survey

The Kenya baseline survey consisted of household-based individual surveys of women and men of reproductive age, surveys of health providers and clients, and audits of service delivery points (SDPs) and was conducted in five cities in Kenya. Between August and December 2010, a representative sample of 8,932 women ages 15–49 were interviewed in Nairobi, Mombasa, Kisumu, Machakos, and Kakamega, while a total of 2,503 men ages 15–59 were interviewed in Nairobi, Mombasa, and Kisumu. In addition to the household survey, data was collected from a total of 279 facilities, 223 pharmacies, 684 health providers, and 4,222 clients between August and October 2011. For additional details on the baseline Kenya household and individual survey, see the full report on the MLE Project website at https://www.urbanreproductivehealth.org/resource/kenya-urban-reproductive-health-initiative-tupange-report-2010-baseline-household-survey. For additional details on the baseline Kenya SDP survey, see the full report on the MLE Project website at https://www.urbanreproductivehealth.org/resource/2011-kenya-urban-reproductive-health-service-delivery-report.

1.2.2 Midterm survey

From August to December 2012, the MLE Project implemented the midterm survey, composed of household-based individual surveys of women and men, as part of its robust evaluation plan for the Tupange program. All female respondents from the baseline surveys in Nairobi, Mombasa, and Kisumu were eligible for the midterm survey; a total of 3,207 women successfully completed the midterm interviews. A cross-sectional sample of men was selected from Mombasa for the men's survey at midterm; a total of 696 men successfully completed the interviews. For additional details on the midterm survey, see the full report on the MLE Project website at https://www.urbanreproductivehealth.org/sites/mle/files/kenya_midterm_twp3_2013.pdf.

CHAPTER 2: ENDLINE METHODOLOGY

The third and final wave of the MLE survey was undertaken at the end of Tupange's implementation in 2014/2015. There were three key components to the endline survey: tracking the participants in the study cohort, individual-level data collection, and SDP data collection. The focus of this report is the longitudinal data collection from respondents in the five study cities; a separate report on the SDP survey is available. For additional details on the endline Kenya SDP survey, see the full report on the MLE Project website at: https://www.urbanreproductivehealth.org/resource/measurement-learning-evaluation-kenya-urban-reproductive-health-initiative-tupange-kenya.

2.1 Survey Organization

The three key partners that implemented the household survey were the African Institute of Health and Development (AIHD), the Kenya National Bureau of Statistics (KNBS), and MLE. KNBS was responsible for coordinating and implementing the survey, procuring the study materials and training venues, facilitating the interviewer training, providing adequate city office space, recruiting staff for data collection, translating survey questionnaires to the local dialects, conducting survey pretests, managing the main survey field operations, obtaining consent and interviewing all longitudinal respondents, field supervision, and implementing the data processing procedures. AIHD's key responsibilities included tracking and confirming the current places of residence for all women interviewed at baseline (2010), obtaining informed consent from respondents once found, collecting follow-up contact information, collecting global positioning system (GPS) coordinates for all women who had relocated since last contact by the research team, and providing final location information for all women at endline. The MLE team provided technical assistance, supervision, and oversight in all phases of data collection, including in the identification of the respondents, data collection, training of research assistants and supervisors, data quality control, and monitoring the survey's implementation.

2.2 Survey Design

A two-stage sampling method was used at baseline to randomly select clusters in each urban area and households within each selected cluster. Consequently, a total of 436 clusters and 30 households from each cluster were selected across the five cities. At endline, the sample size consisted of women who had completed the baseline interview, were not visitors at the time of the baseline survey, and were successfully tracked and found at endline. All eligible women were administered the women's questionnaire. The household questionnaire was administered to the household head of each woman's current household; this means that a woman's household could be different at each survey wave.

2.3 Survey Tools

The tracking form, household questionnaire, women's questionnaire, and GPS tools were used to track endline respondents and to administer endline interviews. The tracking form gathered information on how and where to contact the endline respondents.

The household questionnaires were developed to gather information about the household assets, a list of the people who usually live in the household, and details about the heads of the households. The women's questionnaire collected information on background characteristics, reproduction, birth history, contraception, maternal and child health, sexual activity, marital status, fertility preferences, spousal and interpersonal communication, gender inequity measures, media exposure, migration history, and exposure to Tupange programs.

The GPS tools included two sets of maps: overview maps and grid cell maps. The overview maps showed the entire city, broken up into multiple map grids. The grid cell maps zoomed in on an individual grid cell and showed the locations of women who had moved at midterm. They also included major roads and other landmarks to help trackers find movers at endline. Each grid cell was designed to be small enough to be covered by a team of trackers in one day and was combined with the tracking packets for all of the women shown in that grid cell.

2.4 Field Procedures

2.4.1 Recruitment and training

The research firms recruited trackers, interviewers, field editors, supervisors, and city coordinators for the fieldwork. The recruitment was followed by an intensive series of trainings. The senior technical staff of the research firms and MLE staff attended trainings of trainers (TOT) to review both endline tracking and interviewing procedures. A team of trainers was selected from among officers and demographers from the KNBS with a wealth of experience in training data collection teams. A few of the personnel who participated at both baseline and midterm were also selected to share their experiences and the lessons learned in the previous rounds of the survey. The research firm survey teams were trained for seven days between July 9 and 16, 2014, at Lau Guest House, situated at the Machakos study city. The pilot for the main survey was conducted during this training in contiguous nonstudy clusters. The TOT training had a total of 40 participants, consisting of 22 from KNBS and nine each from AIHD and MLE.

All of the trackers, their supervisors, and the city coordinators received rigorous classroom and practical training. Training methods included lectures, classroom teachings, mock interviews, fieldwork practices, discussions in smaller groups, and tests developed to examine the understanding of the trainees in regard to tracking tools. A number of guest speakers in specific specialized areas, such as GIS or orientation of the KNBS clusters, were invited to give lectures to the trainees. Training for the tracking team, which was composed of 17 KNBS staff members and 50 AIHD trainees and facilitators, was conducted over five days in Nairobi, from August 25 to 29, 2014.

A separate training was conducted for the interviewer teams, field editors, and supervisors. The classroom session included instruction in interviewing techniques, field procedures, and how to use the reproductive health calendar, as well as a detailed review of each item in the questionnaires. After the training on the questionnaires, the trainees were divided into ten teams and sent to nonstudy clusters to test the survey instruments. Training for the main survey was conducted for eleven days in Kisumu, from September 3 to 13, 2014. In addition to the data collection personnel, six KNBS city coordinators also attended the training. In total there were 86 KNBS participants and an additional 12 members of the MLE team.

2.4.2 Tracking field procedures

The purpose of the tracking exercise was to ascertain the current residence for each woman interviewed at baseline so that the study participant could be reinterviewed at endline. The eligible women were tracked using contact information such as names, addresses, phone numbers, and other identifiers gathered at baseline and midterm. As noted above, the specific objectives of the endline tracking exercise were to track and confirm all respondents' current places of residence, obtain informed consent from respondents once found, collect follow-up contact information, collect GPS coordinates for all women who had relocated after baseline or midterm, and update the contact information for all women at endline. If a woman was not found at her last confirmed place of residence, attempts were made to determine her new location; women who had moved outside the study cities, however, were not tracked further.

The tracking teams were supplied with tracking packets that contained all the relevant information collected at baseline in 2010, at midterm in 2012, and midterm follow-up field activities in early 2014. The tracking packet contained information collected during previous survey rounds as well as blank forms for collecting information at endline. The packet included a cover sheet, baseline and midterm contact information for friends, relatives, and neighbors, midterm relocation forms, blank endline relocation forms, and blank follow-up contact information. Some midterm and endline relocation forms contained qualitative information such as descriptions of the locations or nearby landmarks and cluster maps with hand-drawn structures and structure numbers collected during tracking. Preprinted information from the database provided the tracking teams with all the information available for developing tracking leads.

2.4.3 Household data collection

Once the tracking procedures were completed by the AIHD team for a given group of women (grouped by baseline cluster, map grid, or region or city moved

to), data collection teams began interviewing women and households that had been successfully tracked. The interviewer visited each household, reintroduced the study, and requested oral consent. The household questionnaire was completed with the head of household or any responsible person in her/his absence. All eligible women interviewed at the baseline phase were eligible for interview at endline. Each eligible woman was approached by an interviewer and was invited to participate in the study. Informed consent was obtained for each interview, following which the KNBS interviewer administered the individual women's questionnaire in the language that the respondent was most comfortable with (English, Swahili, or the local dialect).

Initially, the data collection teams were divided into 17 teams across the study cities. Each team had three female research assistants, one supervisor, one field editor, and a driver. Additionally, there were eight KNBS coordinators who provided overall supervision of the data collection activities in the field. Furthermore, the survey director, deputy survey director, Kenya URHI coordinator, and two technical officers oversaw the project's implementation.

The supervisors' roles included spot-checking some of the addresses selected for interviews to be sure that the correct households and the correct women or men were interviewed; reviewing each questionnaire to be sure that it was complete and consistent; observing some of the interviews to ensure that interviewers were asking the questions in the right manner and recording the answers correctly; meeting with research assistants on a daily basis to discuss performance and give out future work assignments; resolving any problems the interviewers might have had with finding the assigned households, understanding the questionnaire, or dealing with difficult respondents; and coordinating logistical support for the team. The KNBS editors accompanied each field interviewer to the selected households to ensure that they were asking the questions correctly and in the right sequence, to edit all the questionnaires, and to provide relevant feedback to the interviewers in a timely manner. The KNBS interviewers were responsible for identifying the boundaries of the clusters correctly, completing the informed consent process for all interviewees, interviewing the right women using the contact information and maps provided by the tracking team, checking the completeness of the interviews, and making callbacks to the households to interview respondents who could not be interviewed during the initial visits.

The data collection exercise started on September 22, 2014, and ended January 28, 2015.

2.5 Data Entry and Processing

A data processing team was constituted and trained at the KNBS offices in Nairobi. The training team was supported by technical assistance from MLE. A total of 16 data entry staff members were recruited. The training took place from October 16 to 24, 2014. Two supervisors and four office editors were trained for one day, followed by a training of the data entry personnel. The training involved going through the questionnaire and the manual to master the questionnaire contents and concepts. Most of the supervisors and editors were selected on the basis of having been involved in midterm survey data entry.

Data processing started immediately after the data entry personnel had been trained. Questionnaires from the study sites were delivered to the KNBS data processing center by supervisors who were in charge of data collection in the field. Two officers received and recorded all the returns from the field. Four editors were tasked with identifying any errors that occurred during data collection that were not found by field editors. Tracking details of eligible women were entered by the data entry supervisor, and questionnaires were assigned to personnel in batches for data entry. All questionnaires were double entered.

The data entry process began immediately after the training that ended on October 24, 2014, and was completed at the end of March 2015.

2.6 Ethical Review

The survey received both international and local ethical approval, from the Institutional Review Board at the University of North Carolina at Chapel Hill and the Kenya Medical Research Institute.

CHAPTER 3: RESPONSE RATES

All women who were interviewed for the baseline survey were tracked and revisited at endline. Women who had completed the baseline interview and were not visitors to the household at that time were eligible for the endline interview. Women who had moved from their baseline or midterm location within the five study cities were tracked and located at their new residences; women who had moved outside the study cities were not tracked further.

The tracking and interview results for the longitudinal respondents at endline are presented in Table 3.1. Of the 8,850 eligible baseline women, 64 percent of the women were found within the study cities, 13 percent were found to have moved outside of the study cities (and were not eligible for further tracking or interview), 4 percent refused to participate, 2 percent had died, and 18 percent were not found during tracking. The highest percentage of women found within a study city was in Machakos, at 72 percent, and the lowest was in Nairobi, at 56 percent. The percentage of women whose locations were not determined during the tracking activities ranged from 9 percent in Machakos to 26 percent in Nairobi.

A total of 5,650 women were found within the study cities during the endline tracking activity; of those women, 92 percent had a complete interview and 3 percent refused to be interviewed. The remaining 5 percent either were not interviewed for reasons such as being unavailable at the time of interview or were interviewed but excluded because of inconsistencies in background characteristics between the baseline and endline surveys. The highest proportion of women with complete interviews out of those located was in Kakamega, with 96 percent, and the lowest was in Nairobi, with 89 percent.

Table 3.1 Results of the longitudinal individual tracking and interviews at endline

Number of female respondents to longitudinal surveys, results of tracking, and results of interview. Kenya 2014.

	Tracking							Longitudinal survey					
City	Number of eligible baseline women[1]	Percentage found within a study city	Percentage known to have moved outside of study cities	Percentage refused	Percentage died	Percentage not found	Total	Number of women found within a study city during tracking	Percentage with completed interviews	Percentage refused	Percentage not interviewed[2]	Total	Number of women interviewed at endline
Nairobi	2,676	56.2	11.6	4.9	1.5	25.9	100.0	1,503	88.8	3.9	7.4	100.0	1,334
Mombasa	1,460	64.3	13.1	4.6	1.9	16.1	100.0	939	92.4	2.3	5.2	100.0	868
Kisumu	1,583	61.9	15.8	3.1	2.5	16.7	100.0	980	94.7	3.8	1.5	100.0	928
Machakos	1,828	71.8	14.9	2.2	2.0	9.1	100.0	1,312	92.0	2.2	5.8	100.0	1,207
Kakamega	1,303	70.3	11.2	2.1	1.5	14.9	100.0	916	96.1	2.3	1.6	100.0	880
Total	8,850	63.8	13.2	3.5	1.9	17.5	100.0	5,650	92.3	3.0	4.7	100.0	5,217

[1]A woman was eligible for endline interview if she had a completed baseline woman's questionnaire and was not a visitor to the household at the time of the baseline survey.
[2]Women not interviewed includes those not available at the time of interview and a small number of women (n=42) who were interviewed but excluded because of inconsistencies in background characteristics between the baseline and endline surveys.

Longitudinal response rate data are provided in Table 3.2. Overall, 59 percent of the eligible women successfully completed an endline interview; the highest response rate was in Kakamega, at 68 percent, and the lowest was in Nairobi, at 50 percent. The number of women who were interviewed at endline ranged from 880 in Kakamega to 1,334 in Nairobi.

Table 3.2 Overall response rate for longitudinal respondents at endline

Percentage of eligible baseline women interviewed at endline, by city. Kenya 2014.

City	Number of eligible baseline women	Percentage with a completed endline interview	Number of women interviewed at endline
Nairobi	2676	49.9	1334
Mombasa	1460	59.5	868
Kisumu	1583	58.6	928
Machakos	1828	66.0	1207
Kakamega	1303	67.5	880
Total	8850	58.9	5217

Potential nonresponse bias is presented in Table 3.3, which provides background characteristics by interview status among longitudinal respondents. Overall, similar background characteristics emerged between interviewed and non-interviewed respondents in level of literacy, education, and religious affiliation. Comparing women interviewed at endline to women not interviewed at endline, the women who were lost between surveys included those who were from Nairobi, younger women, never-married women, and women with no children at baseline. These factors were adjusted for using study weights.

Table 3.3 Characteristics of longitudinal respondents by endline interview status

Percentage distribution of longitudinal respondents who were interviewed in 2014, by selected background characteristics at baseline and interview status. Kenya 2014.

Baseline characteristics	Longitudinal respondents		Number of eligible baseline women
	Interviewed at endline	Not interviewed at endline[1]	
City			
Nairobi	25.6	36.9	2676
Mombasa	16.6	16.3	1460
Kisumu	17.8	18.0	1583
Machakos	23.1	17.1	1828
Kakamega	16.9	11.6	1303
Age			
15–19	11.1	17.6	1222
20–24	22.7	32.1	2352
25–29	22.1	23.0	1989
30–34	16.1	12.9	1308
35–39	12.3	7.5	916
40–44	9.1	4.2	628
45–49	6.6	2.6	435
Marital status			
Never married	24.7	37.5	2653
Married/living together	64.2	51.6	5223
Separated/divorced	6.8	8.7	672
Widowed	4.2	2.0	289
Missing	0.1	0.3	13
Literacy			
Cannot read	5.3	5.5	477
Able to read parts of sentences	7.3	7.2	644
Able to read whole sentences	87.0	86.6	7683
Blind/visually impaired	0.1	0.1	11
Missing	0.3	0.5	35
Education			
No education	3.1	3.1	277
Incomplete primary	16.4	16.4	1455
Complete primary	29.0	28.2	2537
Secondary or higher	51.4	52.2	4578
Missing	0.0	0.1	3
Number of live births			
No children	21.9	34.7	2405
1 child	20.6	26.2	2028
2 children	21.2	19.2	1807
3 children	15.2	9.8	1152
4 children	9.2	5.2	671
5 children	5.4	2.4	371
≥6 children	6.3	2.4	416
Religion			
Catholic	21.8	23.1	1977
Protestant/other Christian	68.5	67.7	6035
Muslim	8.3	7.2	693
No religion/other	1.3	1.8	133
Missing	0.2	0.1	12
Wealth index[2]			
Poorest	25.8	26.0	2292
Poor	21.3	18.7	1793
Middle	17.3	16.1	1488
Rich	20.3	18.2	1723
Richest	15.3	20.8	1554
Total percent	58.9	41.1	
Total number of women	5217	3633	8850

[1]Women who were not interviewed include those who moved to a non-study city; who died; who were not found during tracking; who had an incomplete household interview; who were unavailable at the time of interview; and who were excluded due to inconsistencies in background characteristics between their baseline and endline surveys.

[2]Calculated from household data

CHAPTER 4: BACKGROUND CHARACTERISTICS OF WOMEN

This chapter summarizes the background characteristics of longitudinal respondents at endline by age, education, wealth index, number of live births, marital status, and religion (Table 4.1). The largest age group surveyed at endline across all cities was 25–29. At endline, there were smaller proportions of women in the age groups 15–19, 50–54 and 55–59, which was expected, given the baseline eligibility criteria requiring women to be age 15–49.A small number of women are in the age category 55–59 at endline possibly because of mis-reporting of age at baseline or endline. Over 93 percent of the women had some schooling; about one-third had completed either primary or secondary school, and about one-fourth had completed higher than secondary. The wealth index, which was calculated from the household data, divided about 20 percent of the respondents into each of five wealth quintiles: poorest, poor, middle, rich, or richest.

Most of the women were married or living with a partner at endline, ranging from 60 percent in Nairobi to 69 percent in Kakamega. The percentage of women who were never married ranged from 16 percent in Kakamega to 24 percent in Machakos; the percentage of women who were separated, divorced, or widowed ranged from 12 percent in Mombasa and Machakos to 19 percent in Nairobi.

Less than one-fifth of the women overall reported never having a live birth. The percentage of women who had had one live birth ranged from 16 percent in Mombasa to 25 percent in Machakos; women who had had two or three ranged from 40 percent in Kisumu to 45 percent in Nairobi; and women who had five or more ranged from 9 percent in Nairobi and Machakos to 15 percent in Kisumu. Christianity is the predominant religion in all cities; however, the proportion of Muslims was notable in Mombasa, at 37 percent, compared to 3–6 percent in each of the other cities.

Table 4.1 Background characteristics of respondents at endline

Percentage distribution of women by five-year age groups, education, household wealth, number of live births, marital status, and religion. Kenya 2014.

Background characteristic	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Age					
15–19	1.3	2.9	3.7	3.2	1.3
20–24	12.1	18.2	17.6	16.5	14.5
25–29	31.1	26.1	29.6	23.3	28.0
30–34	22.4	18.3	22.1	18.6	22.7
35–39	13.5	13.6	11.7	14.1	12.0
40–44	11.0	10.4	7.6	10.2	9.1
45–49	5.5	6.3	5.2	7.2	6.2
50–54	2.9	3.9	2.5	6.6	5.9
55–59	0.1	0.2	0.0	0.2	0.3
Education					
No education	1.9	6.6	1.8	0.4	3.8
Primary	33.6	40.2	43.8	37.8	37.7
Secondary	36.9	31.3	32.3	35.7	29.1
Higher than secondary	24.7	21.4	21.0	24.7	29.3
Nonstandard	2.6	0.5	0.8	1.4	0.2
Missing	0.3	0.0	0.3	0.0	0.0
Wealth index[1]					
Poorest	20.2	19.1	21.0	19.0	20.0
Poor	19.6	20.6	19.6	19.9	18.7
Middle	20.6	19.6	19.1	20.7	21.1
Rich	20.2	22.6	20.1	20.7	21.1
Richest	19.3	18.1	20.2	19.8	19.2
Number of live births					
No children	14.2	19.4	13.8	16.1	13.0
1 child	23.9	16.3	18.2	24.8	18.1
2 children	27.4	24.2	22.8	25.2	21.1
3 children	17.7	17.0	17.5	16.9	20.3
4 children	8.4	12.2	12.6	8.4	12.2
5 children	4.4	4.1	6.8	5.0	7.0
≥6 children	4.1	6.7	8.4	3.6	8.4
Marital status					
Never married	21.3	21.5	17.2	23.8	15.5
Married/living together	60.1	66.3	65.5	64.7	68.5
Separated/divorced	14.4	8.8	9.0	7.4	10.6
Widowed	4.3	3.4	8.3	4.1	5.4
Religion					
Catholic	25.4	13.4	19.7	22.5	17.2
Protestant/other Christian	68.7	49.0	75.3	74.7	76.7
Muslim	4.0	36.5	3.8	2.5	5.9
No religion/other	1.8	1.2	1.2	0.4	0.3
Missing	0.0	0.0	0.0	0.0	0.0
Total number of women	1,334	868	928	1,207	880

[1]Calculated from household data

CHAPTER 5: FERTILITY PREFERENCES

5.1 Current Pregnancy and Children Ever Born

Results on current pregnancy among all women surveyed at baseline or at endline and mean number of children ever born to women ages 40 to 49 at baseline and endline are presented in Table 5.1. At baseline, the percentage of all women who were pregnant at the time of interview ranged from 6 percent in Nairobi to 7 percent in Kisumu. At endline, the percentage of women currently pregnant ranged from 4 percent in Nairobi, Mombasa, and Machakos to 7 percent in Kakamega. The percentage of pregnant women declined from baseline to endline in all cities, except in Kakamega, where it slightly increased (0.7 percent); these patterns are likely due in part to the aging longitudinal sample.

At baseline, the mean number of children ever born to women ages 40–49 was similar in Nairobi, Mombasa, and Machakos (between 3.6 and 3.9); the mean was higher in Kakamega (4.7) and highest in Kisumu (5.4). At endline, the mean number of children ever born to women ages 40–49 had decreased in all cities, from 3.6 to 3.5 in Nairobi, 3.9 to 3.6 in Mombasa, 5.4 to 4.5 in Kisumu, 3.7 to 3.3 in Machakos, and 4.7 to 4.2 in Kakamega.

Table 5.1 Current pregnancy and number of children ever born at baseline and endline

Percentage of all women who are currently pregnant and mean number of children ever born to women ages 40–49. Kenya 2010, 2014.

	Percentage currently pregnant		Mean number of children ever born to women 40–49	
	Baseline	Endline	Baseline	Endline
Nairobi	5.5	3.5	3.6	3.5
Number of women	2706	1334	260	220
Mombasa	6.5	4.0	3.9	3.6
Number of women	1465	868	189	145
Kisumu	7.4	4.5	5.4	4.5
Number of women	1603	928	136	118
Machakos	5.8	3.5	3.7	3.3
Number of women	1834	1207	291	209
Kakamega	6.5	7.2	4.7	4.2
Number of women	1324	880	193	135

5.2 Fertility Intentions

Table 5.2 presents fertility preferences by number of living children among all women at baseline and endline. Generally, as the number of living children increased, there was a corresponding decrease in the desire for more children at both baseline and endline. At endline, at least two-thirds of the women who had no children stated a desire to have a child soon (less than two years) or later (two or more years); in contrast, less than one-fifth (0 to 18 percent) of the women who already had six or more children wanted more children at endline across all cities.

The desire for another child within two years increased from baseline to endline in all cities among women who had one or no child(ren). For instance, among women who had no living children, the number of women who wanted a child in less than two years increased from 18 percent at baseline to 39 percent at endline in Kakamega and from 17 percent at baseline to 33 percent at endline in Mombasa. Overall, the percentage of women who wanted a child after marriage decreased from baseline to endline across all cities, from 12 percent at baseline to 5 percent at endline in Mombasa and from 12 percent at baseline to 6 percent at endline in Machakos; this likely corresponds to transitions to marriage over the four-year follow-up period.

Table 5.2 Fertility preferences and number of living children at baseline and endline

Percentage distribution of fertility preferences among all women by number of living children. Kenya 2010, 2014.

Desire for children	Baseline								Endline							
	Number of living children (in percentage)								Number of living children (in percentage)							
	0	1	2	3	4	5	6+	Total	0	1	2	3	4	5	6+	Total
Nairobi																
Wants another soon (<2 years)	17.6	18.3	9.1	8.8	5.6	4.5	2.4	13.8	17.8	22.8	9.9	6.5	3.1	1.5	3.0	12.3
Wants another later (≥2 years)	54.0	48.8	27.6	16.0	7.8	7.8	6.5	38.2	54.8	52.6	36.7	19.6	8.2	8.6	7.8	35.2
Wants child after marriage	11.1	2.9	0.8	0.5	0.0	0.0	0.0	4.4	17.0	4.9	1.8	0.0	1.3	0.0	0.0	4.2
Wants child undecided/ undecided if want	10.2	7.8	5.4	5.8	5.7	2.7	1.3	7.4	8.6	5.7	7.7	5.6	1.7	3.5	1.7	6.0
Want no more	6.4	20.8	54.7	63.0	75.1	75.0	64.6	33.2	1.6	12.6	40.8	61.2	71.5	71.2	54.0	36.6
Sterilized	0.0	0.0	0.6	3.5	4.4	8.1	21.5	1.5	0.0	0.0	0.9	5.3	7.4	8.3	26.6	3.3
Declared infecund	0.7	1.2	1.3	1.9	0.2	2.0	3.7	1.2	0.4	1.3	2.2	1.7	6.8	6.9	7.0	2.4
Missing	0.0	0.1	0.5	0.5	1.1	0.0	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	830	760	532	302	145	73	63	2706	189	319	365	236	111	59	55	1334
Mombasa																
Wants another soon (<2 years)	17.2	22.8	16.7	8.8	3.2	6.6	2.8	15.0	32.9	32.0	18.5	8.7	10.5	2.6	12.6	19.8
Wants another later (≥2 years)	37.0	47.3	27.2	22.5	14.6	13.0	4.6	31.0	41.5	46.3	35.6	25.1	11.3	11.2	5.0	30.7
Wants child after marriage	32.9	3.4	1.3	0.0	0.0	0.0	0.0	11.7	19.4	2.7	3.3	0.0	0.1	0.0	0.0	5.0
Wants child undecided/ undecided if want	10.2	6.7	9.9	10.4	8.8	2.4	15.3	9.2	3.7	6.5	10.4	6.7	10.5	7.5	5.3	7.4
Want no more	2.0	17.8	40.7	54.5	62.4	72.1	58.4	29.1	0.1	12.1	28.7	54.5	50.6	61.4	63.8	31.2
Sterilized	0.0	0.0	0.0	1.8	5.0	3.9	7.9	1.2	0.0	0.0	0.0	2.2	1.6	5.9	2.1	1.0
Declared infecund	0.1	0.6	2.4	1.8	6.0	1.9	11.1	1.9	2.5	0.3	3.6	2.8	15.4	11.0	11.2	5.0
Missing	0.7	1.5	1.8	0.1	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	481	282	288	158	112	72	72	1465	169	142	210	148	106	36	58	868
Kisumu																
Wants another soon (<2 years)	15.8	19.9	10.8	6.2	5.9	3.7	0.3	12.1	25.7	30.2	13.1	8.4	5.4	4.1	0.0	14.5
Wants another later (≥2 years)	55.2	56.5	42.5	24.8	12.7	17.1	3.2	40.3	52.7	45.5	43.1	23.8	12.8	4.4	3.0	31.7
Wants child after marriage	18.0	6.5	1.8	0.0	0.0	0.0	0.0	6.3	10.5	10.1	0.4	0.9	1.4	2.1	0.0	3.8
Wants child undecided/ undecided if want	5.9	3.6	5.4	4.7	2.2	0.0	1.9	4.3	4.1	4.0	3.1	2.4	2.1	5.0	0.0	3.0
Want no more	3.7	12.9	36.6	59.0	72.1	70.2	70.6	32.7	5.2	8.9	39.3	59.1	64.9	67.7	71.4	40.4
Sterilized	0.0	0.0	0.3	2.1	6.4	3.3	14.0	1.9	0.0	0.0	0.9	2.7	8.9	7.9	17.3	3.8
Declared infecund	1.4	0.8	1.9	3.4	0.7	5.7	8.7	2.2	1.9	1.3	0.2	2.8	4.5	8.7	8.4	2.9
Missing	0.0	0.0	0.6	0.0	0.0	0.0	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	393	371	309	227	120	79	104	1603	128	169	211	162	117	64	78	928
Machakos																
Wants another soon (<2 years)	14.6	14.9	7.2	7.1	2.6	0.0	1.8	10.5	19.7	22.9	9.0	2.2	2.1	0.0	0.0	11.7
Wants another later (≥2 years)	41.0	48.4	27.1	9.6	1.0	2.0	0.0	30.7	42.9	35.2	18.2	4.2	0.0	1.0	0.0	21.0
Wants child after marriage	30.8	10.7	0.8	0.3	0.0	0.0	0.0	12.1	22.9	7.2	1.1	0.0	0.0	0.0	0.0	5.7
Wants child undecided/ undecided if want	10.7	5.0	3.9	2.9	0.6	0.0	0.0	5.6	12.3	9.5	6.2	3.6	1.2	0.0	0.0	6.6
Want no more	2.1	20.6	60.1	72.3	79.6	59.7	71.5	36.3	1.3	22.5	60.3	76.0	72.9	54.0	55.8	44.7
Sterilized	0.2	0.0	0.5	7.1	13.4	38.3	25.2	4.0	0.0	0.2	1.4	7.8	11.9	33.1	21.8	5.2
Declared infecund	0.6	0.2	0.2	0.6	2.9	0.0	1.5	0.6	0.9	2.1	3.8	6.2	11.1	11.9	22.5	5.0
Missing	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.7	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	560	428	380	219	130	63	54	1834	194	300	304	204	101	61	43	1207
Kakamega																
Wants another soon (<2 years)	18.0	15.4	14.7	6.4	11.4	2.6	1.8	12.7	39.2	24.1	13.2	11.0	5.8	3.1	0.8	15.5
Wants another later (≥2 years)	57.1	59.5	38.9	21.1	11.9	4.2	5.9	38.7	43.1	62.1	45.0	19.1	13.6	7.7	0.9	32.5
Wants child after marriage	9.2	2.7	0.0	0.0	0.0	0.0	0.0	2.8	14.0	2.2	0.2	0.9	1.0	0.0	0.0	2.6
Wants child undecided/ undecided if want	10.3	9.4	4.8	4.6	7.1	2.8	0.7	6.9	0.0	2.9	3.3	1.9	1.9	0.0	0.0	1.8
Want no more	3.5	12.6	39.0	58.9	56.9	73.5	72.9	33.2	1.3	6.4	34.5	58.9	65.4	75.2	72.5	39.9
Sterilized	0.0	0.0	1.5	6.2	8.0	15.5	14.3	3.6	0.0	0.4	1.4	5.3	9.2	11.4	15.7	4.7
Declared infecund	2.0	0.4	1.2	2.6	4.7	1.5	4.5	2.0	2.4	1.8	2.4	2.9	3.1	2.6	10.1	3.2
Missing	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	322	279	254	190	133	53	93	1324	114	159	185	179	107	61	74	880

5.3 Abortions, Stillbirths, and Miscarriages

At endline, all women were asked if they had ever experienced a stillbirth, miscarriage, or abortion. Table 5.3 presents these responses by city; however, due to the sensitive nature of these questions, it is likely that only a small number of women who had experienced one of these three outcomes were forthright about reporting them. The results should therefore be interpreted with caution. Among all women, the percentage that had ever miscarried or had an abortion or stillbirth was fairly low across cities, ranging from 8 percent in Machakos to 21 percent in Kakamega. Among women who reported having had a pregnancy that did not come to term for one of these three reasons, miscarriages over the previous five years were most commonly reported in Nairobi (40 percent) and least reported in Machakos (17 percent). The percentage of women who reported having experienced a stillbirth within the previous five years was also low, ranging from 5 percent in Nairobi to 9 percent in Kakamega. Reports of abortions during the previous five years were fairly uncommon in all cities, ranging from 2 percent in Nairobi to 8 percent in Mombasa.

Table 5.3 Abortions, stillbirths and miscarriages at endline

Percentage distribution of women who have experienced a miscarriage, abortion, or stillbirth. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Ever miscarried or had an abortion or stillbirth					
Yes	12.3	18.2	16.0	8.3	21.4
No	87.7	81.6	84.0	91.6	78.6
Missing	0.0	0.2	0.0	0.2	0.0
Number	1334	868	928	1207	880
Among women who had ever miscarried, aborted, or had a stillbirth, percentage who had had a miscarriage within the previous five years					
Yes	39.8	30.3	29.0	17.1	33.4
No	60.0	69.5	71.0	80.6	66.0
Missing	0.2	0.2	0.0	2.3	0.6
Number	164	158	148	100.0	189
Among women who had ever miscarried, aborted, or had a stillbirth, percentage who had had a stillbirth within the previous five years					
Yes	4.7	7.8	5.9	6.9	8.8
No	95.1	92.0	94.1	92.4	91.2
Missing	0.2	0.2	0.0	0.7	0.0
Number	164	158	148	100.0	189
Among women who had ever miscarried, aborted, or had a stillbirth, percentage who had had an abortion within the previous five years					
Yes	1.5	7.6	5.2	3.5	3.0
No	93.7	87.8	94.1	93.0	93.8
Missing	4.8	4.6	0.7	3.6	3.1
Number	164	158	148	100.0	189

CHAPTER 6: FAMILY PLANNING

FP has been shown to have beneficial effects on economic development and maternal and child health indices, especially in developing countries where high fertility and high population impede economic growth (Canning & Schultz, 2012; Cleland et al., 2012). Despite the acclaimed benefits of FP, the prevalence of contraceptive method use remains low in many countries. In 2013, an estimated 225 million reproductive-age women (ages 15–49) in the developing world had an unmet need for FP (Singh, Darroch, & Ashford, 2014). These are women who want to avoid a pregnancy but are not using an effective contraceptive method. Recent research points to lack of information about, access to, and social and political support for FP as drivers of the low levels of contraceptive use. According to the 2014 KDHS, the FP needs of about a quarter of married women in Kenya remain unmet.

This chapter presents baseline and endline data on women's knowledge, use, and source of contraceptive methods, unmet need for FP, and reasons for use and nonuse of FP, perceptions of FP, and spousal or within-relationship communication about FP.

6.1 Knowledge of Contraceptive Methods

Respondents' knowledge of contraceptive methods was assessed using two questions. Women were first asked to list all the contraceptive methods they knew; this question assessed what was defined as spontaneous knowledge of contraceptive methods. If a woman did not include all the contraceptive methods covered in the study, she was then probed for knowledge of methods not mentioned spontaneously. The contraceptive methods assessed included female sterilization, male sterilization, daily pills, injections, implants, intrauterine devices (IUDs), female condoms, male condoms, emergency contraception (EC), the lactational amenorrhea method (LAM), Standard Days Method (SDM)/CycleBeads, and other traditional methods such as rhythm and withdrawal methods. The same questions were asked at both baseline and endline surveys. The distribution of the women's knowledge of contraceptive methods at the time of each survey is presented in Table 6.1 by city and type of contraceptive method.

Knowledge of at least one contraceptive method is universal in urban Kenya, with over 98 percent of women having either spontaneous or probed knowledge of one or more contraceptive methods at the times of both surveys. In general, knowledge of modern methods was higher than that of traditional methods at both time points in all cities.

The three most widely recognized methods remained the same in both surveys, with minor increases between surveys in all cities. These methods were male condoms, injectables, and daily pills, with an average increase of 1–6 percentage points between surveys. However, there are city-level differences in knowledge of modern methods, with the largest increase between surveys occurring in Nairobi. Knowledge of LAM increased most between surveys in Nairobi and Mombasa (27 and 37 percentage points), IUDs in Mombasa (17 percentage points), implants in Nairobi (17 percentage points), and female sterilization in Nairobi (27 percentage points). At endline, the method with which respondents were least familiar in all cities was SDM/CycleBeads; the percentage of women reporting knowledge of this method ranged from 35 percent in Kakamega to 66 percent in Nairobi. The percentage of women reporting knowledge of EC at endline ranged from 51 to 79 percent, an increase from baseline percentages, which ranged from 45 to 58 percent.

Table 6.1 Women's knowledge of contraception at baseline and endline

Percentage distribution of women by spontaneous or probed knowledge of contraceptive method, type of method, and city at baseline and endline. Kenya 2010, 2014.

Knowledge of methods	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Any modern method	98.1	100.0	98.3	99.8	99.0	99.9	98.9	100.0	98.4	100.0
Modern methods:										
Female sterilization	63.4	90.8	71.1	80.0	74.8	86.0	83.8	89.4	76.6	93.6
Male sterilization	50.0	76.5	56.7	62.8	52.7	65.6	58.3	57.2	65.7	74.0
IUDs	82.8	97.1	78.0	95.4	83.3	96.4	85.0	93.8	87.3	97.8
Injectables	95.4	99.3	93.4	98.3	96.5	99.4	95.8	98.3	95.9	99.8
Implants	81.4	98.0	78.9	94.7	87.0	98.1	86.3	96.3	84.0	98.6
Daily pills	94.9	99.4	94.4	96.8	95.0	99.4	95.5	98.0	94.2	99.8
EC	57.7	79.4	44.5	57.6	57.6	67.3	52.8	51.2	51.9	63.7
Male condoms	96.7	99.8	97.5	98.7	98.4	99.8	98.0	99.7	97.4	99.9
Female condoms	87.1	96.9	74.9	85.7	87.8	95.2	80.0	86.6	90.5	95.2
LAM/breastfeeding	49.7	76.7	40.2	77.3	46.8	52.6	37.7	41.2	54.5	63.2
SDM/CycleBeads[1]	79.2	65.5	78.9	46.3	78.0	45.7	87.5	37.0	81.6	34.6
Traditional methods:										
Rhythm	NA	78.7	NA	82.4	NA	82.1	NA	79.0	NA	80.7
Withdrawal	56.9	87.2	62.6	69.4	56.2	69.7	62.6	67.4	63.1	73.5
Number of women	2,706	1,334	1,465	868	1,603	928	1,834	1,207	1,324	880

NA: not applicable because no data collected; [1]At baseline, rhythm method and Standard Days (SDM)/CycleBeads were not asked about separately.

Despite nearly universal knowledge of different types of contraceptive methods, a lower percentage of women knew of these methods' side effects. Table 6.2 presents the percentage of women who reported knowing common side effects of selected reversible contraceptive methods, including implants, IUDs, pills, and injectables, between midterm and endline surveys. With regard to implants, the most frequently reported side effects at midterm were bleeding or menstrual problems (30 percent), weight gain (22 percent), and weight loss (17 percent). These three side effects remained the most frequently reported at endline, with the percentage reporting weight loss decreasing slightly (2 percentage points) and reports of the other two side effects increasing slightly by endline. About one-third of the women at midterm reported not knowing any side effects or disadvantages of using implants, a number that had decreased by about 3 percentage points by endline. A lower percentage of women reported knowledge of IUD side effects. The most frequently reported IUD side effects at midterm and endline were bleeding or menstrual problems (16–23 percent), movement within the body (17–22 percent), and IUD strings interfering with the respondent's male partner's pleasure during sex (11–14 percent). The least-reported IUD side effects at midterm and endline were weakness and sleeplessness. Though not assessed at midterm, the frequently reported side effects of pills and injectables at endline were bleeding or menstrual problems (67 percent), weight gain (39 percent), and nausea and vomiting (29 percent). The least-reported side effects for these two short-acting methods were birth defects (1 percent) and sleeplessness (2 percent). In general, pills and injectables had the highest proportion of women reporting awareness of side effects at endline, followed by implants and then IUDs.

Table 6.2 Women's knowledge about side effects of selected contraceptive methods at midterm and endline

Percentage of women who reported knowing about the following side effects regarding implants, IUDs and pills/injectables at midterm and endline. Kenya 2012, 2014.

	Implants		IUDs		Pills/injectables	
	Midterm	Endline	Midterm	Endline	Midterm	Endline
Reported knowing side effects or complications						
Bleeding or menstrual problems	29.8	34.9	16.3	23.3	NA	67.0
Weight gain	21.8	25.2	5.3	4.9	NA	39.1
Weight loss	17.4	15.7	5.5	2.7	NA	21.8
Headaches	12.9	9.1	2.6	2.0	NA	21.7
Backaches	9.3	11.9	5.4	11.3	NA	20.0
Nausea/vomiting	6.5	5.7	1.5	0.9	NA	28.5
Sleeplessness	1.1	0.9	0.6	0.2	NA	1.9
Weakness	12.6	12.8	3.5	2.4	NA	11.8
Lack of sexual urge	4.3	5.4	2.7	3.5	NA	9.6
Other health problems	15.5	9.6	9.6	7.5	NA	17.5
Infertility	5.6	5.3	3.7	2.0	NA	8.6
Cancer	2.2	1.9	5.7	5.5	NA	3.0
Deformed children/birth defects	2.1	0.4	5.0	2.6	NA	1.3
Can move around within my body	4.0	2.5	16.9	22.2	NA	NA
Can come out of arm	2.5	1.1	NA	NA	NA	NA
Can harm fetus if I become pregnant	NA	0.3	NA	NA	NA	NA
Strings interfere with husband's pleasure	NA	NA	14.1	11.3	NA	NA
Don't know method	4.1	1.3	5.3	1.8	NA	0.3
Don't know any side effects/disadvantages	32.8	29.9	41.4	38.2	NA	7.2
Other[1]	0.9	1.0	7.1	4.8	NA	2.2
Number of women	3,207	5,217	3,207	5,217	NA	5,217

Note: Percentages may not add up to 100.0% because multiple responses could be given.

NA: not applicable because no data collected; [1]Other responses include perceived ineffectiveness, fear of not digesting pills (leading to stomach issues), hormonal effects on breast milk, etc.

6.2 Use of Contraceptive Methods

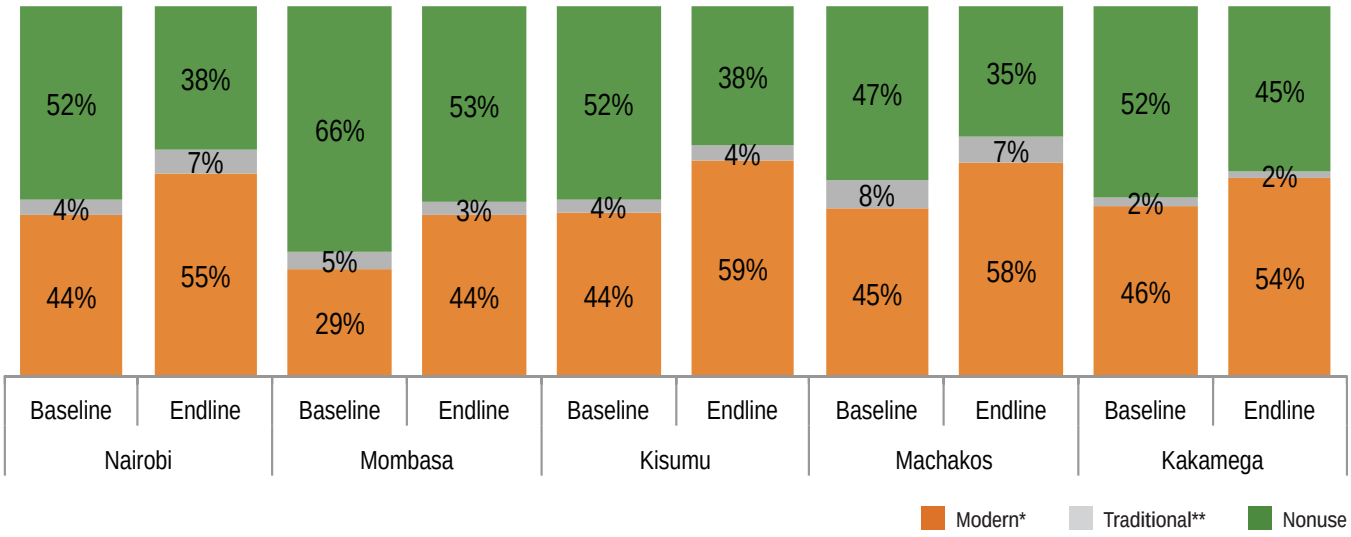
Contraceptive prevalence rate (CPR), an indicator of FP use, is defined as the proportion of reproductive-age women using a method of contraception at a specific time. CPR is a key indicator for the MLE Project's evaluation of Tupange. In all surveys, women were asked whether they or their partners were using any contraceptive method at the time of the survey and, if so, which one(s). Table 6.3 presents current contraceptive method use at baseline and endline surveys by city and household wealth quintile. For the purposes of this report, modern contraceptive methods, hereafter called modern methods, included male and female sterilization, daily pills, injectables, implants, IUDs, male and female condoms, EC, dermal patches, diaphragms, spermicides, and LAM. Traditional methods included rhythm method, withdrawal, and SDM/CycleBeads.

As seen in Figure 6.1, there were appreciable increases in CPR in all cities over the four-year period between surveys. Specifically, in Nairobi, the percentage of women reporting current use of modern methods increased from 44 percent at baseline to 55 percent at endline—an 11-percentage-point increase over four years. In addition, the prevalence of traditional method use increased from 4 percent at baseline to 7 percent at endline. The majority of the increase in modern method use observed in Nairobi was among the poor (45 to 64 percent) and poorest (38 to 56 percent) households, with very little increase observed among the richest households (40 to 41 percent). On the other hand, the increases in the percentage of women using traditional methods were mainly among the rich and richest households (5 to 9 percent in each group). As expected, the percentage of women not using any contraceptive method in Nairobi decreased between surveys by about 14 percentage points, ranging from 52 percent at baseline to 38 percent at endline, with a majority of the decreases observed among the poorest (21 percentage points) and poor (22 percentage points) households. The modern CPR in Mombasa increased from 29 percent at baseline to 44 percent at endline—a 15-percentage-point increase within the four-year period. The highest increase was observed among women in poorest households (23 to 43 percent), followed by those in middle-wealth-quintile households (35 to 54 percent), with the smallest increase observed among women in rich households (31 to 36 percent). Traditional method use decreased between surveys from 5 percent at baseline to 3 percent at endline, while those reporting nonuse of any contraceptive method decreased from 66 percent at baseline to 53 percent at endline. In Kisumu, the majority of the increase in CPR between surveys was in modern method use (44 to 59 percent), compared to traditional method use (3.5 to 3.8 percent). The largest increase in modern method use was observed among women living in middle-wealth-index households (45 to 68 percent), followed by the poorest (43 to 58 percent) and poor households (48 to 63 percent). The percentage of women in Kisumu who reported using traditional methods decreased between surveys for those living in poorest, poor, middle, and richest households (1–3 percentage points) and increased for those living in rich households (2 percentage points).

The situation in Machakos and Kakamega is quite similar, with increases in the CPR of modern methods and decreases in the CPR of traditional methods and in nonuse of contraceptive methods between baseline and endline surveys. Specifically, modern method use increased from 45 to 58 percent in Machakos and from 46 to 54 percent in Kakamega. Traditional method use decreased from 8 to 7 percent in Machakos and from 2.4 to 1.6 percent in Kakamega, while the percentage of women reporting nonuse of contraceptive methods decreased by about 11 percentage points in Machakos (to approximately 35 percent at endline) and 7 percentage points in Kakamega (to 45 percent at endline). In Machakos, however, the majority of the increase in modern method use was observed among women in poorest households (44 to 70 percent), while in Kakamega it was observed among women in poor households (49 to 66 percent). Apart from women in the richest households in both cities, whose use of traditional methods increased, traditional method use decreased for women in all other wealth quintiles.

Figure 6.1 Current contraceptive use among all women ages 15–49 at baseline and endline, by city.

Kenya 2010, 2014.



* Modern methods include male and female sterilization, daily pills, IUDs, implants, injectables, condoms, EC, dermal patches, diaphragms, spermicides, and LAM

** Traditional methods include rhythm method, withdrawal and SDM/CycleBeads.

Table 6.3 Current use of contraception by wealth quintile and city at baseline and endline

Percentage distribution of women 15–49 by type of contraceptive method currently used, wealth quintile, and city. Kenya 2010, 2014.

	Baseline contraception use, 2010				Endline contraception use, 2014			
	Modern[1]	Traditional[2]	Nonuse	Number of women	Modern[1]	Traditional[2]	Nonuse	Number of women
Nairobi								
Poorest	37.6	4.2	58.3	483	55.6	6.6	37.8	256
Poor	44.6	3.3	52.1	518	64.0	5.4	30.6	258
Middle	53.8	3.4	42.8	522	57.7	4.6	37.7	269
Rich	42.5	5.0	52.5	549	54.9	8.7	36.3	261
Richest	40.1	4.7	55.1	634	40.9	8.9	50.2	249
Overall	43.6	4.2	52.2	2706	54.8	6.8	38.4	1294
Mombasa								
Poorest	23.2	4.6	72.2	256	42.5	1.2	56.3	160
Poor	29.5	3.8	66.7	269	44.5	1.9	53.6	174
Middle	35.3	4.9	59.9	305	53.6	3.3	43.1	163
Rich	30.7	3.5	65.8	304	35.6	4.2	60.2	185
Richest	26.9	5.4	67.6	332	43.9	6.2	49.9	150
Overall	29.3	4.5	66.3	1465	43.8	3.3	52.9	832
Kisumu								
Poorest	43.3	4.2	52.4	310	58.3	3.2	38.5	189
Poor	48.4	1.6	50.0	302	62.5	4.6	32.9	177
Middle	44.5	3.5	52.1	298	68.4	2.4	29.2	173
Rich	41.0	3.5	55.5	327	49.2	5.0	45.8	185
Richest	45.1	4.5	50.4	366	55.8	3.6	40.6	180
Overall	44.4	3.5	52.1	1603	58.7	3.8	37.5	904
Machakos								
Poorest	44.3	8.4	47.3	283	70.1	3.2	26.7	212
Poor	50.2	8.9	40.9	362	58.0	5.7	36.3	221
Middle	47.2	5.1	47.7	367	55.0	4.7	40.3	232
Rich	41.7	10.1	48.2	377	56.5	9.9	33.6	235
Richest	43.3	7.6	49.1	447	50.3	10.3	39.4	226
Overall	45.3	8.0	46.8	1834	57.8	6.8	35.4	1124
Kakamega								
Poorest	44.6	1.6	53.8	232	58.3	1.1	40.6	167
Poor	48.7	3.3	48.0	258	65.5	0.7	33.8	147
Middle	48.4	3.1	48.5	270	54.8	0.3	44.9	172
Rich	50.6	1.8	47.5	277	47.5	0.9	51.6	180
Richest	38.2	2.2	59.6	286	44.6	5.2	50.2	160
Overall	46.1	2.4	51.5	1324	53.8	1.6	44.5	826

[1]Modern methods include male and female sterilization, daily pills, IUDs, implants, injectables, condoms, EC, dermal patches, diaphragms, spermicide, and LAM.

[2]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

Table 6.4 presents the percentage of women using a contraceptive method at baseline and endline, by their city of residence and relationship status ("in union" defined as cohabiting with a male partner). In Nairobi, there was a 14-percentage-point increase in CPR (48 percent at baseline to 62 percent at endline) among women overall, while women married or in union reported a 13-percentage-point increase (63 percent to 76 percent). The use of sterilization, implants, IUDs, injectables, female condoms/LAM, and traditional methods increased between surveys, while the use of daily pills, male condoms, and EC decreased between surveys. The most prevalent method at baseline in Nairobi was injectables for women overall, as well as those married or in union. Injectables remained the most prevalent method at endline, though implant use increased most between surveys—from 2 to 9 percent for women overall and from 3 to 13 percent for women married or in union. Between surveys in Mombasa, the CPR increased from 34 to 47 percent for women overall and from 48 to 53 percent for those married or in union. Use of most contraceptive methods increased between surveys except for daily pills, EC, female condoms/LAM, and traditional methods, which decreased between surveys. Injectables were also the most prevalent method in Mombasa at baseline and endline; however, implant use increased most between surveys, from 2 to 11 percent for women overall and from 3 to 14 percent for women married or in union. The situation in Kisumu is slightly different from that observed in Nairobi and Mombasa. Figure 6.2a and Figure 6.2b present the contraceptive method use in Kisumu at baseline and endline, respectively. Though injectables were the most prevalent method among women overall and those married or in union in Kisumu at baseline, the percentage using injectables at endline declined, while those using implants increased, making implants the most prevalent method at endline for women overall and those married or in union. Specifically, about one in five women (one in four for those married or in union) reported using implants at endline. Overall in Kisumu, CPR increased from 48 to 63 percent for women overall and from 57 to 73 percent for those married or in union.

Figure 6.2a Contraceptive method use at baseline among all women ages 15–49 in Kisumu.

Kenya 2010.

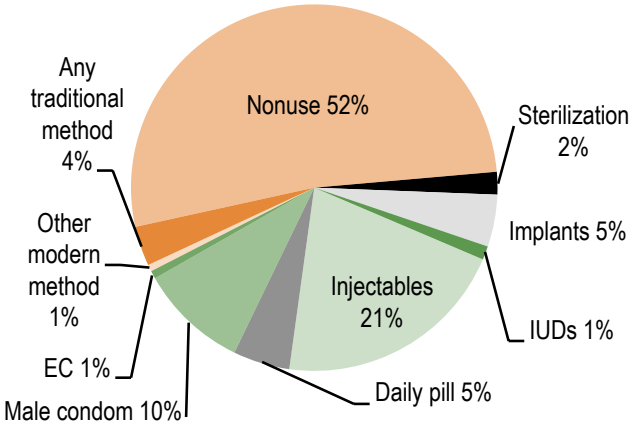
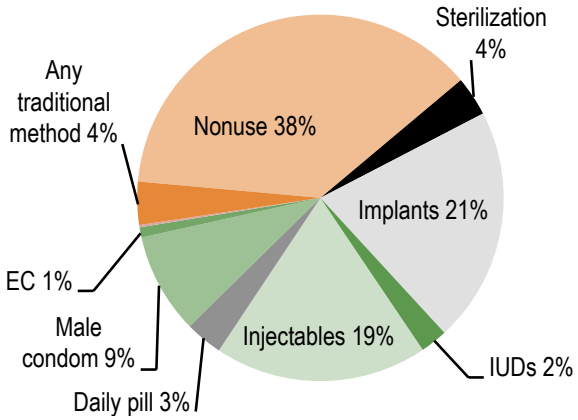


Figure 6.2b Contraceptive method use at endline among all women ages 15–49 in Kisumu.

Kenya 2014.



In Machakos, CPR increased from 53 percent at baseline to 65 percent at endline for women overall and from 73 percent at baseline to 81 percent at endline for women married or in union. The majority of this increase was observed in the use of implants, which increased from 4 to 12 percent for women overall and from 6 to 15 percent for women married or in union. The use of sterilization, male condoms, and traditional methods decreased between surveys, while the use of implants, IUDs, injectables, EC, and female condoms/LAM increased between surveys for women overall as well as for those married or in union. The use of daily pills among women overall in Machakos increased between surveys but decreased among women married or in union. Of all the increases in CPR observed in all cities, Kakamega had the smallest, with CPR increasing from 49 to 56 percent among women overall and from 61 to 65 percent among women married or in union. Similar to Machakos, the majority of the increase in CPR was in use of implants (3 to 15 percent for women overall and 4 to 18 percent for women married or in union). However, injectables were the most prevalent contraceptive method for all women at the time of both surveys.

Table 6.4 Contraceptive use among all women and women married or in union at baseline and endline

Percentage distribution of all women 15–49 and women married or in union by contraceptive method currently used and by city. Kenya 2010, 2014.

	Any method	Any modern method	Modern method								SDM[2]	Any traditional method[3]	Not currently using	Number of women
			Steriliz-ation	Implants	IUDs	Injectables	Daily pills	Male condoms	EC	Other modern method[1]				
Nairobi baseline														
All	47.8	43.6	1.5	2.4	2.2	17.7	11.1	7.2	1.0	0.5	NA	4.2	52.2	2706
Married/in union	63.0	58.0	2.2	3.4	3.1	26.9	17.6	3.4	0.5	0.8	NA	5.0	37.0	1469
Nairobi endline														
All	61.6	54.8	2.6	8.9	4.3	22.1	9.9	5.5	0.7	0.7	2.2	6.8	38.4	1294
Married/in union	75.8	68.3	3.5	12.7	6.2	29.5	13.2	2.3	0.2	0.6	2.6	7.5	24.2	787
Mombasa baseline														
All	33.7	29.3	1.2	1.8	1.1	13.6	6.3	3.9	0.9	0.4	NA	4.5	66.3	1465
Married/in union	48.4	41.5	1.4	2.6	1.3	20.6	10.6	3.0	1.3	0.7	NA	6.9	51.6	837
Mombasa endline														
All	47.1	43.8	0.9	11.0	1.6	17.8	4.7	7.2	0.2	0.2	0.6	3.3	52.9	832
Married/in union	52.8	49.7	0.9	14.0	2.1	22.3	6.2	3.4	0.3	0.4	0.3	3.1	47.2	558
Kisumu baseline														
All	47.9	44.4	2.0	4.6	1.2	20.8	5.0	9.6	0.7	0.6	NA	3.5	52.1	1603
Married/in union	57.0	52.6	2.9	6.6	1.4	28.6	6.3	5.4	0.5	0.9	NA	4.4	43.0	985
Kisumu endline														
All	62.5	58.7	3.5	20.8	2.4	18.8	3.3	8.9	0.9	0.2	0.3	3.8	37.5	904
Married/in union	73.1	68.4	4.0	25.4	3.2	24.3	4.2	6.7	0.4	0.2	0.5	4.7	26.9	593
Machakos baseline														
All	53.2	45.3	4.0	3.9	2.5	19.5	9.2	5.5	0.5	0.2	NA	8.0	46.8	1834
Married/in union	72.9	63.6	6.6	6.0	3.6	28.8	15.3	2.7	0.2	0.3	NA	9.3	27.1	997
Machakos endline														
All	64.6	57.8	3.9	11.7	4.3	23.5	10.5	2.7	0.7	0.3	0.3	6.8	35.4	1124
Married/in union	81.4	72.5	5.5	15.0	5.8	31.1	12.8	1.7	0.3	0.4	0.3	8.9	18.6	735
Kakamega baseline														
All	48.5	46.1	3.6	2.8	3.0	25.1	4.2	6.2	0.4	0.9	NA	2.4	51.5	1324
Married/in union	61.2	57.9	4.8	4.1	3.9	34.1	5.4	4.6	0.0	1.1	NA	3.3	38.8	826
Kakamega endline														
All	55.5	53.8	3.6	14.7	3.3	21.3	5.7	4.4	0.1	0.6	0.0	1.6	44.5	826
Married/in union	64.7	62.4	4.5	17.9	4.1	25.8	7.2	1.9	0.1	0.8	0.0	2.3	35.3	571

[1]Other modern methods include female condoms and LAM.

[2]At baseline, SDM was included with traditional methods in the answer category. Therefore not possible to determine what baseline values would be.

[3]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

The percentage distribution of women using the different types of contraceptive methods at the times of both surveys are displayed in Table 6.5 by household wealth distribution in all cities. Injectables were the most prevalent method in all cities at baseline; at endline, they remained the most prevalent method in all cities except Kisumu, where implants had surpassed them. There are differences in the change in distribution of contraceptive method use between surveys across the wealth quintiles. Among women in the poorest households in all cities and in poor households everywhere but Nairobi, the use of implants increased more than that of any other contraceptive method between surveys. In Nairobi's poor households, meanwhile, injectables showed the greatest increase in use. Among women in the middle-wealth-index households of all cities but Mombasa, implants constituted the method showing the largest increase in use between surveys, while in Mombasa, it was injectables. Among women in rich households, the method with the greatest increase between surveys was daily pills in Machakos and implants in the other cities. For women in the richest households, implants showed the greatest increase between surveys in Mombasa, Kisumu, and Kakamega, while IUDs did so in Nairobi and Machakos.

Table 6.5 Contraceptive method use by wealth quintile and city at baseline and endline

Percentage distribution of women 15–49 by contraceptive method currently used, wealth quintile, and city. Kenya 2010, 2014.

	Any method	Any modern method	Modern method								SDM[2]	Any traditional method[3]	Nonuse	Number of women
			Sterilization	Implants	IUDs	Injectables	Daily pills	Male condoms	EC	Other modern method[1]				
Nairobi baseline														
Poorest	41.7	37.6	1.7	1.1	1.2	21.9	5.3	4.9	1.0	0.6	NA	4.2	58.3	483
Poor	47.9	44.6	1.6	1.4	1.9	25.6	7.9	4.0	1.0	1.3	NA	3.3	52.1	518
Middle	57.2	53.8	0.6	2.5	1.2	22.0	19.6	7.2	0.6	0.1	NA	3.4	42.8	522
Rich	47.5	42.5	0.9	2.4	1.4	17.0	11.5	7.5	1.4	0.5	NA	5.0	52.5	549
Richest	44.9	40.1	2.7	4.1	4.7	5.2	10.7	11.6	1.2	0.0	NA	4.7	55.1	634
Overall	47.8	43.6	1.5	2.4	2.2	17.7	11.1	7.2	1.0	0.5	NA	4.2	52.2	2706
Nairobi endline														
Poorest	62.2	55.6	4.2	10.7	2.3	26.0	7.6	3.0	1.0	0.9	1.8	6.6	37.8	256
Poor	69.4	64.0	2.3	9.3	4.1	39.6	4.0	2.6	1.1	1.0	0.1	5.4	30.6	258
Middle	62.3	57.7	1.7	10.9	1.8	20.1	11.4	9.5	0.8	1.5	1.4	4.6	37.7	269
Rich	63.7	54.9	1.9	8.8	4.4	18.0	14.4	7.0	0.5	0.0	2.9	8.7	36.3	261
Richest	49.8	40.9	3.0	4.6	9.1	6.6	12.1	5.1	0.4	0.0	4.8	8.9	50.2	249
Overall	61.6	54.8	2.6	8.9	4.3	22.1	9.9	5.5	0.7	0.7	2.2	6.8	38.4	1,294
Mombasa baseline														
Poorest	27.8	23.2	0.8	1.4	0.4	13.1	4.3	2.4	0.0	0.8	NA	4.6	72.2	256
Poor	33.3	29.5	0.8	0.1	1.3	19.1	1.8	4.2	1.4	0.7	NA	3.8	66.7	269
Middle	40.1	35.3	1.1	2.3	0.3	16.5	10.1	2.1	2.8	0.1	NA	4.9	59.9	305
Rich	34.2	30.7	0.8	2.0	0.0	14.4	9.0	4.0	0.5	0.0	NA	3.5	65.8	304
Richest	32.4	26.9	2.1	3.0	3.2	6.1	5.4	6.5	0.0	0.6	NA	5.4	67.6	332
Overall	33.7	29.3	1.2	1.8	1.1	13.6	6.3	3.9	0.9	0.4	NA	4.5	66.3	1465
Mombasa endline														
Poorest	43.7	42.5	1.1	11.8	0.2	17.0	3.3	7.6	0.1	1.2	0.0	1.2	56.3	160
Poor	46.4	44.5	0.1	14.9	1.1	20.1	1.1	7.2	0.0	0.0	0.0	1.9	53.6	174
Middle	56.9	53.6	0.1	7.7	3.1	27.6	6.4	8.8	0.0	0.0	0.9	3.3	43.1	163
Rich	39.8	35.6	1.7	10.2	1.9	13.5	2.8	5.5	0.0	0.0	1.9	4.2	60.2	185
Richest	50.1	43.9	1.8	10.4	1.4	10.9	11.1	7.1	1.2	0.0	0.0	6.2	49.9	150
Overall	47.1	43.8	0.9	11.0	1.6	17.8	4.7	7.2	0.2	0.2	0.6	3.3	52.9	832
Kisumu baseline														
Poorest	47.6	43.3	1.8	3.8	1.1	22.1	6.2	7.0	0.5	0.8	NA	4.2	52.4	310
Poor	50.0	48.4	1.8	8.1	0.0	26.2	4.5	6.9	0.5	0.4	NA	1.6	50.0	302
Middle	47.9	44.5	1.2	2.7	0.8	22.9	5.5	10.2	0.3	0.8	NA	3.5	52.1	298
Rich	44.5	41.0	1.7	3.7	0.6	20.7	5.0	8.3	0.6	0.4	NA	3.5	55.5	327
Richest	49.6	45.1	3.2	4.7	2.9	13.6	4.2	14.6	1.4	0.5	NA	4.5	50.4	366
Overall	47.9	44.4	2.0	4.6	1.2	20.8	5.0	9.6	0.7	0.6	NA	3.5	52.1	1603
Kisumu endline														
Poorest	61.5	58.3	3.1	29.8	0.8	19.4	0.9	3.2	0.0	1.2	0.0	3.2	38.5	189
Poor	67.1	62.5	2.9	23.4	1.2	25.9	3.5	5.7	0.0	0.0	0.9	4.6	32.9	177
Middle	70.8	68.4	4.9	18	0.2	25	6.6	11.5	2.2	0.0	0.0	2.4	29.2	173
Rich	54.2	49.2	0.6	18.5	2.3	16.1	1.7	8.9	1.1	0.0	0.0	5.0	45.8	185
Richest	59.4	55.8	6.1	13.7	7.7	7.8	3.9	15.3	1.3	0.0	0.8	3.6	40.6	180
Overall	62.5	58.7	3.5	20.8	2.4	18.8	3.3	8.9	0.9	0.2	0.3	3.8	37.5	904
Machakos baseline														
Poorest	52.7	44.3	6.3	3.4	0.5	23.8	4.5	5.2	0.4	0.2	NA	8.4	47.3	283
Poor	59.1	50.2	3.4	3.3	1.1	22.9	12.2	6.7	0.5	0.0	NA	8.9	40.9	362
Middle	52.3	47.2	2.7	3.5	2.0	26.7	8.8	3.0	0.3	0.2	NA	5.1	47.7	367
Rich	51.8	41.7	4.3	3.8	3.9	16.8	8.3	3.8	0.8	0.0	NA	10.1	48.2	377
Richest	50.9	43.3	3.8	5.2	4.0	10.6	10.8	8.3	0.3	0.4	NA	7.6	49.1	447
Overall	53.2	45.3	4.0	3.9	2.5	19.5	9.2	5.5	0.5	0.2	NA	8.0	46.8	1834
Machakos endline														
Poorest	73.3	70.1	6.2	22.8	1.2	32.5	7.1	0.2	0.0	0.0	0.0	3.2	26.7	212
Poor	63.7	58.0	4.1	10.0	2.9	24.8	10.1	4.8	1.1	0.0	0.5	5.7	36.3	221
Middle	59.7	55.0	1.8	9.9	1.8	30.3	8.5	1.6	0.9	0.2	0.0	4.7	40.3	232
Rich	66.4	56.5	3.2	8.1	5.7	21.4	13.2	3.8	0.4	0.8	0.0	9.9	33.6	235
Richest	60.6	50.3	4.5	8.7	9.8	9.0	13.5	3.1	1.3	0.3	0.9	10.3	39.4	226
Overall	64.6	57.8	3.9	11.7	4.3	23.5	10.5	2.7	0.7	0.3	0.3	6.8	35.4	1,124
Kakamega baseline														
Poorest	46.2	44.6	1.1	1.8	1.9	29.6	2.4	6.1	0.0	1.7	NA	1.6	53.8	232
Poor	52.0	48.7	2.5	1.9	1.5	33.4	4.2	3.5	0.0	1.7	NA	3.3	48.0	258
Middle	51.5	48.4	5.1	4.2	2.4	26.3	4.0	5.6	0.6	0.3	NA	3.1	48.5	270
Rich	52.5	50.6	2.8	1.7	6.0	25.7	4.3	8.9	0.3	0.9	NA	1.8	47.5	277
Richest	40.4	38.2	5.7	4.3	2.9	12.2	5.6	6.6	0.9	0.0	NA	2.2	59.6	286
Overall	48.5	46.1	3.6	2.8	3.0	25.1	4.2	6.2	0.4	0.9	NA	2.4	51.5	1324
Kakamega endline														
Poorest	59.4	58.3	2.4	26.2	1.8	21.5	3.3	3.1	0.0	0.0	0.0	1.1	40.6	167
Poor	66.2	65.5	3.8	11.6	1.3	38.7	5.6	3.1	0.0	1.3	0.0	0.7	33.8	147
Middle	55.1	54.8	2.6	15.1	2.2	25.8	4.6	3.1	0.0	1.6	0.0	0.3	44.9	172
Rich	48.4	47.5	3.2	9.5	5.0	15.1	6.9	7.4	0.0	0.3	0.0	0.9	51.6	180
Richest	49.8	44.6	6.4	11.0	5.8	7.4	8.4	5.2	0.4	0.0	0.0	5.2	50.2	160
Overall	55.5	53.8	3.6	14.7	3.3	21.3	5.7	4.4	0.1	0.6	0.0	1.6	44.5	826

[1]Other modern methods include female condoms and LAM.

[2]At baseline, SDM was included with traditional methods in the answer category. Therefore not possible to determine what baseline values would be.

[3]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

Table 6.6 presents the distribution of contraceptive method use across the five-year age groups in all cities at baseline and endline. Among 15- to 19-year-olds, the most prevalent method at baseline was injectables in Nairobi, Mombasa, and Kakamega and male condoms in Kisumu and Machakos. At endline, injectables were the most prevalent in Nairobi and Mombasa, implants were the most prevalent in Machakos and Kakamega, and male condoms remained the most prevalent in Kisumu. Implants and injectables increased the most between surveys among 15- to 19-year-olds in all cities. For the 20- to 24-year-olds, injectables were the most prevalent at baseline and endline in all cities, with the exception of Kisumu, where implants were slightly more prevalent at endline. The largest increases took place among 20- to 24-year-olds and were observed in implant use in all cities except Mombasa, where injectable and male condom use increased most between surveys. The most prevalent methods among 25- to 29-year-olds in all cities were implants and injectables; implant use also increased most between surveys in all cities except Nairobi, where the largest increase was in injectable use. Similar results were observed for 30- to 34-year-olds and 35- to 39-year-olds in all cities. However, there are slight differences in the methods of choice among the older women (i.e., those age 40 or older). At baseline, the most prevalent method among women ages 40–44 was sterilization in Nairobi and Machakos, male condoms in Mombasa and Kisumu, and injectables in Kakamega. However, by endline, the most prevalent method for this age group had become injectables in all cities except Machakos, where daily pills predominated. The methods that increased most in use between surveys for women ages 40–44 were injectables in Nairobi, Mombasa, and Kisumu and implants in Machakos and Kakamega. Sterilization was the most prevalent contraceptive method at baseline for women in the oldest age group (45–49 years old). At endline, it remained sterilization in all cities, except in Mombasa, where implant use had increased beyond sterilization. However, the methods that increased most between surveys for women ages 45–49 differed across all the cities. In Nairobi, the greatest increase was in traditional methods (4 percent at baseline to 10 percent at endline); in Mombasa, it was in implants (2 percent at baseline to 6 percent at endline); in Kisumu, it was in injectables (1 percent at baseline to 10 percent at endline); in Machakos, it was in sterilization (20 percent at baseline to 25 percent at endline); and in Kakamega, it was in implants (none at baseline to 5 percent at endline).

Table 6.6 Contraceptive method use by five-year age groups and city at baseline and endline

Percentage distribution of women 15–49 by contraceptive method currently used, five-year age groups, and city. Kenya 2010, 2014.

	Any method	Any modern method	Modern method								SDM[2]	Any traditional method[3]	Nonuse	Number of women
			Steriliz-ation	Im-plants	IUDs	Inject-ables	Daily pills	Male con-doms	EC	Other modern method[1]				
Nairobi baseline														
15–19	17.4	16.7	0.0	0.2	0.5	7.6	1.2	6.7	0.5	0.0	NA	0.6	82.6	271
20–24	43.3	39.7	0.2	0.9	0.5	16.7	10.9	9.2	1.1	0.2	NA	3.7	56.7	815
25–29	55.1	51.0	0.2	2.8	1.4	23.4	12.6	7.9	1.5	1.2	NA	4.0	44.9	678
30–34	61.9	55.6	0.8	4.7	2.5	24.0	16.8	6.0	0.8	0.0	NA	6.3	38.1	389
35–39	57.3	52.3	1.8	3.2	8.6	18.1	13.5	7.0	0.0	0.1	NA	5.0	42.7	294
40–44	47.7	41.5	10.9	5.9	5.3	7.5	7.5	1.8	0.9	1.7	NA	6.3	52.3	165
45–49	33.6	29.8	12.8	0.0	0.7	6.1	4.8	2.8	2.7	0.0	NA	3.8	66.4	95
Overall	47.8	43.6	1.5	2.4	2.2	17.7	11.1	7.2	1.0	0.5	NA	4.2	52.2	2,706
Nairobi endline														
15–19	38.5	38.5	0.0	0.0	0.0	36.2	0.0	2.3	0.0	0.0	0.0	0.0	61.5	18
20–24	50.8	45.4	0.0	5.1	1.9	15.1	8.4	10.9	1.0	2.9	3.9	5.4	49.2	161
25–29	68.4	63.2	0.4	12.7	3.2	34.1	8.3	3.2	0.8	0.4	0.8	5.2	31.6	415
30–34	66.3	59.2	0.9	9.4	7.1	21.4	13.4	6.6	0.1	0.4	1.7	7.1	33.7	298
35–39	64.6	56.2	3.9	10.7	6.0	15.2	12.3	7.2	0.8	0.0	1.4	8.4	35.4	181
40–44	54.5	44.9	7.6	3.3	4.7	12.6	9.9	3.9	2.0	0.9	4.5	9.6	45.5	147
45–49	40.1	29.9	15.2	2.4	0.3	5.9	4.8	1.3	0.0	0.0	5.5	10.3	59.9	74
Overall	61.6	54.8	2.6	8.9	4.3	22.1	9.9	5.5	0.7	0.7	2.2	6.8	38.4	1,294
Mombasa baseline														
15–19	8.3	7.6	0.0	0.6	0.6	3.1	0.1	2.4	0.1	0.8	NA	0.7	91.7	247
20–24	31.9	27.9	0.0	0.8	2.0	13.0	3.9	5.8	2.2	0.1	NA	4.1	68.1	354
25–29	46.5	43.1	0.4	3.2	0.7	24.5	9.1	3.2	0.7	1.2	NA	3.4	53.5	315
30–34	46.7	35.7	0.0	1.2	0.9	19.9	8.6	3.4	1.5	0.1	NA	11.0	53.3	227
35–39	41.1	36.1	1.4	2.7	2.1	14.3	13.1	2.4	0.0	0.1	NA	5.0	58.9	133
40–44	34.5	30.7	5.1	4.1	0.1	3.2	8.9	9.2	0.0	0.0	NA	3.7	65.5	112
45–49	19.4	15.7	10.2	2.0	0.0	0.3	3.1	0.0	0.0	0.0	NA	3.6	80.6	77
Overall	33.7	29.3	1.2	1.8	1.1	13.6	6.3	3.9	0.9	0.4	NA	4.5	66.3	1,465
Mombasa endline														
15–19	1.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	98.5	25
20–24	40.4	38.2	0.0	6.3	0.0	19.5	0.0	12.3	0.1	0.0	0.9	2.1	59.6	158
25–29	58.4	53.1	0.0	18.2	2.5	21.3	2.3	7.1	0.7	0.9	0.9	5.3	41.6	227
30–34	65.0	62.7	1.0	13.9	3.2	26.5	11.0	7.2	0.0	0.0	0.0	2.3	35.0	159
35–39	40.5	36.4	2.9	7.7	1.5	10.6	6.3	7.3	0.0	0.0	1.2	4.1	59.5	118
40–44	34.6	33.6	0.2	6.7	0.3	15.2	8.1	2.8	0.2	0.0	0.0	1.1	65.4	90
45–49	23.4	18.3	5.0	6.1	0.4	0.6	3.5	2.8	0.0	0.0	0.0	5.1	76.6	55
Overall	47.1	43.8	0.9	11.0	1.6	17.8	4.7	7.2	0.2	0.2	0.6	3.3	52.9	832
Kisumu baseline														
15–19	24.7	23.9	0.0	1.6	0.0	9.0	2.7	10.3	0.0	0.4	NA	0.8	75.3	278
20–24	51.6	49.5	0.0	6.4	0.5	25.2	3.8	11.8	0.8	1.0	NA	2.1	48.4	486
25–29	56.1	50.1	1.5	4.0	0.9	27.1	7.9	7.4	1.4	0.0	NA	6.0	43.9	362
30–34	57.6	51.9	1.5	6.2	2.5	24.5	6.6	9.6	0.0	1.0	NA	5.7	42.4	208
35–39	51.8	45.9	6.6	3.5	2.2	21.4	4.1	6.6	0.7	0.7	NA	5.9	48.2	133
40–44	45.3	44.3	10.2	4.5	1.8	9.9	5.9	10.4	1.5	0.0	NA	1.0	54.7	83
45–49	36.7	34.2	11.4	4.5	6.5	0.9	3.9	7.1	0.0	0.0	NA	2.5	63.3	53
Overall	47.9	44.4	2.0	4.6	1.2	20.8	5.0	9.6	0.7	0.6	NA	3.5	52.1	1,603
Kisumu endline														
15–19	35.4	35.4	0.0	17.6	0.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0	64.6	34
20–24	60.5	57.5	0.0	21.7	0.0	21.3	1.3	11.5	1.7	0.0	0.0	3.1	39.5	164
25–29	66.9	64.5	0.9	26.3	3.2	21.8	4.1	6.6	1.2	0.4	0.0	2.4	33.1	275
30–34	72.2	66.5	3.2	24.1	4.0	20.8	3.8	9.4	0.7	0.5	0.7	5.7	27.8	205
35–39	62.6	56.1	6.4	18.3	2.0	13.4	3.5	12.5	0.0	0.0	1.4	6.4	37.4	109
40–44	51.4	47.0	12.4	5.1	2.8	18.6	3.8	3.0	1.2	0.0	0.0	4.4	48.6	70
45–49	37.6	36.4	14.5	2.7	2.0	9.7	3.5	3.9	0.0	0.0	0.0	1.2	62.4	48
Overall	62.5	58.7	3.5	20.8	2.4	18.8	3.3	8.9	0.9	0.2	0.3	3.8	37.5	904

Table 6.6 continues on the next page.

Table 6.6 is continued from the previous page.

Machakos baseline														
15–19	13.0	9.5	0.0	0.0	0.0	1.5	1.0	7.1	0.0	0.0	NA	3.4	87.0	276
20–24	47.7	39.5	0.0	2.6	0.5	20.3	6.5	8.7	0.6	0.2	NA	8.2	52.3	419
25–29	63.7	54.3	0.2	5.4	1.1	29.6	12.4	4.3	1.2	0.2	NA	9.4	36.3	354
30–34	67.1	58.7	1.7	6.8	1.1	29.8	14.3	4.0	0.5	0.6	NA	8.3	32.9	297
35–39	67.1	59.0	6.8	6.3	5.0	21.3	12.8	6.8	0.0	0.0	NA	8.1	32.9	197
40–44	67.2	57.9	17.1	6.0	9.6	12.6	11.0	1.8	0.0	0.0	NA	9.3	32.8	150
45–49	58.7	48.5	20.1	0.0	8.7	10.7	7.7	1.4	0.0	0.0	NA	10.2	41.3	141
Overall	53.2	45.3	4.0	3.9	2.5	19.5	9.2	5.5	0.5	0.2	NA	8.0	46.8	1,834
Machakos endline														
15–19	24.4	24.4	0.0	18.7	0.0	3.2	0.0	2.6	0.0	0.0	0.0	0.0	75.6	39
20–24	47.2	45.7	0.0	7.7	1.0	23.3	7.4	5.2	1.2	0.0	0.0	1.5	52.8	199
25–29	64.4	56.7	0.3	12.3	3.1	30.7	6.7	2.3	1.0	0.3	1.1	7.7	35.6	282
30–34	73.3	67.6	0.9	14.0	5.0	28.3	15.9	2.0	0.4	1.0	0.0	5.8	26.7	225
35–39	78.1	68.4	4.4	16.1	6.5	25.9	12.7	1.6	1.1	0.0	0.0	9.7	21.9	171
40–44	72.6	62.1	10.2	11.4	7.9	13.4	15.9	3.4	0.0	0.0	0.0	10.4	27.4	123
45–49	63.2	51.8	24.9	1.8	6.9	7.4	9.3	1.5	0.0	0.0	0.0	11.4	36.8	86
Overall	64.6	57.8	3.9	11.7	4.3	23.5	10.5	2.7	0.7	0.3	0.3	6.8	35.4	1,124
Kakamega baseline														
15–19	23.4	22.2	0.0	0.4	0.4	13.5	1.8	5.2	0.0	0.8	NA	1.2	76.6	173
20–24	48.0	46.3	0.0	1.1	1.4	28.5	4.1	10.0	0.0	1.3	NA	1.7	52.0	365
25–29	52.0	49.5	0.3	5.3	2.1	33.6	2.8	3.2	1.1	1.2	NA	2.5	48.0	298
30–34	63.1	60.3	5.2	4.6	7.5	29.8	6.7	5.5	0.0	0.9	NA	2.8	36.9	176
35–39	57.6	52.9	7.2	5.3	3.5	23.4	6.9	6.3	0.0	0.3	NA	4.8	42.4	119
40–44	50.3	48.1	13.0	2.2	3.4	18.3	5.9	3.9	1.4	0.0	NA	2.2	49.7	113
45–49	43.4	39.6	17.3	0.0	8.5	4.6	2.2	7.0	0.0	0.0	NA	3.8	56.6	80
Overall	48.5	46.1	3.6	2.8	3.0	25.1	4.2	6.2	0.4	0.9	NA	2.4	51.5	1,324
Kakamega endline														
15–19	19.7	19.7	0.0	11.5	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	80.3	12
20–24	50.6	50.6	0.0	9.5	4.3	25.4	3.8	6.6	0.0	1.0	0.0	0.0	49.4	127
25–29	55.4	53.7	0.5	19.2	1.4	23.3	5.3	4.0	0.0	0.0	0.0	1.7	44.6	247
30–34	55.6	53.3	2.4	15.5	4.5	20.2	4.9	4.7	0.3	0.9	0.0	2.3	44.4	200
35–39	73.4	71.1	6.5	16.7	6.0	25.0	10.9	4.7	0.0	1.3	0.0	2.3	26.6	105
40–44	54.0	51.4	10.8	11.6	2.0	19.5	5.9	0.7	0.0	0.8	0.0	2.6	46.0	80
45–49	41.5	41.5	15.7	5.4	2.3	7.4	6.3	4.4	0.0	0.0	0.0	0.0	58.5	54
Overall	55.5	53.8	3.6	14.7	3.3	21.3	5.7	4.4	0.1	0.6	0.0	1.6	44.5	826

[1]Other modern methods include female condoms and LAM.
[2]At baseline, SDM was included with traditional methods in the answer category. Therefore not possible to determine what baseline values would be.
[3]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

The statistical analysis of the differences between baseline and endline responses for all cities is presented in Table 6.7. The increases between surveys observed in CPR and modern contraceptive method use in all cities were statistically significant at $p<0.05$. The increases in CPR ranged from 7 percentage points (from 49 to 56 percent) in Kakamega to 14 percentage points (from 48 to 62 percent) in Nairobi and, for modern method use in particular, ranged from 8 percentage points (from 46 to 54 percent) in Kakamega to 15 percentage points (from 29 to 44 percent) in Mombasa. Likewise, there are statistically significant increases in the prevalence of long-acting and permanent methods (LAPM), which include implants, IUDs, male sterilization, and female sterilization ($p<0.001$). These increases in LAPM ranged from about 9 percentage points (to around 14 percent at endline) in Mombasa to 19 percentage points (to around 27 percent at endline) in Kisumu. The use of traditional methods (rhythm, withdrawal, periodic abstinence, and SDM/CycleBeads) increased by 3 percentage points (4 to 7 percent) in Nairobi ($p<0.01$); the changes in traditional method use in other cities were not statistically significant ($p>0.05$). As expected, there were substantial decreases in the proportion of women who reported not using any method of contraception from baseline to endline. These decreases ranged from 7 percentage points (to around 45 percent at endline) in Kakamega to nearly 15 percentage points (to around 38 percent at endline) in Kisumu and were statistically significant at $p<0.05$ in all cities.

Table 6.7 Contraceptive use by method and city at baseline and endline (significance testing)

Percentage distribution of all women ages 15–49 years successfully interviewed at baseline and endline by contraceptive method currently used and by city. Kenya 2010, 2014.

	Nairobi			Mombasa			Kisumu			Machakos			Kakamega		
Method	Baseline	Endline	P value of the difference	Baseline	Endline	P value of the difference	Baseline	Endline	P value of the difference	Baseline	Endline	P value of the difference	Baseline	Endline	P value of the difference
Any method	47.8	61.6	0.000	33.7	47.1	0.000	47.9	62.5	0.000	53.2	64.6	0.000	48.5	55.5	0.012
Any modern method	43.6	54.8	0.001	29.3	43.8	0.000	44.4	58.7	0.000	45.3	57.8	0.000	46.1	53.8	0.004
LAPM[1]	6.1	15.8	0.000	4.1	13.5	0.000	7.7	26.7	0.000	10.4	20.0	0.000	9.4	21.6	0.000
Female/male sterilization	[1.5]	[2.6]	0.102	[1.2]	[0.9]	0.670	[2.0]	[3.5]	0.094	4.0	3.9	0.947	3.6	[3.6]	0.913
Implants	2.4	8.9	0.000	[1.8]	11.0	0.000	4.6	20.8	0.000	3.9	11.7	0.000	[2.8]	14.7	0.000
IUDs	[2.2]	4.3	0.008	[1.1]	[1.6]	0.490	[1.2]	[2.4]	0.038	[2.5]	[4.3]	0.035	[3.0]	[3.3]	0.773
Injectables	17.7	22.1	0.256	13.6	17.8	0.099	20.8	18.8	0.376	19.5	23.5	0.104	25.1	21.3	0.112
Daily pills	11.1	9.9	0.466	6.3	[4.7]	0.305	5.0	[3.3]	0.038	9.2	10.5	0.320	4.2	5.7	0.100.0
Male condoms	7.2	5.5	0.194	3.9	[7.2]	0.167	9.6	8.9	0.564	5.5	[2.7]	0.008	6.2	[4.4]	0.128
Other modern method[2]	[1.5]	[1.4]	0.876	[1.3]	[0.5]	0.099	[1.3]	[1.2]	0.833	[0.6]	[1.0]	0.357	[1.2]	[0.7]	0.202
Any traditional method[3]	4.2	6.8	0.008	4.5	[3.3]	0.280	3.5	[3.8]	0.786	8.0	6.8	0.308	[2.4]	[1.6]	0.228
Nonuse	52.2	38.4	0.000	66.3	52.9	0.000	52.1	37.5	0.000	46.8	35.4	0.000	51.5	44.5	0.012
Number of women	2,706	1,294		1,465	832		1,603	904		1,834	1,124		1,324	826	

[1]Implants, IUCDs, and male and female sterilization.
[2]Other modern methods include dermal patches, diaphragms, spermicide, LAM, and SDM.
[3]Traditional methods include rhythm, withdrawal, periodic abstinence, and SDM/CycleBeads.
Note: Numbers in brackets are based on fewer than 50 unweighted cases.

The use of contraceptive methods changes over time for different reasons, such as desiring or not desiring pregnancy, experiencing side effects, or having limited access to a preferred contraceptive method. Understanding the dynamics in contraceptive method use is relevant to identifying women likely to adopt, discontinue, or switch contraceptive methods over time. Table 6.8 presents the distribution of women who adopted, discontinued, or switched contraceptive methods between baseline and endline surveys based on their baseline background characteristics, including age, education, marital status, household wealth, and city of residence.

There are nine categories of contraceptive use status between baseline and endline surveys into which the women are classified and described. Nonusers at baseline who had adopted a modern method by endline (22 percent of the women) were more likely to be ages 15–24, to have completed primary education, to never have been married, to live in poor/poorest households, and to reside in Kisumu. Nonusers at baseline who had adopted a traditional method by endline (3 percent of the women) were more likely to be age 35 or older, to have had no formal education, to never have been married, to live in poorest households, and to reside in Nairobi. Those who remained nonusers at baseline and endline surveys (30 percent of the women) were more likely to be in the extremes of reproductive ages (i.e., 15–19 and 40–49 years), to have had no formal education, not to be married or in union, to live in poorest and richest households, and to reside in Mombasa. Those who were using a traditional method at baseline switched to a modern method (1 percent), remained a traditional method user (1 percent), or discontinued using any contraceptive method by endline (1 percent). The traditional method users who switched to a modern method were more likely to be ages 30–34, to have some primary education, to be married or in union, to live in poorest households, and to reside in Machakos. Women who remained traditional method users at the times of both surveys were more likely to be ages 40–44, to have had a formal education, to be married or in union, to live in the richest households, and to reside in Machakos, while those who had discontinued traditional method use were more likely to be ages 30–34, to have had a formal education, to be married, to live in middle-wealth-index households, and to reside in Mombasa.

About 29 percent of the women were modern method users at both baseline and endline, 2 percent were modern method users at baseline but had switched to traditional methods by endline, and 11 percent were modern method users at baseline but had discontinued contraceptive use by endline. Those who were modern method users at the times of both surveys were more likely to be ages 25–39, to have had a formal education, to be married, to live in middle-wealth-index households, and to reside in Machakos, while those who had switched from modern to traditional methods between surveys were more likely to be ages 45–49, to have had a secondary or higher education, to be widowed, to live in rich/richest households, and to reside in Machakos and Nairobi. Modern method users at baseline who had discontinued use of all contraceptive methods at endline were more likely to be ages 45–49, to have had a secondary or higher education, to be married or in union, to live in middle-wealth-index households, and to reside in Kakamega. Figure 6.3 summarizes the distribution of contraceptive method switching between baseline and endline.

Table 6.8 Changes in type of contraceptive method currently used from baseline to endline

Percentage distribution of women's (15–49) current contraceptive method change from baseline to endline by women's baseline characteristics. Kenya 2010, 2014.

Baseline / Endline	Nonuser ↓ Modern method[1]	Nonuser ↓ Traditional method[2]	Nonuser ↓ Nonuser	Traditional method ↓ Modern method[1]	Traditional method ↓ Traditional method[2]	Traditional method ↓ Nonuser	Modern method ↓ Modern method[1]	Modern method ↓ Traditional method[2]	Modern method ↓ Nonuser	Total
Baseline age										
15–19	28.2	2.4	58.5	1.0	0.0	0.2	6.8	1.2	1.8	100.0
20–24	31.5	3.4	24.1	1.0	0.6	1.0	28.0	0.9	9.6	100.0
25–29	23.8	3.1	20.6	1.9	0.3	1.0	34.8	1.8	12.7	100.0
30–34	14.2	2.7	21.8	2.2	1.6	3.6	39.0	2.5	12.3	100.0
35–39	9.8	3.5	32.6	1.7	1.8	1.5	35.1	2.1	11.9	100.0
40–44	7.0	3.8	46.6	0.2	3.0	1.9	20.6	3.4	13.4	100.0
45–49	6.0	0.0	54.4	0.0	0.3	0.5	14.2	6.0	18.6	100.0
Baseline education										
No education	19.4	4.1	54.7	0.1	0.0	0.0	15.0	0.6	6.1	100.0
Incomplete primary	21.1	2.2	32.5	2.4	0.5	0.8	29.7	1.6	9.1	100.0
Complete primary	24.4	2.8	29.0	1.1	1.0	1.2	30.3	1.1	9.0	100.0
Secondary and higher	21.6	3.4	28.2	1.4	1.0	1.7	28.9	2.1	11.6	100.0
Missing	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Baseline marital status										
Never married	27.8	3.8	46.0	0.9	0.3	1.1	12.3	0.7	7.2	100.0
Married/living together	18.9	3.1	16.7	1.8	1.5	1.8	40.8	2.4	13.1	100.0
Separated/divorced	20.7	1.1	44.2	1.6	0.2	0.1	24.0	1.1	7.1	100.0
Widowed	19.4	0.1	48.7	0.4	0.0	0.1	20.0	4.2	7.1	100.0
Missing	0.0	0.0	0.0	0.0	0.0	0.0	57.9	0.0	42.1	100.0
Baseline wealth Index										
Poorest	22.7	3.8	32.3	2.7	0.5	1.3	26.9	0.9	9.0	100.0
Poor	31.7	2.8	26.1	1.0	0.3	0.9	28.5	0.7	8.0	100.0
Middle	18.4	1.9	27.0	1.6	0.8	1.7	35.8	1.4	11.4	100.0
Rich	21.9	2.9	28.8	1.2	0.6	0.9	29.7	2.7	11.2	100.0
Richest	16.9	4.0	34.1	1.0	2.1	2.1	25.1	2.6	12.1	100.0
Baseline city										
Nairobi	22.5	3.6	26.1	1.5	1.0	0.9	30.8	2.2	11.4	100.0
Mombasa	20.8	2.2	43.0	0.9	0.6	2.9	22.1	0.5	6.9	100.0
Kisumu	24.9	1.9	24.3	2.0	0.7	1.3	31.8	1.2	11.9	100.0
Machakos	19.5	2.7	24.0	3.9	1.6	2.6	34.4	2.5	8.8	100.0
Kakamega	21.3	0.9	30.7	1.2	0.1	0.9	31.4	0.6	13.0	100.0
Total percent	22.2	3.1	29.8	1.4	0.9	1.4	29.0	1.7	10.5	100.0
Number of women	1118	156	1502	72	46	70	1461	88	527	5040

[1]Modern methods include male and female sterilization, daily pills, IUDs, implants, injectables, condoms, EC, dermal patches, diaphragms, spermicide, and LAM.

[2]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

Figure 6.3 Contraceptive method switching between baseline and endline among all women ages 15–49, by baseline city

Kenya 2010, 2014.

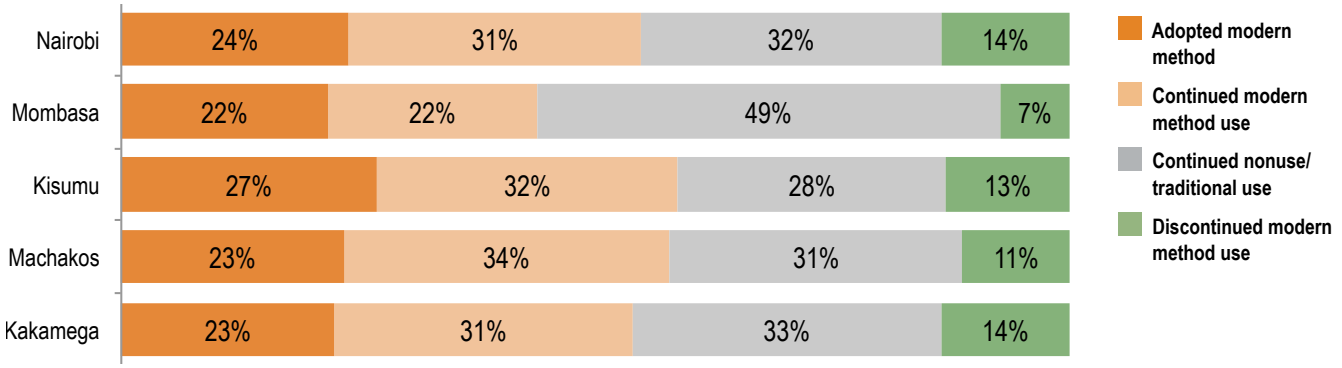


Table 6.9 compares the contraceptive methods used at baseline to those used at endline by method type. As expected, almost all women who reported using male or female sterilization at baseline reported the same at endline. In general, women were more likely to continue the method they were using at baseline, but a few changes were noted by endline. Among those using implants at baseline, 40 percent had remained implant users, 11 percent had switched to injectables, 10 percent had switched to traditional methods, and about 23 percent had become nonusers by endline. About 40 percent of women who were using IUDs at baseline had remained IUD users at endline, 12 percent had switched to implants, another 12 percent had switched to daily pills, and 18 percent had become nonusers. Among injectables users at baseline, 39 percent had continued using injectables, 18 percent had switched to implants, and 25 percent had become nonusers at endline. Pill users at baseline were more likely to have continued using pills (36 percent), to have switched to injectables (15 percent) or implants (11 percent), or to have become nonusers at endline (24 percent). Of the women who reported using male condoms at baseline, 20 percent had continued to do so, 13 percent had switched to injectables, 12 percent had switched to daily pills, and 33 percent reported not using any contraceptive method at endline. EC users at baseline were more likely to have discontinued using any contraceptive methods (57 percent) or to have switched to traditional methods (23 percent) at endline. Among women who reported using female condoms, LAM, diaphragms, or spermicides at baseline, 33 percent had adopted daily pills, 20 percent had adopted IUDs, and 15 percent had adopted female or male sterilization; only 15 percent of them reported not using any contraceptive method at endline. The majority of the women who reported using traditional methods at baseline remained traditional method users (24 percent) or had become nonusers (37 percent) at endline. Among those who were nonusers at baseline, 54 percent remained nonusers at endline; however, 19 percent of them had adopted injectables and another 7 percent had adopted implants by endline.

Table 6.9 Comparison of current method used at baseline and endline

Percentage of women 15–49 who switched contraceptive methods between 2010 and 2014, by method. Kenya 2010, 2014.

Baseline method	Endline method use											
	Female/male sterilization	Implants	IUDs	Injectables	Pills	Male condoms	EC	Other modern method[1]	Any traditional method[2]	Nonuse	Total	Number of women
Female/male sterilization	99.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	100.0	69
Implants	0.1	40.3	6.6	10.7	7.6	1.1	0.1	0.0	10.2	23.4	100.0	128
IUDs	0.7	11.8	40.2	8.7	11.7	4.5	0.0	0.0	4.4	18.1	100.0	113
Injectables	1.2	17.6	4.7	39.0	7.4	2.4	0.1	0.2	2.0	25.4	100.0	939
Pills	0.5	11.2	4.2	14.8	36.4	4.9	0.0	0.8	3.0	24.3	100.0	442
Male condoms	0.5	8.3	2.7	13.4	11.6	20.3	0.0	0.7	9.2	33.3	100.0	349
EC	1.4	4.9	2.2	3.3	4.6	3.2	0.0	0.0	23.3	57.2	100.0	23
Other modern method[1]	14.9	5.2	20.0	1.5	32.5	9.8	0.0	1.2	0.3	14.5	100.0	14
Any traditional method[2]	2.0	9.9	4.6	8.4	5.3	7.7	0.5	0.0	24.4	37.2	100.0	188
Nonuse	1.0	6.7	1.5	19.4	4.0	5.9	1.1	0.7	5.6	54.1	100.0	2776
Total	2.3	10.2	3.6	21.0	8.3	6.0	0.6	0.6	5.8	41.6	100.0	5040

[1]Other modern methods include female condoms, LAM, diaphragms, spermicide.

[2]Any traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

6.3 Source of Contraceptive Methods

One of the key determinants of FP use is accessibility and availability of FP services. For this reason, Tupange has, among its objectives, to reduce access barriers to FP and to improve the supply environment for contraceptive commodities. To assess the FP environment, women who were using a modern contraceptive method were asked to provide information on where they last obtained it. This information is presented in Table 6.10, comparing baseline to endline results by city and type of modern method. The modern methods assessed were implants, IUDs, injectables, daily pills, and male condoms.

At baseline, the main source of implants was private facilities in Mombasa and Kisumu and public facilities in Machakos and Kakamega; sources in Nairobi were evenly split between public and private facilities. However, by endline, public facilities had become the main source of implants in all cities. The main source of IUDs remained the same in Nairobi and Kisumu (private facilities) and in Machakos and Kakamega (public facilities); however, it switched from private facilities at baseline to public facilities at endline in Mombasa. The main source of injectables remained the same between surveys in Mombasa (private facilities) and in Kisumu, Machakos, and Kakamega (public facilities); it switched from public to private facilities in Nairobi. Daily pills were mainly obtained from pharmacies in Nairobi, private facilities in Mombasa, and public facilities in Kisumu, Machakos, and Kakamega at the times of both surveys. In contrast, male condoms were mainly obtained from pharmacies, worksite clinics, mobile clinics, and kiosks in all cities at both baseline and endline.

Table 6.10 Source of modern contraceptive methods at baseline and endline

Percentage distribution of women using a modern contraceptive method, by source of method and city. Kenya 2010, 2014.

	Baseline method source					Endline method source				
Source	Implants	IUDs	Injectables	Daily pills	Male condoms	Implants	IUDs	Injectables	Daily pills	Male condoms
Nairobi										
Public	48.5	35.7	47.8	29.8	10.0	57.8	44.4	40.1	30.5	11.0
Private hospital/clinic/doctor	48.8	64.3	43.4	24.2	7.2	36.2	51.2	49.8	17.4	1.5
Pharmacy/chemist	1.7	0.0	7.7	44.7	47.7	0.2	0.0	10.1	51.6	46.4
Other[1]	1.0	0.0	0.6	1.2	31.4	5.8	4.4	0.0	0.5	40.4
Don't know/missing	0.0	0.0	0.5	0.1	3.7	0.0	0.0	0.0	0.0	0.6
Number	64	59	480	300	196	116	55	287	130	72
Mombasa										
Public	29.9	43.3	45.8	27.4	5.4	48.2	66.3	45.7	16.8	17.2
Private hospital/clinic/doctor	70.1	56.7	51.3	40.8	5.6	47.8	33.7	53.3	42.9	0.8
Pharmacy/chemist	0.0	0.0	2.3	31.8	36.3	0.0	0.0	1.0	34.7	23.1
Other[1]	0.0	0.0	0.0	0.0	49.0	4.0	0.0	0.0	5.6	58.8
Don't know/missing	0.0	0.0	0.6	0.0	3.6	0.0	0.0	0.0	0.0	0.2
Number	27	16	199	92	58	93	13	150	39	61
Kisumu										
Public	27.5	38.2	73.6	60.4	18.3	39.0	34.5	71.4	46.1	7.7
Private hospital/clinic/doctor	46.2	61.8	21.0	12.3	8.9	35.6	65.5	22.5	15.2	8.9
Pharmacy/chemist	0.0	0.0	3.8	25.7	29.8	0.0	0.0	6.1	38.7	31.6
Other[1]	25.4	0.0	1.6	1.7	34.5	25.0	0.0	0.0	0.0	51.8
Don't know/missing	0.9	0.0	0.0	0.0	8.5	0.4	0.0	0.0	0.0	0.0
Number	73	18	333	81	154	188	22	170	29	81
Machakos										
Public	84.8	75.4	78.0	47.0	12.4	85.8	74.4	78.8	59.3	11.3
Private hospital/clinic/doctor	14.3	24.6	18.3	5.3	5.4	12.4	25.6	19.3	7.6	0.0
Pharmacy/chemist	0.0	0.0	3.5	47.2	48.4	0.0	0.0	1.9	32.2	41.8
Other[1]	0.9	0.0	0.0	0.5	20.4	1.8	0.0	0.0	0.0	31.0
Don't know/missing	0.0	0.0	0.2	0.0	13.5	0.0	0.0	0.0	0.9	15.9
Number	72	45	358	169	101	133	53	265	120	31
Kakamega										
Public	85.9	53.3	90.3	53.3	38.9	86.3	75.4	84.0	49.2	29.4
Private hospital/clinic/doctor	14.1	36.7	5.6	5.1	8.9	4.8	24.6	9.3	5.8	0.0
Pharmacy/chemist	0.0	6.2	2.7	40.7	30.3	0.0	0.0	5.9	45.0	32.5
Other[1]	0.0	3.8	0.8	0.9	20.7	9.0	0.0	0.8	0.0	36.1
Don't know/missing	0.0	0.0	0.6	0.0	1.2	0.0	0.0	0.0	0.0	2.0
Number	37	39	332	55	82	122	28	176	50	38

[1]Other includes worksite clinics, mobile clinics, kiosks/shops/markets, and TBA/CHW.

Table 6.11 compares the sources of injectables at baseline and endline surveys. The majority of the women reported receiving their injectables from similar sources at baseline and endline. For example, among injectables users who obtained their method from public facilities at baseline, 65 percent still did so at endline, while 26 percent and 9 percent had switched to private facilities and pharmacies, respectively. Likewise, among women who had been getting their injectables from private facilities at baseline, 68 percent continued to do so at endline, while 27 percent had switched to public facilities and 4 percent to pharmacies. Similar results were observed for those whose sources of injectables were pharmacies and other sources such as worksite clinics, mobile clinics, kiosks/shops, traditional birth attendants, and/or community health workers.

Table 6.11 Source of injectables as reported by injectables users at baseline and endline

Percentage of women using injectables at baseline and endline who switched sources between 2010 and 2014. Kenya 2010, 2014.

	Endline source						
Baseline source	Public	Private	Pharmacy	Other source[1]	Don't know	Total	Number of women
Public Facility	64.5	26.0	9.5	0.0	0.0	100.0	189
Private Facility	27.2	68.3	4.4	0.0	0.0	100.0	157
Pharmacy/drugstore	11.0	63.1	26.0	0.0	0.0	100.0	19
Other source[1]	7.6	92.5	0.0	0.0	0.0	100.0	1
Don't know	100.0	0.0	0.0	0.0	0.0	100.0	1
Total	45.5	46.3	8.2	0.0	0.0	100.0	366

[1]Other includes worksite clinics, mobile clinics, kiosks/shops/markets, and TBA/CHW.

6.4 Unmet Need

Unmet need for FP is defined as the percentage of women who do not want to become pregnant but are not using any method of contraception (Bradley et al., 2012). This FP use indicator is often measured to assess the gap between fertility desires and contraceptive behaviors. Unmet need for FP is often assessed in terms of having an unmet need for spacing childbirths or limiting childbirth. Currently pregnant or postpartum women who reported that their last or current pregnancy was mistimed or unwanted were also said to have an unmet need for FP. Table 6.12 presents the unmet need for FP by household wealth index and city of residence at baseline and endline. Overall, the unmet need for FP decreased between surveys in all cities except Kakamega, where it increased. In addition, there are wealth disparities in the level of change in unmet need for FP in all cities.

In Nairobi, the unmet need for FP decreased from 16 to 9 percent between surveys; the majority of this decrease was for unmet need for spacing and was observed mainly among women in poor and poorest households. Similar results were noted in Kisumu, where the unmet need for FP decreased from 18 to 8 percent between surveys, with the majority of the decrease attributable to unmet need for spacing, particularly among women in poor and poorest households. The decreases observed in Mombasa (20 to 17 percent) and Machakos (9 to 5 percent) were minimal — about 3 percentage points in each case. In Mombasa, the unmet need for spacing decreased by about 2 percentage points (9 to 7 percent), while the unmet need for limiting decreased by less than 1 percentage point (11.2 to 10.5 percent). The largest decreases in unmet need for spacing in Mombasa was observed among women in poor (11 to 7 percent) and richest (8 to 2 percent) households, while women in the poorest and middle-wealth-index households had the largest decline in unmet need for limiting. Among women in Machakos, the unmet need for spacing decreased from 4 percent at baseline to 2 percent at endline, while the unmet need for limiting decreased from 5 to 3 percent. Interestingly, the women in the rich and richest households had the largest decreases between surveys. Kakamega is different from the other cities in that it is the only city where the unmet need for FP increased between surveys, doing so by about 2 percentage points. Women in the poorest households had a 9-percentage-point (6 to 15 percent) increase in their unmet need for spacing and a 2-percentage-point (13 to 15 percent) increase in their unmet need for limiting. Additionally, the proportion of women in Kakamega whose demand for FP was satisfied decreased from 87 percent at baseline to 85 percent at endline.

Table 6.12 Unmet need for FP among women married or in union by wealth quintile and city at baseline and endline

Percentage distribution of women 15–49 married or in union with unmet need and demand satisfied, by wealth quintile. Kenya 2010, 2014.

	Baseline					Endline				
	Unmet need for spacing	Unmet need for limiting	Percentage of demand satisfied	Missing	Number of women	Unmet need for spacing	Unmet need for limiting	Percentage of demand satisfied	Missing	Number of women
Nairobi										
Poorest	9.9	12.0	78.1	0.0	245	1.0	7.2	91.8	0.0	136
Poor	12.2	8.0	79.7	0.0	304	2.3	8.0	89.7	0.0	182
Middle	7.5	5.0	87.0	0.4	355	2.4	8.1	89.5	0.0	161
Rich	7.7	5.1	87.2	0.0	313	3.2	3.5	93.3	0.0	165
Richest	9.5	3.2	87.4	0.0	253	3.7	4.3	92.1	0.0	143
Overall	9.3	6.5	84.1	0.1	1469	2.5	6.3	91.2	0.0	787
Mombasa										
Poorest	14.0	11.7	74.3	0.0	165	11.7	6.9	81.4	0.0	112
Poor	11.0	10.6	78.3	0.0	148	6.5	11.2	82.3	0.0	112
Middle	5.8	12.6	81.6	0.0	189	4.2	6.4	89.4	0.0	116
Rich	5.1	7.5	86.5	0.9	175	8.2	11.9	80.0	0.0	107
Richest	7.6	13.7	78.7	0.0	160	2.4	16.4	81.2	0.0	111
Overall	8.5	11.2	80.0	0.2	837	6.6	10.5	82.9	0.0	558
Kisumu										
Poorest	14.0	9.6	76.4	0.0	208	5.0	6.4	88.6	0.0	118
Poor	10.4	9.0	79.6	0.9	217	2.7	4.4	93.0	0.0	130
Middle	8.7	10.1	81.2	0.0	192	4.5	4.4	91.0	0.0	110
Rich	7.9	8.4	83.7	0.0	196	2.6	5.8	91.6	0.0	118
Richest	6.2	5.9	87.9	0.0	171	0.6	4.9	94.4	0.0	117
Overall	9.6	8.7	81.5	0.2	985	3.1	5.2	91.8	0.0	593
Machakos										
Poorest	2.6	5.3	92.1	0.0	151	1.3	2.9	95.2	0.6	141
Poor	2.7	2.4	94.8	0.0	198	4.0	2.7	93.3	0.0	123
Middle	2.3	5.9	91.8	0.0	202	1.2	2.2	96.6	0.0	154
Rich	5.5	6.6	87.9	0.0	207	3.0	3.2	93.8	0.0	160
Richest	4.4	4.5	91.2	0.0	239	2.0	4.1	93.9	0.0	158
Overall	3.6	4.9	91.5	0.0	997	2.3	3.1	94.6	0.1	735
Kakamega										
Poorest	5.5	7.3	87.2	0.0	149	14.7	9.0	76.3	0.0	109
Poor	8.1	5.9	86.0	0.0	184	7.6	8.8	83.5	0.0	108
Middle	4.2	8.0	87.0	0.8	175	14.2	3.0	82.8	0.0	130
Rich	7.3	5.6	87.2	0.0	179	1.9	5.8	92.4	0.0	124
Richest	4.2	8.2	87.6	0.0	140	1.3	10.3	88.4	0.0	100.0
Overall	5.9	6.9	87.0	0.2	826	8.1	7.1	84.8	0.0	571

Note: Unmet need for spacing includes pregnant or postpartum amenorrheic women whose pregnancy was mistimed and fecund women who are not pregnant or using any method of FP and say they want to wait two or more years for their next birth. Unmet need for limiting refers to pregnant or postpartum amenorrheic women whose pregnancy was unwanted and fecund women who are not pregnant or using any method of FP and who want no more children. Demand satisfied includes women using a method as well as women with no demonstrated need for a method. The revised unmet need definition was used here (Bradley et al., 2012).

Table 6.13 presents the unmet need for FP among women married or in union by five-year age groups and city at baseline and endline. Overall, unmet need decreased from baseline to endline in all cities. Nonetheless, with respect to women's age, differences are noted in the distribution of unmet need for spacing or limiting and in demand satisfied. Younger women were more likely to have a greater need for spacing, and older women were more likely to have a greater need for limiting at baseline and endline across all cities.

In Nairobi at baseline, unmet need for spacing was higher than for limiting among women ages 15–29 years; unmet need for limiting was greater among women ages 30–49 years. After four years, among older women (35–49 years), unmet need for limiting remained greater than for spacing in Nairobi. Among younger women, slight changes were found from baseline to endline. Due to aging in the longitudinal sample, there was a small number of women in each city in the age group 15–19 years. In Nairobi, unmet need for limiting was higher than that of spacing among women ages 20–24; unmet need for spacing was higher than that for limiting among women ages 30–34. Similar patterns of unmet need and demand satisfied were noted in other cities as well.

Table 6.13 Unmet need for FP among women married or in union by age group and city at baseline and endline

Percentage distribution of women 15–49 married or in union with unmet need and demand satisfied, by age group. Kenya 2010, 2014.

	Baseline					Endline				
	Unmet need for spacing	Unmet need for limiting	Percentage of demand satisfied	Missing	Number of women	Unmet need for spacing	Unmet need for limiting	Percentage of demand satisfied	Missing	Number of women
Nairobi										
15–19	20.2	12.2	67.6	0.0	62	NA	NA	NA	NA	NA
20–24	14.4	2.9	82.3	0.4	397	1.2	4.7	94.0	0.0	58
25–29	11.5	3.6	84.8	0.0	418	3.2	3.1	93.7	0.0	275
30–34	3.9	7.7	88.3	0.0	259	2.8	2.5	94.7	0.0	200
35–39	3.3	9.2	87.5	0.0	180	3.9	13.0	83.1	0.0	121
40–44	0.6	14.5	84.9	0.0	105	0.3	12.7	87.0	0.0	96
45–49	3.4	18.9	77.6	0.0	48	0.0	13.8	86.2	0.0	37
Overall	9.3	6.5	84.1	0.1	1469	2.5	6.3	91.2	0.0	787
Mombasa										
15–19	30.0	0.7	69.3	0.0	43	NA	NA	NA	NA	NA
20–24	11.2	2.9	85.9	0.0	161	7.1	3.4	89.5	0.0	62
25–29	6.6	6.8	86.0	0.7	226	8.4	5.1	86.5	0.0	165
30–34	5.8	14.4	79.8	0.0	164	4.3	1.6	94.1	0.0	123
35–39	7.4	12.7	80.0	0.0	102	10.4	16.3	73.3	0.0	90
40–44	6.8	28.5	64.7	0.0	87	3.9	20.2	75.9	0.0	77
45–49	4.8	23.2	72.0	0.0	55	2.4	38.0	59.6	0.0	41
Overall	8.5	11.2	80.0	0.2	837	6.6	10.5	82.9	0.0	558
Kisumu										
15–19	22.6	10.5	66.9	0.0	82	0.0	34.0	66.0	0.0	5
20–24	14.6	6.5	78.6	0.2	313	4.0	3.1	92.8	0.0	87
25–29	7.7	5.6	86.7	0.0	271	4.8	2.4	92.9	0.0	188
30–34	3.6	8.1	88.4	0.0	148	2.5	1.4	96.1	0.0	164
35–39	3.0	15.0	80.2	1.7	83	0.4	13.1	86.5	0.0	81
40–44	2.8	23.9	73.3	0.0	54	3.0	17.4	79.6	0.0	44
45–49	0.0	12.5	87.5	0.0	34	0.0	5.7	94.3	0.0	25
Overall	9.6	8.7	81.5	0.2	985	3.1	5.0	92.0	0.0	593
Machakos										
15–19	24.0	0.0	76.0	0.0	17	44.9	0.0	55.1	0.0	2
20–24	7.3	1.5	91.2	0.0	172	6.8	1.4	91.8	0.0	81
25–29	4.1	1.9	94.0	0.0	225	3.8	0.2	96.0	0.0	187
30–34	3.8	3.9	92.3	0.0	228	1.8	4.2	94.0	0.0	172
35–39	0.6	4.6	94.8	0.0	140	0.0	2.9	97.1	0.0	141
40–44	0.3	11.6	88.0	0.0	116	0.0	6.0	94.0	0.0	89
45–49	0.0	13.6	86.4	0.0	98	0.0	6.7	91.9	1.4	63
Overall	3.6	4.9	91.5	0.0	997	2.1	3.1	94.7	0.1	735
Kakamega										
15–19	6.2	3.0	90.8	0.0	43	0.0	0.0	100.0	0.0	2
20–24	11.0	2.4	86.6	0.0	207	8.8	3.8	87.4	0.0	62
25–29	6.4	5.4	88.1	0.0	221	14.8	4.7	80.5	0.0	187
30–34	5.4	7.9	86.8	0.0	134	7.5	6.2	86.3	0.0	147
35–39	1.6	15.1	83.4	0.0	86	1.9	5.7	92.4	0.0	80
40–44	0.0	15.7	84.3	0.0	79	1.3	13.6	85.2	0.0	56
45–49	1.5	5.3	90.6	2.5	55	0.0	22.3	77.7	0.0	37
Overall	5.9	6.9	87.0	0.2	826	8.1	7.2	84.7	0.0	571

Note: Unmet need for spacing includes pregnant or postpartum amenorrheic women whose pregnancy was mistimed and fecund women who are not pregnant or using any method of family planning and who say they want to wait two or more years for their next birth. Unmet need for limiting refers to pregnant or postpartum amenorrheic women whose pregnancy was unwanted and fecund women who are not pregnant or using any method of FP and who want no more children. Demand satisfied includes women using a method as well as women with no demonstrated need for a method. The revised unmet need definition was used here (Bradley et al., 2012).

NA: Not applicable because there were no women married or in union in the age group (15–19).

Table 6.14 presents unmet need for FP among women married or in union by parity and city at baseline and endline. As mentioned in the previous sections, generally unmet need for FP declined between baseline and endline, and demand satisfied improved in the same period in all cities. Nonetheless, the percentage of women with demand satisfied tended to drop as the number of living children increased. In Nairobi, Kisumu, and Machakos, women with six or more children and in Kakamega women with five children reported the lowest percentage of demand satisfied for FP at both baseline and endline. In Mombasa, women with five children reported the lowest percentage of demand satisfied at baseline, and women with six or more children reported the lowest percentage of demand satisfied at endline.

Table 6.14 Unmet need for FP among women married or in union by parity and city at baseline and endline

Percentage distribution of women 15–49 married or in union with unmet need and demand satisfied, by parity. Kenya 2010, 2014.

	Baseline					Endline				
	Unmet need for spacing	Unmet need for limiting	Percentage of demand satisfied	Missing	Number of women	Unmet need for spacing	Unmet need for limiting	Percentage of demand satisfied	Missing	Number of women
Nairobi										
No children	16.1	0.7	83.3	0.0	151	5.0	0.0	95.0	0.0	9
1 child	14.0	3.1	82.6	0.3	469	2.3	0.0	97.7	0.0	171
2 children	7.0	6.5	86.5	0.0	388	3.4	3.6	93.0	0.0	252
3 children	5.8	7.2	87.0	0.0	242	2.0	7.1	90.9	0.0	193
4 children	0.6	11.6	87.7	0.0	111	2.2	13.6	84.1	0.0	86
5 children	3.4	21.2	75.5	0.0	57	2.3	17.0	80.7	0.0	41
≥6 children	5.0	23.5	71.5	0.0	52	0.7	22.6	76.7	0.0	35
Overall	9.3	6.5	84.1	0.1	1469	2.5	6.3	91.2	0.0	787
Mombasa										
No children	4.9	0.0	95.1	0.0	75	4.7	0.0	95.3	0.0	33
1 child	9.7	0.7	89.6	0.0	196	10.0	1.9	88.1	0.0	91
2 children	11.6	6.6	81.2	0.6	231	5.3	9.1	85.6	0.0	164
3 children	8.1	13.9	78.0	0.0	133	7.8	5.3	86.9	0.0	119
4 children	7.5	25.9	66.7	0.0	83	4.4	18.3	77.3	0.0	83
5 children	7.6	36.6	55.8	0.0	62	9.4	25.5	65.0	0.0	29
≥6 children	0.7	25.6	73.7	0.0	56	4.7	32.5	62.8	0.0	39
Overall	8.5	11.2	80.0	0.2	837	6.6	10.5	82.9	0.0	558
Kisumu										
No children	12.1	5.1	82.8	0.0	95	6.5	4.0	89.5	0.0	21
1 child	15.4	3.4	81.0	0.2	240	0.7	3.6	95.6	0.0	100.0
2 children	10.8	6.7	82.5	0.0	242	3.0	2.4	94.6	0.0	176
3 children	4.5	9.3	86.3	0.0	180	2.2	3.3	94.5	0.0	117
4 children	5.2	18.3	76.5	0.0	95	3.7	10.0	86.4	0.0	89
5 children	4.2	14.2	81.5	0.0	64	10.3	3.1	86.6	0.0	41
≥6 children	6.5	18.9	72.5	2.1	69	1.4	16.1	82.5	0.0	51
Overall	9.6	8.7	81.5	0.2	985	3.1	5.2	91.8	0.0	593
Machakos										
No children	15.5	0.0	84.5	0.0	78	14.6	0.0	85.4	0.0	28
1 child	5.1	1.3	93.6	0.0	243	5.5	0.0	94.0	0.5	181
2 children	3.5	3.2	93.3	0.0	297	0.3	2.7	97.0	0.0	228
3 children	0.0	6.7	93.3	0.0	178	0.0	4.4	95.6	0.0	172
4 children	0.7	13.8	85.5	0.0	110	2.6	8.3	89.1	0.0	69
5 children	0.0	9.3	90.7	0.0	51	0.0	3.1	96.9	0.0	37
≥6 children	0.0	11.8	88.2	0.0	40	0.0	9.3	90.7	0.0	20
Overall	3.6	4.9	91.5	0.0	997	2.3	3.1	94.6	0.1	735
Kakamega										
No children	7.4	1.5	91.1	0.0	68	0.0	0.0	100.0	0.0	24
1 child	10.3	2.6	87.1	0.0	176	21.0	2.4	76.5	0.0	109
2 children	6.2	3.9	89.8	0.0	210	4.1	6.2	89.7	0.0	138
3 children	2.5	8.8	88.7	0.0	159	5.2	6.3	88.4	0.0	144
4 children	6.0	11.9	80.8	1.3	106	3.2	12.5	84.3	0.0	81
5 children	3.3	15.3	81.5	0.0	40	20.1	8.6	71.4	0.0	38
≥6 children	1.9	15.6	82.5	0.0	68	0.0	18.6	81.4	0.0	37
Overall	5.9	6.9	87.0	0.2	826	8.1	7.1	84.8	0.0	571

Note: Unmet need for spacing includes pregnant or postpartum amenorrheic women whose pregnancy was mistimed and fecund women who are not pregnant or using any method of family planning and who say they want to wait two or more years for their next birth. Unmet need for limiting refers to pregnant or postpartum amenorrheic women whose pregnancy was unwanted and fecund women who are not pregnant or using any method of FP and who want no more children. Demand satisfied includes women using a method as well as women with no demonstrated need for a method. The revised unmet need definition was used here (Bradley et al., 2012).

6.5 Reasons for Use or Nonuse of Current Method

The reasons women practice FP were assessed at both baseline and endline. Table 6.15 presents the reasons contraceptive method users gave for selecting their preferred methods at the times of both surveys, wherein women could cite multiple reasons if they chose. The three most frequently cited reasons for using a contraceptive method in all cities at both surveys were (1) a desire not to get pregnant, (2) the method's safety or lack of side effects, and (3) the method's convenience. Other commonly reported reasons women gave for their contraceptive method choices included the method's ease of use, the respondent's not having to use the method every day, and the avoidance of HIV and other sexually transmitted infections. The least-reported reasons for using a contraceptive method in all cities at endline were aesthetic reasons, such as helping with weight loss and making skin look healthier.

Table 6.15 Reasons why using method at baseline and endline

Percentage of women currently using an FP method by reason for using the current method. Kenya 2010, 2014.

Reason for using current method	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Effective/don't want to get pregnant	61.9	47.5	47.4	52.9	68.9	53.1	57.7	52.2	56.6	61.0
Safe/few or no side effects	35.1	54.3	47.7	48.6	37.3	43.8	61.4	52.9	40.1	39.8
Don't want to get infected with HIV or other STIs	7.4	2.8	3.0	7.8	11.8	5.8	3.7	1.5	5.3	2.1
Convenient to use	25.4	27.7	12.7	20.5	27.9	17.8	22.6	25.7	30.0	30.1
Discreet	1.9	2.0	0.6	0.1	3.6	0.6	1.4	0.6	1.9	0.6
Affordable	6.2	8.4	7.3	4.8	6.4	1.9	10.5	1.9	4.8	3.5
Easy to obtain	7.4	5.6	8.3	8.6	8.2	3.4	5.0	2.8	4.0	7.6
Easy to use	11.1	10.1	11.1	19.9	12.9	10.4	9.9	3.9	9.5	8.4
Many people use it	1.0	0.7	2.1	0.7	2.7	0.7	1.1	0.3	1.1	0.3
You like that you take it every day	0.7	1.4	1.2	0.0	0.8	0.2	3.1	0.2	1.0	0.8
You like that you don't have to take it every day	7.1	7.0	11.6	7.2	17.7	8.6	16.2	4.0	10.5	11.8
Help you to lose weight	0.2	0.2	0.9	0.0	0.4	0.2	0.3	0.1	0.3	0.2
Help you to gain weight	0.0	0.1	0.7	0.4	0.8	0.4	0.2	0.0	0.6	0.1
Makes skin look healthier	0.5	0.0	1.7	0.3	0.4	0.0	0.2	0.0	0.0	0.0
Recommended by provider	3.8	3.0	6.0	3.0	6.6	5.0	4.7	3.4	7.2	5.5
Partner prefers	2.1	1.3	1.5	1.7	2.9	1.4	1.9	1.8	2.9	2.9
Don't have to worry about it; partner is responsible for it	1.0	0.3	4.1	0.7	1.2	0.2	1.6	0.5	1.0	0.3
Other	2.4	3.5	3.3	0.8	2.1	3.8	1.3	1.7	3.2	2.4
Missing	0.0	0.6	0.9	0.1	0.6	0.4	0.0	0.9	0.4	1.0
Number of women	1293	812	494	397	768	571	976	754	642	476

Note: Percentages may not add up to 100.0% because multiple responses could be given.

The reasons women do not use contraceptive methods were also assessed. Understanding these reasons is relevant to improving the use of contraceptive methods in any given context. Women who were not using any contraceptive method were asked their reasons for not doing so; Table 6.16 presents these responses at baseline and endline. The reasons for nonuse are classified into five main categories: fertility-related reasons, opposition to use, lack of knowledge, method-related reasons, and fatalistic reasons. In all cities, fertility-related reasons were the main reason cited for contraceptive nonuse at the times of both surveys. Among these reasons were that the woman was having infrequent or no sex, her partner was away, she was currently pregnant at the time of the survey, and/or she desired more children. The most prevalent fertility-related reason for all cities was having infrequent/no sex or having no partner; at endline, 56 percent of women in Nairobi, 35 percent in Mombasa, 41 percent in Kisumu, 54 percent in Machakos, and 41 percent in Kakamega cited this reason. The second-most frequently cited reasons for contraceptive nonuse were method-related, including health concerns, fear of side effects, and financial and geographical inaccessibility. Of the method-related reasons, health concerns and fear of side effects were the two most-cited reasons in all the cities, ranging from 5 to 17 percent at both baseline and endline. The least-cited reason for not using a contraceptive method at both surveys in all cities was fatalistic, i.e., leaving one's childbearing up to God. The percentage of nonusers citing lack of knowledge as a reason for not using a contraceptive method decreased between surveys by about 2–8 percentage points in all cities.

Table 6.16 Reasons for nonuse of contraception at baseline and endline

Percentage of women not currently using contraception by reason for not using a method and by city. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Fertility related reasons										
Infrequent sex/no sex/no partner/not married	45.0	55.8	44.1	34.5	39.5	40.6	58.5	54.4	38.2	40.7
Away from spouse	7.0	3.4	4.2	3.2	7.2	3.3	3.9	2.1	7.2	4.0
Already pregnant	9.6	8.9	9.4	7.4	12.7	11.5	12.0	9.4	11.8	15.6
Breastfeeding/recently had a child	6.0	7.0	4.7	6.3	9.7	10.0	4.6	3.8	9.6	4.2
Wants more children/trying to get pregnant	9.9	9.4	10.8	13.0	13.0	10.6	8.4	9.3	12.1	12.4
Menopausal/hysterectomy	1.3	6.0	2.5	7.5	1.7	6.4	2.5	11.0	2.2	7.1
Can't have more children	1.9	1.0	2.6	3.6	3.7	4.5	1.9	2.8	2.9	4.6
Opposition to use										
Respondent opposes	5.3	0.2	7.7	7.7	5.4	1.8	7.0	0.4	5.7	1.7
Partner opposes	2.0	0.5	2.7	4.7	5.0	1.1	1.3	0.2	3.6	0.6
Others oppose	0.2	0.1	0.6	0.6	1.2	0.0	0.4	0.0	1.1	0.0
Religious prohibition	2.6	0.9	4.6	3.8	2.8	1.9	1.0	0.0	1.5	0.9
Lack of knowledge										
Knows no method	NA	0.0	NA	0.0	NA	0.0	NA	0.5	NA	0.0
Don't know which method to use	2.7	0.1	2.1	1.5	4.5	1.1	3.2	0.7	3.4	0.0
Don't know how to use method	0.9	0.0	1.0	0.7	3.7	0.2	1.8	0.4	1.7	0.0
Knows no source	0.2	0.0	0.8	0.0	0.7	0.0	0.7	0.0	0.9	0.0
Method-related reasons										
Health concerns	9.5	7.5	7.0	17.7	10.1	16.2	5.0	4.6	9.6	11.0
Fear of side effects	9.3	7.7	10.8	13.3	16.3	11.3	8.4	6.0	16.4	9.8
Lack of access/too far	0.0	0.0	0.0	1.1	0.1	0.0	0.1	0.0	1.2	0.0
Costs too much	0.0	0.0	0.2	0.1	0.4	0.0	0.1	0.1	0.4	0.2
Inconvenient to use	0.3	0.2	0.1	1.2	0.0	0.0	0.8	0.3	0.4	1.3
Don't like existing methods	2.5	0.8	0.7	1.1	1.4	1.5	1.4	0.8	1.2	0.0
Bad experience with existing methods	2.0	1.2	2.1	2.5	1.2	3.1	1.5	0.7	2.6	1.1
Fatalistic										
Up to God	0.4	0.8	1.7	3.6	1.8	0.0	0.4	0.1	1.1	2.2
Other	7.1	2.0	7.6	1.1	3.7	4.0	5.3	3.5	4.2	2.5
Don't know	1.2	0.0	0.2	0.4	0.5	0.2	0.3	0.3	1.0	0.8
Missing	1.0	0.0	0.2	0.8	0.7	0.0	1.0	0.0	0.6	0.2
Number of women	1362	523	945	471	818	357	837	453	660	404

Note: Percentages may not add up to 100.0% because multiple responses could be given. NA: not applicable because no data collected.

6.6 Perceptions of FP

In addition to assessing reasons for use and nonuse of contraceptive methods, women who reported familiarity with at least one method of FP were asked, as a way to measure attitudes and perceptions toward FP, whether they agreed or disagreed with statements that reflected common misconceptions about FP. Table 6.17 presents the percentages of women who agreed with eight such statements by city of residence. At baseline, the two statements with which women in all cities most commonly agreed were related to health concerns: "people who use family planning end up with health problems" and "contraceptives are dangerous to your health," but the overall level of agreement with all the statements had decreased by endline. In Nairobi, the statement that reflected the highest level of agreement (49 percent) was that "people who use family planning end up with health problems," while the statement with the largest decrease in agreement between surveys (by 37 percentage points) was "contraceptives can give you deformed babies." The statement with the highest level of agreement in Mombasa at endline was that "contraceptives are dangerous to your health," while agreement with the statement "people who use family planning end up with health problems" decreased most between surveys. At endline in Nairobi and Mombasa, none of the statements received more than 50 percent agreement, in contrast with Kisumu, Machakos, and Kakamega. At endline in Kisumu, for instance, 55 percent and 58 percent of the women agreed, respectively, that "people who use family planning end up with health problems" and that "contraceptives reduce women's sexual urge." Belief that "contraceptives are dangerous to your health," however, had declined by 23 percentage points, the greatest decrease in that city. There was a 33-percentage-point decrease in the proportion of women in Machakos who believed that "contraceptives can harm your womb," but more than half of the women there still believed at endline that "people who use family planning end up with health problems" and that "contraceptives are dangerous to your health." In Kakamega, unlike in the other cities, women's belief in two common misconceptions—"contraceptives reduce women's sexual urge" and "women who use family planning/childbirth spacing may become promiscuous"—actually increased between baseline and endline, while more than half of the women still believed at endline that "people who use family planning end up with health problems" and that "contraceptives reduce women's sexual urge." Meanwhile, there was a 28-percentage-point decrease, the greatest in Kakamega, in the belief that "contraceptives can harm your womb." Despite the differences across the cities, women's overall agreement with these statements decreased between surveys, with a range of 16–37 percentage points in Nairobi, 5–26 in Mombasa, 0–23 in Kisumu, and 9–33 in Machakos. In Kakamega, the degree of change ranged from a decrease of 28 percentage points to an increase of 3.

Table 6.17 Women's perceptions about FP among those who report FP knowledge at baseline and endline

Percentage distribution of women with knowledge of at least one FP method who strongly agreed or agreed with the following statements about FP, by city. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Use of a contraceptive injection can make a woman permanently infertile	53.0	27.6	50.5	26.6	39.0	27.0	45.8	28.8	56.6	33.9
People who use FP end up with health problems	74.4	48.6	73.0	47.3	73.2	54.9	82.0	60.5	77.7	53.8
Contraceptives can harm your womb	61.4	32.3	67.1	42.0	52.7	36.6	63.0	30.2	69.4	41.0
Contraceptives reduce women's sexual urge	62.1	46.0	48.2	43.6	58.3	58.3	48.1	38.9	57.0	59.1
Contraceptives can cause cancer	54.7	39.1	62.3	37.8	40.5	33.0	70.1	44.1	60.0	42.5
Contraceptives can give you deformed babies	62.9	26.2	58.6	37.0	62.0	46.4	60.7	35.1	66.0	49.5
Contraceptives are dangerous to your health	71.8	43.7	72.5	47.8	63.7	41.2	82.0	51.8	69.9	45.5
Women who use FP/childbirth spacing may become promiscuous	37.6	14.3	29.9	16.4	17.8	13.6	40.9	29.4	23.2	26.6
Number of women	2656	1334	1440	866	1587	927	1813	1206	1302	880

6.7 Communication between Spouses or Partners

Communication between relationship partners about fertility desires and FP use is one way to initiate male involvement in RH issues and can improve the probability of the couple using FP. Women who reported having a partner were asked questions on communication about fertility and FP use with partners and significant others at baseline and endline; the results are presented in Table 6.18. The proportion of women married or in union who reported ever discussing the number of children they would like to have with their spouse/partner increased from 77 to 84 percent in Nairobi, 65 to 79 percent in Mombasa, 71 to 82 percent in Kisumu, and 76 to 82 percent in Kakamega. The proportion remained the same in Machakos (91 percent at the time of both surveys). The frequency of such discussions six months prior to the survey was also assessed. Among those who reported ever having had such discussions with their spouse or partner, the percentage who had not had such discussions in the six months prior to the survey increased by endline in all cities. The proportion of women married or in union who reported having had such a discussion more than twice in the six months prior to the survey decreased between surveys in all cities; however, the percentage who had had such a discussion once or twice in the same timeframe increased in Mombasa and Kisumu while decreasing in Nairobi, Machakos, and Kakamega.

The percentage of women married or in union who reported ever discussing FP use with their spouse or partner increased from 68 to 81 percent in Nairobi, 71 to 80 percent in Kisumu, and 70 to 80 percent in Kakamega but decreased from 64 to 61 percent in Mombasa and from 84 to 81 percent in Machakos. Among those who discussed FP use with their spouse or partner, the proportion who had had such discussions more than twice in the six months prior to the survey declined between surveys in all cities. The proportion who had had such discussions once or twice within the six months prior to the survey decreased in Machakos and Kakamega but increased in Nairobi, Mombasa, and Kisumu. As expected, the proportion who had not had such discussions in the same timeframe increased between surveys in all cities. The women who reported having ever discussed FP use with their spouse/partner were asked who initiated the discussion. The proportion of women married or in union who reported initiating the FP discussion increased between surveys in all cities, while the proportion who reported that their spouse/partner initiated the discussion increased in Kakamega but decreased between surveys in all other cities. The proportion who reported that either their spouse/partner or themselves initiated the discussion remained the same in Nairobi but decreased between surveys in all other cities.

Finally, the women were asked if they needed someone else's permission to use a method of FP if they wanted to. Although 60 percent of women in Mombasa reported needing permission to use a contraceptive method at baseline, the proportion had decreased to 38 percent at endline. Likewise, in Kisumu and Machakos, the percentage of women reporting that they needed permission to use a contraceptive method decreased by 8 percentage points and 24 percentage points, respectively. In Kakamega, however, the percentage needing permission to use a contraceptive method increased by 10 percentage points between the baseline and endline surveys, and about one-third of the women (32 percent) in Nairobi reported they needed permission from someone else to use a contraceptive method at both surveys.

Table 6.18 Spousal and interpersonal communication among women at baseline and endline

Percentage distribution of spousal and interpersonal communication on topics of FP and fertility among women married or in union, by city. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Ever discussed, with spouse/partner, the number of children they would like to have										
Yes	77.4	83.8	64.8	79.2	71.1	81.9	91.2	90.9	75.6	82.4
No	22.3	16.1	34.5	20.5	28.8	18.1	8.7	8.7	24.3	17.6
Missing	0.3	0.2	0.7	0.3	0.1	0.0	0.1	0.4	0.1	0.0
Number	1469	801	837	576	985	608	997	781	826	603
Among those who have discussed, frequency of discussions in previous six months										
Not discussed	30.2	51.1	39.3	44.8	37.2	47.0	37.3	55.9	33.8	47.7
Once or twice	37.1	30.5	31.0	34.4	34.9	40.8	31.4	26.9	33.0	28.1
More than twice	32.3	18.4	29.3	20.8	27.5	12.2	31.1	17.3	33.2	24.2
Missing	0.4	0.0	0.3	0.0	0.4	0.0	0.2	0.0	0.0	0.0
Number	1137	671	542	456	700	498	909	710	624	497
Ever discussed the use of a FP method with spouse/partner										
Yes	68.0	80.9	64.0	61.2	71.0	79.6	84.4	81.2	70.0	80.4
No	31.7	18.8	35.5	38.3	28.8	20.4	15.5	18.4	29.8	19.6
Missing	0.3	0.2	0.6	0.6	0.1	0.0	0.1	0.4	0.2	0.0
Number	1469	801	837	576	985	608	997	781	826	603
Among those who have discussed use of a FP method, frequency of discussions in previous six months										
Not discussed	25.7	44.8	37.7	43.0	31.0	40.8	33.2	51.4	24.9	44.4
Once or twice	37.3	38.8	30.7	37.5	40.3	42.2	34.5	27.3	42.3	30.6
More than twice	37.0	16.4	31.6	19.5	28.7	17.0	32.3	21.4	32.7	25.0
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Number	999	648	535	352	700	484	841	634	578	485
Among those who have discussed use of a FP method, person who usually initiated the discussions										
Self	43.2	54.9	48.3	59.6	52.9	61.5	46.8	62.8	44.9	53.0
Spouse/partner	23.7	13.5	21.1	18.2	20.8	17.7	19.8	17.6	17.8	26.5
Either	29.4	29.9	28.4	18.6	21.1	20.0	32.7	19.4	35.8	20.4
Missing	3.7	1.7	2.2	3.6	5.2	0.8	0.7	0.2	1.5	0.1
Number	999	648	535	352	700	484	841	634	578	485
If respondent wants to use a method of FP, needs someone else's permission										
Yes	32.3	32.4	60.4	38.4	51.9	44.4	72.4	48.3	26.9	36.9
No	67.1	67.5	37.8	61.0	47.8	55.6	27.0	51.7	72.8	63.1
Don't know	0.5	0.1	1.5	0.3	0.3	0.0	0.3	0.0	0.2	0.0
Missing	0.1	0.0	0.4	0.3	0.0	0.0	0.4	0.0	0.1	0.0
Number	1469	801	837	576	985	608	997	781	826	603

CHAPTER 7: MATERNAL AND CHILD HEALTH

A key objective of the Tupange program is to integrate quality FP services with services addressing maternal and newborn health (MNH), HIV/AIDS, postpartum (PP), and postabortion care (PAC). At baseline and endline, women who had given birth within two years prior to the date of their interviews were asked a set of detailed questions about their most recent live birth and exposure to FP information and services. This chapter presents the endline findings on key maternal and child health indicators with baseline comparisons when available.

7.1 Exposure to FP Information and Services at Time of Delivery

Increasing facility deliveries where skilled attendance is available is crucial to improving maternal and neonatal health outcomes. Table 7.1 presents places of delivery by city at baseline and endline. The largest increase in public facility delivery was observed in Kakamega, with a 15-percentage-point increase since baseline; public facility deliveries increased by 10 percentage points in Kisumu and Machakos, while there was little change observed in Mombasa and a slight decrease in Nairobi at endline. During the same time period, private facility deliveries increased in all cities except Kakamega. The greatest change in private facility delivery was noted in Nairobi, with a 15-percentage-point increase since baseline, and smaller increases were observed in the other cities (5–8 percentage points). Home deliveries were somewhat common at baseline, ranging from 9 percent of deliveries in Nairobi to just over a quarter of deliveries in Kakamega; the proportion of home deliveries, however, had decreased noticeably in most cities by endline. The greatest change was observed in Machakos, with a 12-percentage-point decrease in home deliveries between baseline and endline, and the city with the smallest decrease was Mombasa (by 2 percentage points).

Table 7.1 Place of delivery at baseline and endline

Percentage distribution of the last live births since 2008 for the baseline survey and since 2012 for the endline survey, by place of delivery and city. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
Facility type	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Public facility	45.9	38.0	41.2	43.4	48.5	58.4	55.7	65.1	56.1	71.1
Private facility	41.5	56.0	31.5	36.2	25.3	33.6	18.4	23.8	15.2	14.4
Home	9.4	5.6	21.2	19.2	15.3	5.6	20.6	7.6	26.6	14.3
Other[1]	1.9	0.4	4.1	0.0	9.1	1.1	4.6	0.8	1.6	0.0
Missing	1.3	0.0	2.0	1.2	1.9	1.4	0.9	2.6	0.6	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	783	411	429	268	610	248	432	268	500	255

[1]Other includes individuals (TBAs, community midwives, etc.).

Women who reported that their most recent birth had been delivered at a health facility were asked whether they had received any information or counseling on FP before or after delivery while still at the facility. Table 7.2 reflects how often women had received information or counseling before, after, or both before and after delivery, by city. At endline, the largest percentage of women who reported receiving any FP information or counseling before delivery was observed in Mombasa (56 percent); in all other cities, less than 50 percent of women reported having received these services before delivery, ranging from 27 percent in Kisumu to 42 percent in Machakos. All cities experienced a large increase in receiving these FP services before delivery since baseline, ranging from a 16-percentage-point increase in Kisumu to a 29-percentage-point increase in Machakos, with the greatest increase in Mombasa (43 percentage points). At endline, more women reported having received FP information or counseling after delivery—nearly two-thirds of women in Nairobi, Mombasa, Kisumu, and Machakos and about three-quarters of women in Kakamega. In Nairobi, Machakos, and Kakamega, only about a 10-percentage-point increase was observed since baseline in receiving these FP services after delivery, while Kisumu and Mombasa saw increases of 17 and 20 percentage points, respectively. The data indicates that women were offered FP services after delivery more often than beforehand, at both baseline and endline. Figure 7.1 shows the percentage of women who were exposed to FP programs or services before and after delivery at a health facility at baseline and endline. At baseline, the percentage of women who had received FP information or counseling both before and after delivery was under 10 percent in each city. Four years later at endline, considerable increases in the percentages of women receiving these services both before and after delivery were observed in all cities, ranging from a 19-percentage-point increase in Kisumu to a 42-percentage-point increase in Mombasa. These changes were substantial, with the rise in the number of women receiving such services ranging from around a fourfold increase in Kakamega (from less than 7 percent to almost 27 percent) to around tenfold in Machakos (from less than 4 percent to almost 39 percent).

Figure 7.1 Exposure to FP programs or services before and after delivery at a health facility at baseline and endline.
Kenya 2010, 2014.

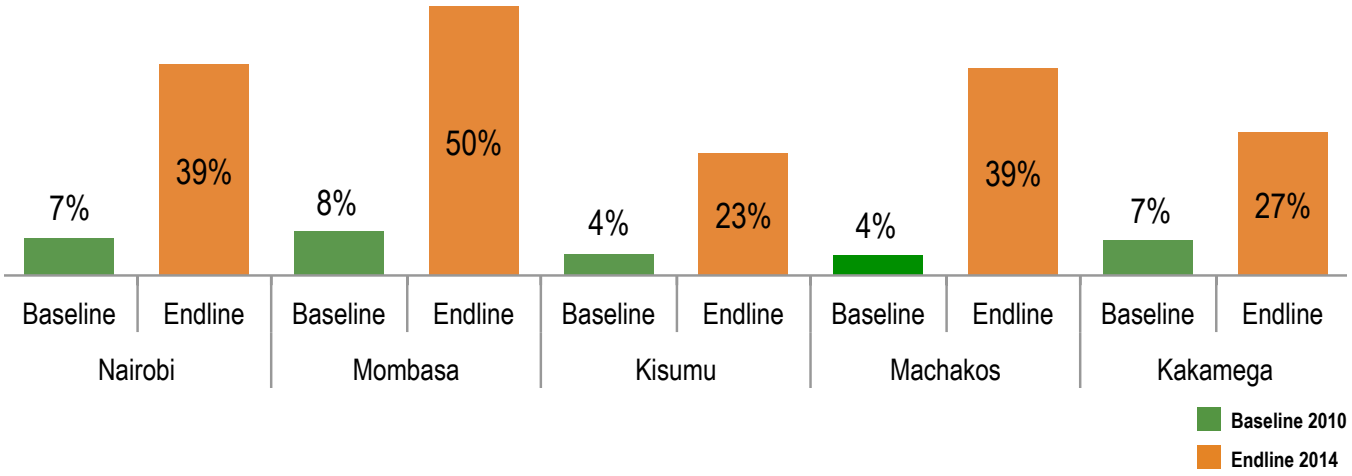


Table 7.2 Exposure to FP services at time of delivery at baseline and endline

Percentage distribution of women who were exposed to FP services at the time of delivery among women who delivered at a health facility in the two years prior to baseline and endline, by city. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Received information or counseling on FP before delivery (when at the facility for delivery)										
Yes	15.2	41.0	12.5	55.7	10.8	26.8	13.0	42.1	18.7	31.3
No	82.9	59.0	82.7	42.8	85.5	72.2	85.9	54.7	78.0	68.5
Don't know	0.9	0.0	1.6	0.0	3.1	0.0	0.0	0.0	2.2	0.0
Missing	1.0	0.0	3.2	1.5	0.6	0.9	1.1	3.1	1.0	0.3
Received information or counseling on FP after delivery (when at the facility for delivery)										
Yes	52.2	62.1	44.5	64.6	48.4	65.8	59.3	66.8	60.1	73.7
No	45.9	37.9	50.6	33.8	47.9	33.3	39.6	30.1	36.6	26.1
Don't know	0.9	0.0	1.6	0.0	3.1	0.0	0.0	0.0	2.2	0.0
Missing	1.0	0.0	3.2	1.5	0.6	0.9	1.1	3.1	1.0	0.3
Received information or counseling on FP before and after delivery (when at the facility for delivery)										
Yes	7.0	39.3	8.2	50.1	4.0	22.8	3.8	38.6	6.6	26.6
No	91.1	60.7	87.0	48.4	92.3	76.3	95.2	58.3	90.1	73.2
Don't know	0.9	0.0	1.6	0.0	3.1	0.0	0.0	0.0	2.2	0.0
Missing	1.0	0.0	3.2	1.5	0.6	0.9	1.1	3.1	1.0	0.3
Number	705	387	336	217	507	234	344	248	367	218

7.2 Exposure to Program Intervention During Postnatal Period

At baseline and endline, all women who had given birth within the previous two years were asked if they had gone to a health facility in the three months prior to the survey for any child health services and, if so, if they had received any FP information or counseling. Table 7.3 presents the responses to these questions and whether those who had been exposed received a method or referral for FP at that time, by city. Over the four years between baseline and endline, women's exposure to FP/childbirth spacing information or counseling during child health visits remained fairly unchanged in Nairobi, Kisumu, and Machakos, and there was a decrease in Kakamega (10 percentage points). The only increase in exposure was observed in Mombasa, with a 32-percentage-point increase. At baseline, among the women who had received FP information or counseling at the child health visit, those who had received a method, prescription, or referral for FP at the time of the visit ranged from 34 percent in Kisumu to 69 percent in Machakos; most reported having received either a method (14–36 percent) or a prescription (11–31 percent), while few reported having received a referral (0–13 percent). At endline, however, a 10- to 38-percentage-point increase in the proportion of women who reported not receiving a method, prescription, or referral at a child health visit was observed in all cities. At endline the proportion of women who had received a method during a child health visit ranged from 7 percent in Mombasa to 40 percent in Machakos; those who had received a prescription ranged from less than 1 percent in Nairobi to 17 percent in Mombasa, and the proportion of women who had received a referral constituted no respondents in Kakamega to just 6 percent in Nairobi. The low exposure to FP services at child health visits in most cities highlights a possible missed opportunity to reach women during the first two years after childbirth.

Table 7.3 Exposure to FP information/counseling and methods at a child health visit at baseline and endline

Percentage distribution of women's exposure to FP information/counseling and method among women who have gone to a health facility for a child health visit in the previous three months, by city. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Received information or counseling on FP/child birth spacing at a child health visit										
Yes	26.6	25.4	22.1	54.7	21.2	22.7	18.1	21.4	30.9	20.1
No	73.4	74.6	77.9	45.3	78.7	77.3	81.9	78.6	69.1	79.9
Missing	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Number	601	372	326	246	511	354	436	345	405	308
Among women who received information or counseling, an FP method, or a referral at a child health visit										
Received method	34.0	11.1	14.0	7.0	23.2	8.9	36.2	40.0	36.1	19.1
Received prescription	16.1	0.4	24.4	17.0	10.6	12.1	31.4	2.4	14.1	3.1
Received referral	4.6	6.0	13.0	3.0	0.4	4.4	1.9	4.5	5.4	0.0
Did not receive any of the above	45.3	82.6	48.7	73.0	64.7	74.6	30.6	49.7	44.4	77.8
Missing	0.0	0.0	0.0	0.0	1.2	0.0	0.0	3.3	0.0	0.0
Number	160	94	72	135	108	80	79	74	125	62

The use of FP methods in the first year postpartum can provide health benefits to both the mother and child by helping women prevent closely spaced or unintended pregnancies. At endline, women who had given birth in the previous two years were asked if they had started using a contraceptive method within 12 months of delivery and, if so, which method. Table 7.4 presents these results for each city. Postpartum modern method use was common in all cities for women, ranging from 62 percent in Mombasa to 81 percent in Kakamega. The most common modern methods reported were injectables, ranging from 32 percent in Mombasa and Kisumu to 41 percent in Kakamega, implants, ranging from 11 percent in Nairobi to 25 percent in Kisumu, and daily pills, ranging from 4 percent in Kisumu to 17 percent in Nairobi. The least common reported modern methods include condoms, LAM, IUDs, EC, and sterilization. Traditional method use in the first 12 months after delivery was reported by 5 percent or less of women in all cities. Nonuse of a contraceptive method in the first 12 months after delivery was still prevalent in all cities, ranging from 17 percent in Machakos to 37 percent in Mombasa.

Table 7.4 Contraceptive use during postpartum period at endline

Percentage distribution of women who had given live birth since January 2012 and reported postpartum contraceptive use within 12 months of delivery. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Contraceptive method used within 12 months of delivery					
Sterilization	1.0	0.0	0.2	1.1	2.8
Implants	11.4	15.9	25.0	14.4	18.9
IUDs	3.1	2.4	0.8	4.2	3.6
Injectables	33.7	31.9	32.3	36.7	40.9
Daily pills	17.3	6.9	4.2	14.4	6.6
EC	1.1	0.6	0.3	0.9	0.5
Condoms	4.2	2.1	7.1	2.7	4.0
LAM	5.5	2.1	2.8	2.9	4.0
Other modern	0.0	0.0	0.0	0.0	0.0
Total modern CPR	77.3	61.9	72.6	77.3	81.3
Traditional methods	2.8	0.2	1.6	5.2	1.1
Total CPR	80.1	62.2	74.3	82.5	82.4
Nonuse	19.9	36.6	25.7	17.0	17.6
Missing	0.0	1.2	0.0	0.5	0.0
Number of women	411	268	248	268	255

CHAPTER 8: EXPOSURE TO KENYA URBAN REPRODUCTIVE HEALTH INITIATIVE

The Kenya Urban Reproductive Health Initiative, also called Tupange, has developed a communication strategy with interventions aimed at creating demand for and use of contraceptives among the urban population in Kenya. Tupange-specific print materials, radio programs, television spots, outreach and interpersonal programs, and internet messages have been designed to increase the use of modern contraceptives specifically among the marginalized poor. This chapter discusses the endline findings on women's exposure to Tupange interventions, with baseline or midterm comparisons when available.

8.1 Exposure to Tupange Program Materials

Respondents were asked about their exposure to the word "Tupange" and to the Tupange logo in the midterm and endline surveys. Table 8.1 shows that at endline, between 42 and 74 percent of the women recalled having heard or seen the word "Tupange" in the previous year; only in Nairobi did the percentage increase, from 64 percent at midterm to 69 percent at endline. Respondents were shown the Tupange program logo and were asked if they had ever seen it. A similar pattern applied to the recognition of the Tupange logo as to the initiative's name: between 44 and 77 percent remembered ever having seen the Tupange logo, with slight increases in Nairobi and Kisumu since midterm, by 5 and 1 percentage point(s), respectively. Figure 8.1 presents the percentage of women exposed to the Tupange logo in Nairobi, Mombasa and Kisumu at midterm and endline. Respondents who recognized the Tupange logo were asked where or how they saw the logo most recently. At both midterm and endline, the most common response in Nairobi, Mombasa, and Kisumu was "on a sign at a health facility," whereas in the other two cities, the most common response was "on a poster."

Figure 8.1 Exposure to Tupange logo at midterm and endline among all women

Kenya 2012, 2014.

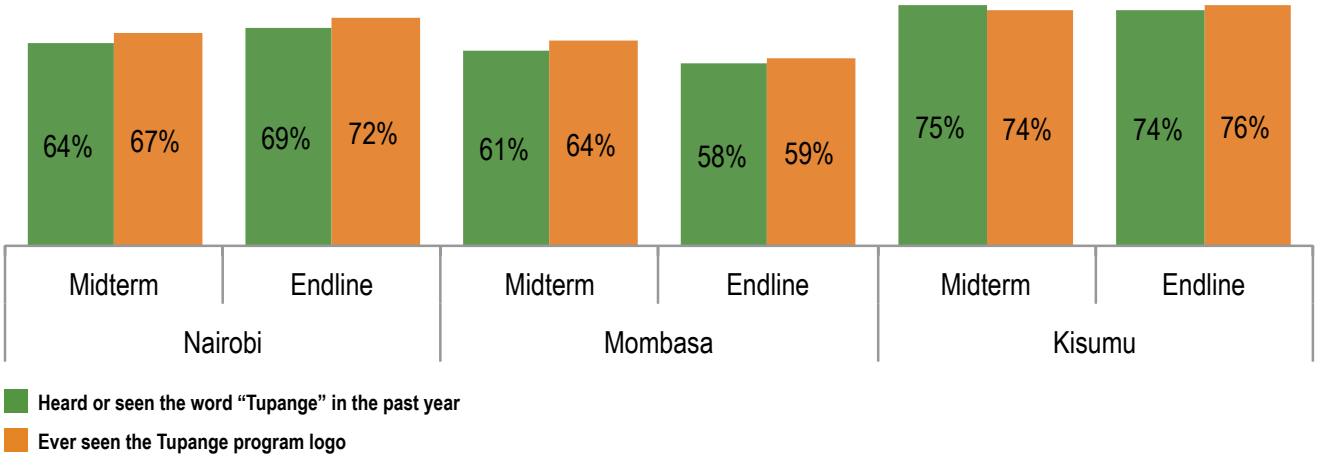


Table 8.1 Exposure to Tupange logo at midterm and endline

Percentage distribution of women's exposure to the Tupange logo, by city. Kenya 2012, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline
Heard or seen the word "Tupange" in the previous year										
Yes	63.6	68.5	61.5	57.5	75.5	74.4	NA	41.8	NA	73.6
No	36.4	31.4	38.6	42.3	24.5	25.6	NA	58.2	NA	26.1
Missing	0.0	0.2	0.0	0.2	0.0	0.0	NA	0.0	NA	0.3
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Ever seen "Tupange" program logo										
Yes	66.7	71.7	64.4	58.8	74.4	75.6	NA	44.0	NA	76.8
No	33.3	28.3	35.6	41.0	25.6	24.4	NA	55.8	NA	23.0
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.2	NA	0.2
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Among those who had ever seen Tupange logo, seen it on:										
Television	32.7	32.5	30.4	17.3	14.8	20.3	NA	17.9	NA	15.3
Poster	32.2	39.5	40.2	34.9	21.5	33.1	NA	56.2	NA	45.9
Newsmagazine or booklet	3.2	1.9	4.9	0.5	1.0	1.8	NA	1.5	NA	2.5
Leaflet/fliers	6.4	4.7	12.1	2.4	4.3	2.4	NA	10.9	NA	6.1
Internet/Facebook	0.5	0.1	1.9	0.0	0.5	0.0	NA	0.5	NA	0.3
Umbrella	0.6	0.3	0.9	1.8	0.7	0.0	NA	1.5	NA	0.6
Calendar	0.4	0.5	6.2	2.5	0.1	0.5	NA	0.8	NA	0.5
T-shirt	17.4	13.5	23.5	13.8	14.8	16.2	NA	18.1	NA	22.0
Health worker uniform/coat	8.6	13.6	6.9	22.0	4.6	12.8	NA	9.4	NA	26.9
Sign at a health facility	44.3	43.9	43.4	59.7	49.5	54.2	NA	35.5	NA	35.1
Street banner	5.0	6.1	7.4	5.3	6.0	1.6	NA	1.1	NA	6.1
Khanga/leso	4.2	3.6	2.3	6.0	2.0	6.8	NA	2.9	NA	2.4
Vehicle	1.4	0.2	0.8	0.0	3.2	3.5	NA	0.3	NA	1.2
Other	0.9	1.6	3.0	0.8	3.8	2.4	NA	1.1	NA	1.8
Can't remember	4.1	3.6	2.7	4.0	4.8	2.7	NA	2.2	NA	1.3
Number	889	957	601	510	700	701	NA	531	NA	676

Note: Percentages may not add up to 100.0% because multiple responses could be given. NA: not applicable because no data collected.

Table 8.2 shows print readership in the previous year at midterm and endline. The percentage of women who had read any newspapers or magazines during the year prior to the survey declined by 28 percentage points in Mombasa, 19 percentage points in Kisumu, and 14 percentage points in Nairobi from midterm to endline. Nevertheless, the percentage of women who had read any articles on FP in the previous year had increased 11 percentage points in Kisumu, 9 percentage points in Nairobi, and 1 percentage point in Mombasa since midterm. Of the women who had read articles on FP in the previous year, the number who had read articles that specifically talked about the Tupange project ranged from 11 percent in Machakos to 21 percent in Mombasa by endline, which was a decline across cities since midterm.

Overall, exposure to Tupange-specific printed materials in the previous year declined from midterm to endline. The percentage of women who had seen or read the "Celebrate Life" Tupange poster in the previous year dropped by 17 percentage points in Kisumu, 12 percentage points in Mombasa, and 10 percentage points in Nairobi between surveys. Exposure to the Shujaaz comic book dropped 15 percentage points in Mombasa and 7 percentage points in Kisumu but increased nearly 3 percentage points in Nairobi. Among women who had seen or heard of Shujaaz, the percentage of women who had read or seen issues that addressed teenage pregnancy, relationships, or male responsibility ranged from 47 percent in Nairobi to 68 percent in Mombasa.

Table 8.2 Exposure to Tupange printed materials at midterm and endline

Percentage distribution of women's exposure to Tupange printed materials, by city. Kenya 2012, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline
Read any newspaper(s) or magazines in the previous year										
Yes	65.4	51.3	61.1	33.0	63.7	44.8	NA	39.1	NA	48.7
No	34.6	48.7	38.9	66.8	36.3	55.2	NA	60.9	NA	51.3
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.0	NA	0.1
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Read any articles on FP/childbirth spacing in newspapers/magazines in the previous year										
Yes	69.9	78.5	71.1	72.0	65.7	76.2	NA	69.4	NA	78.1
No	28.4	20.6	28.8	27.8	33.7	23.8	NA	29.6	NA	21.8
Don't know	1.7	0.8	0.1	0.0	0.7	0.0	NA	0.8	NA	0.0
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.2	NA	0.1
Number	872	684	570	286	600	416	NA	472	NA	428
Read any articles on FP in newspapers/magazines that talked about the Tupange project in the previous year										
Yes	23.4	14.8	29.9	21.0	34.1	15.3	NA	11.1	NA	19.1
No	72.7	84.4	67.3	78.3	65.5	83.3	NA	86.6	NA	80.5
Don't know	3.9	0.3	2.8	0.5	0.4	1.5	NA	1.3	NA	0.4
Missing	0.0	0.4	0.0	0.2	0.0	0.0	NA	1.1	NA	0.0
Number	872	684	570	286	600	416	NA	472	NA	428
Seen or read a brochure/leaflet on FP with "Tupange Imarisha Maisha" written on it in the previous year										
Yes	31.3	21.1	35.6	21.2	39.1	11.1	NA	14.8	NA	20.1
No	68.7	78.9	64.5	78.6	60.9	88.9	NA	85.2	NA	79.8
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.0	NA	0.1
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Seen or read a poster with "Tupange" or "Celebrate Life! Use Family Planning" written on it in the previous year										
Yes	42.2	32.1	44.5	32.5	51.5	34.9	NA	25.5	NA	44.0
No	57.8	67.9	55.5	67.3	48.5	65.1	NA	74.5	NA	55.9
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.0	NA	0.1
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Seen or heard of the *Shujaaz* comic book										
Yes	26.1	28.6	35.7	20.6	25.8	18.4	NA	19.2	NA	25.2
No	73.9	71.4	64.3	79.2	74.2	81.6	NA	80.8	NA	74.7
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.0	NA	0.1
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Read or seen a *Shujaaz* comic book issue about teenage pregnancy, relationships, or male responsibility (among women who had seen or heard of *Shujaaz*)										
Yes	60.3	46.8	60.3	68.0	58.9	57.0	NA	55.3	NA	55.2
No	39.7	53.2	39.7	32.0	41.1	43.0	NA	44.7	NA	44.8
Number	348	382	333	179	242	171	NA	232	NA	222

NA: not applicable because no data collected

8.2 Exposure to Tupange Media Messages

Print readership, as compared to radio listenership and television viewership, was low across cities (Table 8.3). Among women who read newspapers or magazines, the percentage of women who had read articles on FP in the previous three months increased slightly in Nairobi from 55 to 57 percent, whereas in the remaining cities, the percentage decreased from baseline to endline by margins ranging from 1 percentage point in Kisumu to 20 percentage points in Machakos. Radio listenership is higher than television viewership in all cities except in Nairobi, where at endline 89 percent reported watching television, whereas only 84 percent reported listening to the radio. Among women who listened to the radio, the percentage of women who had heard any FP information on the radio in the previous three months increased in all cities from baseline to endline, for instance, from 70 to 83 percent in Nairobi and from 78 to 91 percent in Machakos. Likewise, among women who watch television, the percentage of women who had seen any FP information on television in the previous three months increased in all cities from baseline to endline, for instance, from 64 to 84 percent in Nairobi and from 72 to 84 percent in Kisumu.

Table 8.3 Exposure to mass media at baseline and endline

Percentage distribution of women with recent exposure to FP in the media. Kenya 2010, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Do you read newspapers and/or magazines										
Yes	52.0	54.5	33.7	36.0	40.3	47.8	56.6	46.7	40.9	51.7
No	47.6	45.5	66.0	63.8	59.6	52.2	43.1	53.1	59.1	48.2
Missing	0.4	0.0	0.4	0.2	0.1	0.0	0.3	0.2	0.0	0.1
Number	2706	1334	1465	868	1603	928	1834	1207	1324	880
Have you read any articles on FP in newspapers/magazines in the past three months (among women who read)										
Yes	55.2	57.3	70.4	55.7	64.1	63.3	66.1	46.6	63.0	52.3
No	44.5	42.7	29.6	44.3	35.9	36.4	33.9	53.2	37.0	47.4
Missing	0.3	0.0	0.0	0.0	0.0	0.2	0.1	0.3	0.0	0.4
Number	1407	727	493	312	646	444	1039	563	542	455
Do you listen to the radio										
Yes	83.0	84.4	73.5	72.6	89.2	87.3	92.0	85.6	87.4	85.9
No	16.7	15.6	26.1	27.1	10.8	12.7	7.7	14.2	12.6	14.0
Missing	0.3	0.0	0.4	0.3	0.1	0.0	0.3	0.2	0.0	0.1
Number	2706	1334	1465	868	1603	928	1834	1207	1324	880
Have you heard any FP information on the radio in the past three months (among women who listen to the radio)										
Yes	69.8	82.5	76.6	81.1	81.4	90.6	77.9	90.6	77.6	85.3
No	30.0	17.5	23.4	18.9	18.6	9.4	22.1	9.4	22.4	14.7
Missing	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Number	2245	1126	1077	630	1429	810	1688	1033	1157	756
Do you watch television										
Yes	78.4	88.7	69.3	70.6	66.0	72.4	65.3	67.2	55.7	65.5
No	21.3	11.2	30.3	29.2	33.9	27.6	34.4	32.6	44.2	34.4
Missing	0.3	0.0	0.4	0.2	0.1	0.0	0.3	0.2	0.1	0.1
Number	2706	1334	1465	868	1603	928	1834	1207	1324	880
Have you seen any FP-related information on TV in the past three months (among women who watch TV)										
Yes	64.3	84.1	75.7	84.7	72.2	85.4	66.8	76.3	73.7	77.5
No	35.7	15.9	24.3	15.3	27.8	14.6	33.2	23.7	26.3	22.3
Missing	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Number	2122	1184	1015	613	1058	672	1197	811	738	577

Radio listenership in the previous three months and exposure to FP information and Jongo Love are presented in Table 8.4. Jongo Love is a 24-episode radio drama that explores the lives of the residents of Nairobi's low-income areas and factors affecting their reproductive health. Across all cities, at endline, between 43 and 68 percent of women listened to the radio every day and between 17 and 29 percent listened at least once in the last two weeks, while between 13 and 28 percent did not listen to the radio in the last three months. Among those who listened to the radio, most of the women (over 87 percent) had heard FP information on the radio in the past year by endline.

The percentage of women who had heard or listened to Jongo Love declined from midterm to endline by margins as low as 11 percentage points in Nairobi and Mombasa and as high as 19 percentage points in Kisumu. Among the small number of women who had heard Jongo Love at endline, 13 to 24 percent had also discussed this radio program with others. Figure 8.2 shows the percentage of women who had heard FP information on the radio and who had heard Jongo Love, among those who had listened to the radio in the previous three months in Nairobi, Mombasa, and Kisumu.

Figure 8.2 Exposure to Tupange radio program in the previous year at midterm and endline among all women.

Kenya 2012, 2014.

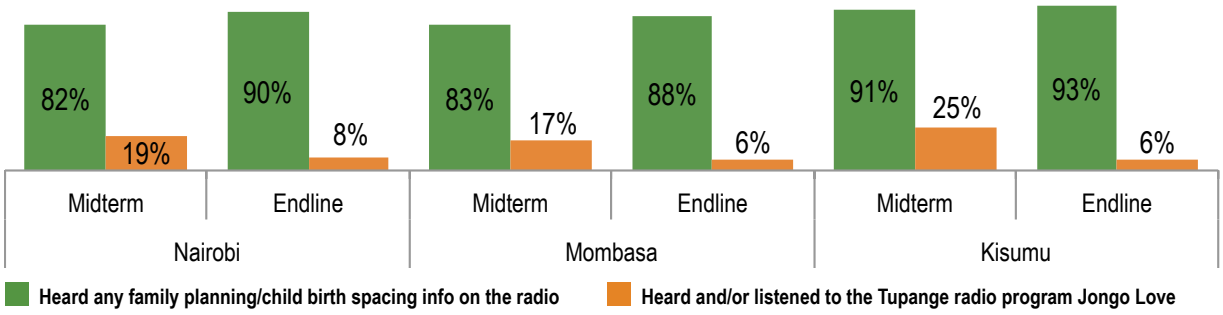


Table 8.4 Exposure to Tupange radio programs at midterm and endline

Percentage distribution of women's exposure to Tupange radio programs, by city. Kenya 2012, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline
Listened to the radio in previous three months										
Every day	66.2	63.0	48.1	42.7	60.6	63.0	NA	68.2	NA	62.2
At least once a week	17.8	18.7	23.2	26.1	22.0	20.2	NA	13.2	NA	17.9
At least once in two weeks	3.3	3.0	7.5	3.0	5.0	3.6	NA	3.5	NA	4.2
Not at all	12.8	15.1	21.2	28.0	12.4	13.3	NA	14.8	NA	15.5
Missing	0.0	0.1	0.0	0.2	0.0	0.0	NA	0.2	NA	0.2
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Among those who had listened in previous three months, had heard any FP/childbirth spacing information on the radio in the previous year										
Yes	82.4	90.0	82.5	87.7	91.2	93.4	NA	94.5	NA	93.4
No	17.6	10.0	17.4	12.0	8.8	6.6	NA	5.4	NA	6.2
Missing	0.0	0.0	0.0	0.3	0.0	0.0	NA	0.1	NA	0.4
Number	1163	1133	735	625	824	805	NA	1028	NA	743
Among those who had listened to radio in previous three months, had heard and/or listened to the Tupange radio program *Jongo Love* in the previous year										
Yes	19.1	7.9	17.3	6.3	24.7	5.9	NA	3.7	NA	14.4
No	80.9	92.1	82.6	93.4	75.3	94.1	NA	95.9	NA	85.3
Missing	0.0	0.0	0.0	0.3	0.0	0.0	NA	0.4	NA	0.3
Number	1163	1133	735	625	824	805	NA	1028	NA	743
Among who had heard *Jongo Love*, had discussed this radio program with anyone else										
Yes	14.8	18.3	29.0	21.9	21.2	23.5	NA	21.7	NA	12.5
No	84.7	81.7	68.9	77.6	78.8	76.5	NA	78.3	NA	87.5
Missing	0.5	0.0	2.1	0.5	0.0	0.0	NA	0.0	NA	0.0
Number	222	89	128	39	204	47	NA	38	NA	107

NA: not applicable because no data collected

Table 8.5 presents women's exposure to Tupange television programs. At endline, between 52 and 77 percent of the women in each city reported having watched television every day and between 10 and 13 percent reported having watched at least once in two weeks within the previous three months. Meanwhile, between 11 and 35 percent had not watched television in the previous three months at all. Among those who reported having watched television in the three months prior to the endline survey, over 84 percent in each city had seen FP information on television in the previous year, which reflected a slight increase since midterm. On the other hand, at endline, only 15–30 percent of the women recalled having seen scenes from the television program Matatu in the previous year, while at midterm 34–65 percent remembered having seen these scenes. Matatu is a two-episode television program that is filmed on a public minibus, called a "matatu," where passengers discussed FP and family size topics. Respondents who recalled the Matatu scenes were asked what the scenes were about and if they had ever discussed the program with anyone else. Despite the low recognition of the program at endline, women most frequently responded that they remembered the topic "benefits of family planning," ranging from 28 percent in Mombasa to 53 percent in Kisumu. Very few women, between 7 and 14 percent, reported at endline having discussed the program with someone else.

Table 8.5 Exposure to Tupange television programs at midterm and endline

Percentage distribution of women's exposure to Tupange television programs, by city. Kenya 2012, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline
Watched television in previous three months										
Every day	74.0	77.3	63.0	60.2	57.3	59.9	NA	54.0	NA	52.1
At least once a week	11.9	10.4	11.9	9.5	13.8	10.0	NA	8.7	NA	9.7
At least once in two weeks	3.6	1.6	5.2	0.9	6.7	2.0	NA	4.0	NA	2.9
Not at all	10.5	10.7	19.9	29.2	22.2	28.1	NA	33.3	NA	35.2
Missing	0.0	0.1	0.0	0.2	0.0	0.0	NA	0.1	NA	0.1
Number	1333	1334	933	868	941	928	NA	1207	NA	880
Of those who reported watching in previous three months, seen any FP/childbirth spacing information on TV in the previous year										
Yes	86.4	91.4	80.9	91.8	88.6	90.7	NA	84.5	NA	88.1
No	13.4	8.3	18.9	7.8	11.4	9.0	NA	15.2	NA	11.3
Don't know	0.2	0.3	0.2	0.0	0.0	0.0	NA	0.2	NA	0.4
Missing	0.0	0.0	0.0	0.3	0.0	0.3	NA	0.1	NA	0.1
Number	1193	1192	748	615	733	667	NA	806	NA	570
Of those who reported watching in previous three months, recognized scenes from TV program *Matatu* in the previous year										
Yes	65.2	30.0	34.1	14.8	40.2	15.6	NA	15.3	NA	21.9
No	34.9	70.0	65.9	84.9	59.8	84.4	NA	84.4	NA	78.0
Missing	0.0	0.0	0.0	0.3	0.0	0.0	NA	0.3	NA	0.1
Number	1193	1192	748	615	733	667	NA	806	NA	570
Of those who recognized the scenes, topics or information recalled about the show										
Benefits of FP	21.8	43.2	47.1	28.1	56.0	53.3	NA	40.2	NA	36.6
Role of men in FP	7.8	2.8	3.9	3.3	6.3	4.6	NA	5.8	NA	7.4
Ideal quality of life	9.7	6.5	13.9	15.4	4.9	7.6	NA	5.3	NA	14.3
Myths around FP	3.1	6.3	2.1	18.7	2.9	3.8	NA	4.3	NA	8.1
Being in abusive relationship	3.6	3.8	5.9	5.1	2.6	2.5	NA	10.0	NA	2.2
Overcome abuse relationship	2.0	7.4	1.6	0.1	0.4	1.0	NA	4.2	NA	4.8
Gender-based violence and rape	6.4	2.7	0.7	0.0	1.3	2.1	NA	3.5	NA	0.0
Teenage pregnancy	14.5	10.8	7.3	9.3	7.2	7.1	NA	13.2	NA	8.7
Cash for births	0.0	0.1	0.7	0.0	0.0	0.0	NA	0.0	NA	0.0
Negative statements about FP	5.1	4.8	2.9	8.6	2.5	1.4	NA	4.3	NA	0.9
Other	11.7	3.7	2.4	1.5	3.0	4.3	NA	1.1	NA	9.3
Don't know	38.7	23.6	36.5	28.8	26.4	10.9	NA	44.0	NA	25.6
Don't remember	9.1	9.0	4.6	5.0	7.9	19.1	NA	1.1	NA	2.8
Number	777	358	255	91	294	104	NA	123	NA	125
Of those who recognized the scenes, discussed the program with someone else										
Yes	9.7	10.8	18.9	12.2	20.1	13.5	NA	6.9	NA	8.8
No	90.3	89.1	81.1	86.5	79.9	86.5	NA	93.1	NA	91.2
Missing	0.0	0.1	0.0	1.3	0.0	0.0	NA	0.0	NA	0.0
Number	777	358	255	91	294	104	NA	123	NA	125

Note: Percentages may not add up to 100.0% because multiple responses could be given. NA: not applicable because no data collected.

Internet access remains low across cities; only about one-third of the women reported having accessed the internet in the previous year at midterm and endline (Table 8.6). Among those who had accessed the internet in the previous year, 43 to 66 percent in each city reported daily usage at endline, compared to 44 to 50 percent at midterm. All women who had accessed the internet in the previous year were asked if they had seen Tupange messages on teenage pregnancy, relationships, or male responsibility on the internet. At endline between 38 and 56 percent in each city reported that they had seen the messages on Facebook and between 9 and 18 percent reported having seen them on YouTube. However, a notable percentage of the women had not seen the internet messages at all, ranging from 33 percent in Kisumu to 53 percent in Mombasa. Among those who had seen the internet messages, Kakamega had the highest percentage of women (38 percent) who had discussed the messages with others, while Machakos had the lowest (14 percent) at endline.

Table 8.6 Exposure to Tupange internet programs at midterm and endline

Percentage distribution of women's exposure to Tupange internet programs, by city. Kenya 2012, 2014.

	Nairobi		Mombasa		Kisumu		Machakos		Kakamega	
	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline	Midterm	Endline
Accessed internet in the previous year										
Yes	30.7	34.4	27.4	34.7	22.3	27.4	NA	28.0	NA	30.5
No	66.7	54.9	63.7	43.6	72.2	63.8	NA	58.6	NA	52.5
Don't know internet, web, email	2.6	10.7	9.0	21.5	5.5	8.8	NA	13.4	NA	16.9
Missing	0.0	0.0	0.0	0.2	0.0	0.0	NA	0.1	NA	0.1
Number	1333	1334	933	868	941	928	NA	1207	NA	880
How often did you access internet, web, or email (among who accessed internet in the previous year)										
Every day	49.9	66.0	43.6	58.2	45.5	50.6	NA	48.8	NA	42.7
At least one a week	32.4	21.8	35.0	31.6	30.2	38.7	NA	33.1	NA	33.2
At least once in two weeks	8.6	5.3	11.0	4.3	11.0	5.8	NA	7.6	NA	15.5
Less frequently	9.1	5.0	10.4	5.2	12.9	4.3	NA	6.4	NA	7.8
Missing	0.0	1.9	0.0	0.7	0.4	0.6	NA	4.1	NA	0.8
Number	409	458	255	301	210	254	NA	338	NA	269
Seen any teenage pregnancy, relationship, or male responsibility messages on the internet in the previous year (among who accessed internet in the previous year)										
Facebook	44.8	42.7	30.9	38.1	39.2	56.0	NA	37.8	NA	48.4
YouTube	18.3	10.3	11.5	15.8	13.9	17.7	NA	9.0	NA	12.3
Tupange/Youth Smart website	5.8	0.5	4.1	2.5	2.0	2.7	NA	1.2	NA	1.1
Shujazz website	3.2	0.0	1.2	1.3	1.9	1.8	NA	0.9	NA	3.4
Shujaaz Facebook page	2.8	0.4	1.9	1.9	2.0	1.9	NA	0.5	NA	0.2
Jongo Love Facebook page	NA	0.3	NA	0.0	NA	0.7	NA	0.0	NA	0.7
Jongo Love website	2.2	0.0	0.4	0.1	1.4	0.0	NA	0.0	NA	0.0
None of these, but saw on other internet site	27.6	11.6	22.3	4.7	20.8	5.6	NA	8.3	NA	9.8
None of these messages on internet	33.9	39.5	44.1	52.9	39.1	33.4	NA	48.2	NA	39.4
Number	409	458	255	301	210	254	NA	338	NA	269
Discussed this media source with anyone else (among those who had seen in the previous year)										
Yes	42.5	26.8	40.9	19.9	46.9	29.3	NA	14.4	NA	38.0
No	57.2	70.1	59.1	78.6	53.1	69.8	NA	76.3	NA	61.5
Missing	0.4	3.2	0.0	1.5	0.0	0.9	NA	9.3	NA	0.5
Number	270	277	143	142	128	170	NA	175	NA	163

Note: Percentages may not add up to 100.0% because multiple responses could be given. NA: not applicable because no data collected.

The Ministry of Health and Tupange had broadcast FP messages during the 2014 FIFA World Cup matches through radio and television, coinciding with the period of the endline study. Data on exposure to FP messages through radio are presented in Table 8.7 and those on exposure through television are presented in Table 8.8. Less than one-fourth of the women in each city had listened to the quarter-final, semifinal, or final matches of the World Cup on the radio. Among those who had heard the match broadcasts, the number who remembered messages from the Ministry of Health and Tupange while listening to the matches ranged from 22 percent in Nairobi to 31 percent in Machakos. Interestingly, most of the women (68–94 percent in each city) correctly identified FP as the topic of the messages.

Less than one-third of the women, ranging from 10 percent in Machakos and Kakamega to 29 percent in Mombasa, reportedly watched the quarter-final, semifinal, or final 2014 FIFA Football World Cup matches on television (Table 8.8). Among those who watched the matches, 14 to 33 percent remembered having seen a video clip from the Ministry of Health and Tupange during the broadcasts. Respondents who recalled the video clip were asked about the message, and about three-fourths correctly identified FP as the topic of the messages, ranging from 71 percent in Kakamega to 83 percent in Mombasa.

Table 8.7 Exposure to Ministry of Health and Tupange radio messages at endline

Percentage distribution of women's exposure to Ministry of Health and Tupange radio messages during 2014 FIFA World Cup matches, by city at endline. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Listened to any quarter-final, semifinal, or final 2014 FIFA Football World Cup matches on the radio					
Yes	16.0	13.5	20.7	15.6	17.9
No	84.0	86.3	79.3	84.4	82.0
Missing	0.0	0.2	0.0	0.0	0.1
Number	1334	868	928	1207	880
Among those who heard the matches, remembered any messages from the Ministry of Health and Tupange while listening to the match					
Yes	22.4	27.3	28.0	31.1	30.1
No	77.6	72.7	72.0	68.0	69.9
Missing	0.0	0.0	0.0	1.0	0.0
Number	214	117	193	188	158
Among those who heard the messages, whether correctly recalled topic of the message					
Correctly identified FP	69.8	93.7	71.6	68.1	75.8
Did not identify FP as topic	19.3	5.9	23.5	17.7	15.9
Don't know/don't remember	10.9	0.0	4.3	14.1	8.2
Missing	0.0	0.4	0.6	0.0	0.0
Number	48	32	54	59	47

Table 8.8 Exposure to Ministry of Health and Tupange television messages at endline

Percentage distribution of women's exposure to Ministry of Health and Tupange television messages during 2014 FIFA World Cup matches, by city at endline. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Watched any quarter-final, semifinal, or final 2014 FIFA Football World Cup matches on television					
Yes	19.3	28.9	17.3	10.4	10.1
No	80.7	70.9	82.7	89.6	89.8
Missing	0.0	0.2	0.0	0.0	0.1
Number	1334	868	928	1207	880
Among those who watched the matches, remembered a video clip from the Ministry of Health and Tupange while watching the match					
Yes	13.7	27.9	24.3	16.8	33.2
No	86.3	72.1	75.7	83.2	66.8
Number	257	251	160	126	89
Among those who recalled the messages, whether correctly recalled topic of the message					
Correctly identified FP	75.6	83.2	77.5	73.2	71.4
Did not identify FP as topic	20.6	16.8	15.3	22.1	28.6
Don't know	3.8	0.0	7.2	4.6	0.0
Number	35	70	39	21	29

8.3 Exposure to Tupange Program Community Outreach

All women at endline were asked about their interactions with community health volunteers (CHVs) in the previous year (Table 8.9). The highest percentage of women in a single city who had been visited by a CHV in the previous year was in Kakamega, at 28 percent, with the lowest percentage in Nairobi, at 10 percent. The number of women who reported having discussed FP during contact with a CHV ranged from 44 percent in Machakos to 72 percent in Kakamega. Among this group of women, more than 80 percent in each city reported that FP methods, FP benefits, and places to obtain FP were discussed. Discussions about HIV/AIDS were low across all cities.

Women who reported having received visits from a CHV during the year prior to the survey were also asked if they had ever received oral pills or condoms or had ever been referred to a health facility by a CHV. Compared to other cities, a higher percentage of women in Nairobi (12 percent) reported having received oral pills from CHVs, compared to only 5 percent or less in other cities. Similarly, 22 percent of the women in Nairobi reported ever having received condoms from CHVs, compared to only 6 to 15 percent in each of the other cities. Referrals to health facilities by CHVs were more common across cities than distribution of pills or condoms; among women visited by a CHV, the percentage of women who reported having ever received a referral to a health facility for FP ranged from 21 percent in Machakos to 51 percent in Kakamega.

Table 8.9 Exposure to CHVs at endline

Percentage distribution of women who reported contact with CHVs, by city. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Visited by a CHV in the previous year					
Yes	9.9	25.8	21.8	16.0	27.7
No	90.1	74.2	78.2	84.0	72.3
Number	1334	868	928	1207	880
CHV talked about FP in the previous year (among those visited by CHV)					
Yes	69.9	53.7	64.1	43.8	72.2
No	30.1	46.3	35.9	56.2	27.8
Number	132	224	202	193	244
Topics of FP discussions in the past one year (among those who talked about FP with CHV)[1]					
Methods of FP	94.0	98.3	96.0	92.4	97.8
Side effects of FP	62.5	60.1	69.1	67.2	79.0
Benefits of FP	80.9	95.1	94.7	86.9	95.3
Where to obtain family planning	93.4	91.0	98.2	84.0	98.1
HIV/AIDS	2.7	4.8	7.7	4.3	1.8
Other topic	8.9	3.4	11.7	18.0	6.7
Number	93	120	130	85	176
Among those visited, ever received oral pills for FP from CHV					
Yes	11.7	3.8	4.5	3.4	5.1
No	88.3	96.2	92.7	96.6	94.9
Missing	0.0	0.0	2.8	0.0	0.0
Number	132	224	202	193	244
Among those visited, ever received condoms for FP from CHV					
Yes	22.4	11.1	11.9	6.6	15.1
No	77.1	88.1	85.3	93.4	84.9
Missing	0.5	0.8	2.8	0.0	0.0
Number	132	224	202	193	244
Among those visited, ever referred by a CHV to a health facility for FP					
Yes	43.9	30.9	44.2	20.8	51.0
No	56.1	68.4	53.9	79.2	48.7
Missing	0.0	0.7	1.9	0.0	0.3
Number	132	224	202	193	244
Among those visited, told about or referred by a CHV to a special event being held outside a health facility where she could access FP					
Yes	35.2	30.2	19.3	21.5	41.2
No	64.8	69.3	78.8	78.5	58.8
Missing	0.0	0.5	1.9	0.0	0.0
Number	132	224	202	193	244
Among those visited, told about or referred by a CHV to a special event being held at a health facility where she could access FP					
Yes	41.3	30.1	13.6	20.5	41.1
No	58.7	69.9	84.6	79.5	58.9
Missing	0.0	0.0	1.9	0.0	0.0
Number	132	224	202	193	244

[1]Note: Percentages may not add up to 100.0% because multiple responses could be given.

At endline, all women were asked if they had heard information on topics of teenage pregnancy, relationships, male responsibility, or FP at Tupange events in the previous year (Table 8.10). Between 27 and 45 percent had heard the information at a caravan road show event, between 12 and 24 percent had heard it at community meetings, and between 10 and 23 percent had heard it at public entertainment events. In each city, less than 10 percent had heard the information at community dramas, football competitions, beauty contests, or boda boda (bicycle or motorcycle taxi) events.

Table 8.10 Exposure to Tupange events at endline

Percentage of women reporting hearing information about FP[1] at Tupange events in the past year, by city. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Caravan road show event	28.3	29.5	45.1	27.1	36.1
Community meeting	11.5	17.9	14.5	23.6	20.6
Community drama	6.1	9.0	8.2	3.2	7.8
Football competition	2.1	1.0	2.1	2.0	2.8
Beauty contest	2.2	4.0	0.9	1.0	3.7
Boda boda event	1.7	1.1	0.8	1.4	4.8
Public entertainment event	15.5	12.1	9.5	12.3	23.0
Other[2]	2.3	0.1	3.8	2.1	1.4
Number of women	1334	868	928	1207	880

[1]Heard FP information on topics of teenage pregnancy, relationships, male responsibility, FP, childbirth spacing. [2]Other includes school, work, church, hospitals, clinics, television, radio, and others.
Note: Percentages may not add up to 100.0% because multiple responses could be given.

8.4 Exposure to Tupange Private Sector Initiatives

Data on women's exposure to private health facilities branded "Amua Tupange" are presented in Table 8.11. The percentage of women who had heard of or seen an Amua Tupange private health facility ranged from 25 percent in Machakos to 59 percent in Kisumu. Women who reported having heard of or seen an Amua Tupange facility were asked if they had ever visited one and if they knew what services were provided at the facilities. The city with the lowest proportion of women who had ever visited an Amua Tupange facility was Kakamega, at 20 percent, while the highest reported percentage was from women in Machakos, at 43 percent. More than half of the women (51–65 percent in each city) said that they knew what types of health services were provided at Amua Tupange, with a majority of the women (over 85 percent) in each city reporting specifically that they knew FP services to be provided at the Amua Tupange facilities.

Table 8.11 Exposure to Amua Tupange health facilities at endline

Percentage distribution of women exposed to private Amua Tupange health facilities, by city. Kenya 2014.

	Nairobi	Mombasa	Kisumu	Machakos	Kakamega
Heard or seen a private health facility branded Amua Tupange					
Yes	46.5	50.3	58.7	24.7	56.4
No	53.5	49.7	41.3	75.3	43.6
Number	1334	868	928	1207	880
Among those who reported having heard or seen one, ever visited an Amua Tupange private health facility					
Yes	39.6	39.6	22.9	43.3	19.9
No	60.4	59.8	77.1	56.1	80.1
Missing	0.0	0.7	0.0	0.6	0.0
Number	620	437	545	298	496
Among those who reported having heard or seen one, know types of health services provided at Amua Tupange private health facility					
Yes	64.5	59.2	55.2	50.5	61.8
No	35.3	40.8	44.5	48.9	38.0
Missing	0.2	0.0	0.2	0.6	0.2
Number	620	437	545	298	496
Among those who reported they knew the type of services, types of Amua Tupange health services mentioned					
FP	94.3	93.9	85.1	97.6	92.9
Antenatal care	17.4	12.4	6.3	7.8	21.2
Delivery services	7.3	11.9	3.1	4.1	8.6
Postnatal care	12.3	5.1	3.5	5.0	10.3
Postabortion care	0.3	0.7	4.6	0.0	1.0
Growth monitoring	4.0	18.0	0.4	3.9	6.5
Child immunization	9.7	20.4	6.4	11.9	9.5
STI management	0.1	2.2	1.1	0.0	1.2
HIV/AIDS management	8.0	17.3	10.9	7.2	9.2
Curative services	5.2	13.8	24.5	5.4	30.5
HIV testing and counseling	8.5	14.8	17.0	10.0	15.1
Number	400	259	301	151	307

Note: Percentages may not add up to 100.0% because multiple responses could be given.

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APPENDIX I: Additional Tables

Table A1 Contraceptive use among all women and women married or in union by phase at baseline and endline

Percentage distribution of all women 15–49 and women married or in union, by contraceptive method currently used and by phase. Kenya 2010, 2014.

	Any method	Any modern method	Modern method								SDM[2]	Any traditional method[3]	Not currently using	Number of women
			Steriliz-ation	Implants	IUDs	Injectables	Daily pills	Male condoms	EC	Other modern method[1]				
Phase I baseline														
All	45.0	40.8	1.5	2.4	1.9	17.1	9.8	6.7	1.0	0.5	NA	4.2	55.0	5,774
Married/in union	59.5	54.2	2.1	3.4	2.7	25.7	15.5	3.4	0.7	0.8	NA	5.3	40.5	3,190
Phase I endline														
All	58.3	52.5	2.3	10.1	3.5	20.9	8.3	6.1	0.6	0.6	1.7	5.8	41.7	3,028
Married/in union	69.9	63.7	2.9	13.8	5.0	27.4	10.9	2.9	0.2	0.5	1.9	6.2	30.1	1,894
Phase II baseline														
All	50.7	45.7	3.8	3.3	2.8	22.5	6.5	5.9	0.4	0.5	NA	5.0	49.3	3,158
Married/in union	66.2	60.4	5.5	5.0	3.8	31.8	9.7	3.8	0.1	0.8	NA	5.9	33.8	1,851
Phase II endline														
All	59.6	55.6	3.8	13.4	3.7	22.3	7.9	3.6	0.4	0.5	0.1	4.0	40.4	1,952
Married/in union	72.1	66.8	4.9	16.6	4.9	28.1	9.7	1.8	0.2	0.6	0.1	5.2	27.9	1,316

Note: Phase I includes Nairobi, Mombasa, and Kisumu. Phase II includes Machakos and Kakamega.

[1]Other modern methods include female condoms and LAM.

[2]At baseline, SDM was included with traditional methods in the answer category. Therefore not possible to determine what baseline values would be.

[3]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

Table A2 Contraceptive method use by five-year age groups and phase at baseline and endline

Percentage distribution of women 15–49 by contraceptive method currently used, five-year age groups, and city group. Kenya 2010, 2014.

	Any method	Any modern method	Modern method								SDM[2]	Any traditional method[3]	Nonuse	Number of women
			Steriliz-ation	Implants	IUDs	Injectables	Daily pills	Male condoms	EC	Other modern method[1]				
Phase I baseline														
15–19	15.3	14.6	0.0	0.4	0.5	6.4	1.0	5.7	0.4	0.2	NA	0.7	84.7	680
20–24	41.9	38.2	0.1	1.2	0.7	16.6	9.3	8.7	1.3	0.3	NA	3.7	58.1	1,670
25–29	53.6	49.6	0.3	2.9	1.3	23.8	11.8	7.1	1.3	1.1	NA	4.0	46.4	1,397
30–34	58.4	51.1	0.7	4.0	2.1	23.1	14.6	5.6	0.9	0.1	NA	7.3	41.6	839
35–39	54.2	49.1	1.9	3.1	7.2	17.6	13.0	6.2	0.0	0.1	NA	5.0	45.8	598
40–44	44.4	39.0	9.4	5.4	3.9	6.6	7.8	4.0	0.7	1.2	NA	5.4	55.6	367
45–49	29.8	26.1	12.0	0.8	0.8	4.2	4.3	2.2	1.8	0.0	NA	3.7	70.2	223
Overall	45.0	40.8	1.5	2.4	1.9	17.1	9.8	6.7	1.0	0.5	NA	4.2	55.0	5,774
Phase I endline														
15–19	24.6	24.6	0.0	2.1	0.0	19.2	0.0	3.3	0.0	0.0	0.0	0.0	75.4	57
20–24	48.4	44.2	0.0	6.7	1.2	16.9	5.3	11.4	0.8	1.8	2.7	4.2	51.6	434
25–29	66.3	61.2	0.4	14.6	3.0	30.8	6.9	4.2	0.8	0.5	0.8	5.0	33.7	936
30–34	66.4	60.3	1.0	11.2	6.1	22.4	12.3	6.9	0.1	0.3	1.3	6.1	33.6	670
35–39	58.8	51.5	3.8	10.4	4.8	14.0	10.4	7.5	0.6	0.0	1.4	7.3	41.2	421
40–44	49.8	42.4	6.1	4.2	3.6	13.5	9.2	3.6	1.5	0.6	3.3	7.4	50.2	333
45–49	35.7	27.2	12.5	3.3	0.4	4.7	4.4	1.9	0.0	0.0	3.8	8.4	64.3	178
Overall	58.3	52.5	2.3	10.1	3.5	20.9	8.3	6.1	0.6	0.6	1.7	5.8	41.7	3,028
Phase II baseline														
15–19	18.2	15.9	0.0	0.2	0.2	7.5	1.4	6.2	0.0	0.4	NA	2.3	81.8	442
20–24	47.9	43.4	0.0	1.7	1.0	25.1	5.1	9.4	0.3	0.8	NA	4.4	52.1	802
25–29	57.0	51.6	0.3	5.3	1.6	31.9	6.9	3.6	1.2	0.7	NA	5.4	43.0	664
30–34	65.1	59.5	3.4	5.7	4.2	29.8	10.6	4.8	0.3	0.8	NA	5.7	34.9	462
35–39	62.5	56.0	7.0	5.8	4.3	22.4	9.9	6.5	0.0	0.2	NA	6.5	37.5	309
40–44	58.0	52.6	14.8	3.9	6.2	15.7	8.2	3.0	0.7	0.0	NA	5.4	42.0	265
45–49	51.5	44.3	18.8	0.0	8.6	7.8	5.1	4.0	0.0	0.0	NA	7.2	48.5	215
Overall	50.7	45.7	3.8	3.3	2.8	22.5	6.5	5.9	0.4	0.5	NA	5.0	49.3	3,158
Phase II endline														
15–19	22.9	22.9	0.0	16.3	0.0	2.1	0.0	4.4	0.0	0.0	0.0	0.0	77.1	46
20–24	48.9	48.2	0.0	8.6	2.7	24.3	5.5	5.9	0.6	0.5	0.0	0.7	51.1	321
25–29	59.1	54.9	0.4	16.4	2.1	26.3	5.9	3.3	0.4	0.1	0.5	4.2	40.9	540
30–34	62.8	59.1	1.8	14.9	4.7	23.5	9.3	3.6	0.4	1.0	0.0	3.7	37.2	436
35–39	75.7	69.8	5.4	16.4	6.2	25.4	11.8	3.2	0.6	0.7	0.0	6.0	24.3	270
40–44	62.9	56.6	10.5	11.5	4.8	16.5	10.7	2.0	0.0	0.4	0.0	6.4	37.1	200
45–49	52.2	46.6	20.2	3.6	4.5	7.4	7.8	3.0	0.0	0.0	0.0	5.6	47.8	138
Overall	59.6	55.6	3.8	13.4	3.7	22.3	7.9	3.6	0.4	0.5	0.1	4.0	40.4	1,952

Note: Phase I includes Nairobi, Mombasa, and Kisumu. Phase II includes Machakos and Kakamega.

[1]Other modern methods include female condoms and LAM.

[2]At baseline, SDM was included with traditional methods in the answer category. Therefore not possible to determine what baseline values would be.

[3]Traditional methods include rhythm method, withdrawal, and SDM/CycleBeads.

Table A3 Contraceptive use by method and phase at baseline and endline (significance testing)

Percentage distribution of all women ages 15–49 years successfully interviewed at baseline and endline by contraceptive method currently used, by city group. Kenya 2010, 2014.

Method	Phase I[1]			Phase II[2]		
	Baseline	Endline	P value of the difference	Baseline	Endline	P value of the difference
Any method	45.0	58.3	0.000	50.7	59.6	0.000
Any modern method	40.8	52.5	0.000	45.7	55.6	0.000
LAPM[3]	5.8	15.9	0.000	9.8	20.9	0.000
Female/ male sterilization	1.5	2.3	0.101	3.8	3.8	0.969
Implants	2.4	10.1	0.000	3.3	13.4	0.000
IUDs	1.9	3.5	0.005	2.8	3.7	0.122
Injectables	17.1	20.9	0.173	22.5	22.3	0.922
Daily pills	9.8	8.3	0.232	6.5	7.9	0.081
Male condoms	6.7	6.1	0.581	5.9	3.6	0.005
Other modern method[4]	1.5	[1.2]	0.482	[1.0]	[0.8]	0.697
Any traditional method[5]	4.2	5.8	0.030	5.0	4.0	0.110
Nonuse	55.0	41.7	0.000	49.3	40.4	0.000
Number of women	5,774	3,028		3,158	1,952	

[1]Phase I includes Nairobi, Mombasa, and Kisumu.
[2]Phase II includes Machakos and Kakamega.
[3]Implants, IUCDs, and male and female sterilization.
[4]Other modern methods include dermal patches, diaphragms, spermicide, LAM, and SDM.
[5]Traditional methods include rhythm, withdrawal, periodic abstinence, and SDM/CycleBeads.
Note: Numbers in brackets are based on fewer than 50 unweighted cases.

APPENDIX II: Study Teams

KNBS TEAM

Project management team

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City coordinators

City	Coordinator
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