EVALUATION

Evaluation of Healthy Timing and Spacing of Pregnancy and Family planning Project in Garba Tulla Ward

[April 2017]

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Dr. Peter Hayombe, Dr. Kennedy Ombuki and Eliud Kibet of Sigmund Peak International. This evaluation was produced by World Vision, agreement number APC-GM-0048, through Advancing Partners & Communities (APC), a five-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-12-00047, beginning October 1, 2012.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADP</td>
<td>Area Development Programme</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immuno Deficiency Syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td>APC</td>
<td>Advancing Partners and Communities</td>
</tr>
<tr>
<td>BC</td>
<td>Behaviour Change</td>
</tr>
<tr>
<td>BP</td>
<td>Blood Pressure</td>
</tr>
<tr>
<td>CHA</td>
<td>Community Health Assistants (formally CHEWs)</td>
</tr>
<tr>
<td>CHC</td>
<td>Community Health Committees</td>
</tr>
<tr>
<td>CHV</td>
<td>Community Health Volunteers (formerly CHW)</td>
</tr>
<tr>
<td>CHMT</td>
<td>County Health Management Team</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence Interval</td>
</tr>
<tr>
<td>CL</td>
<td>Confidence Level</td>
</tr>
<tr>
<td>CU</td>
<td>Community Unit</td>
</tr>
<tr>
<td>CVA</td>
<td>Citizen Voices and Action</td>
</tr>
<tr>
<td>DHIS</td>
<td>District Health Information System</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussions</td>
</tr>
<tr>
<td>FHI 360</td>
<td>Family Health International 360</td>
</tr>
<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HTSP</td>
<td>Healthy Timing and Spacing of Pregnancy</td>
</tr>
<tr>
<td>KII</td>
<td>Key Informant Interviews</td>
</tr>
<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
</tr>
<tr>
<td>KPC</td>
<td>Knowledge and Practice Coverage Survey</td>
</tr>
<tr>
<td>LAM</td>
<td>Lactation Amenorrhea Method</td>
</tr>
<tr>
<td>LARC</td>
<td>Long-Acting Reversible Methods of Contraception</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
</tr>
<tr>
<td>MIYCN</td>
<td>Maternal, Infant and Young Child Nutrition</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MNCH</td>
<td>Maternal, Newborn and Child Health</td>
</tr>
<tr>
<td>OC</td>
<td>Oral Contraceptives</td>
</tr>
<tr>
<td>PM</td>
<td>Permanent Method</td>
</tr>
<tr>
<td>PNC</td>
<td>Prenatal Care</td>
</tr>
<tr>
<td>SCHMT</td>
<td>Sub-County Health Management</td>
</tr>
<tr>
<td>TTM</td>
<td>The Transtheoretical Model</td>
</tr>
<tr>
<td>TFR</td>
<td>Total Fertility Rate</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WRA</td>
<td>Women of Reproductive Age</td>
</tr>
<tr>
<td>WVK</td>
<td>World Vision Kenya</td>
</tr>
<tr>
<td>WVUS</td>
<td>World Vision United States</td>
</tr>
</tbody>
</table>
Table of contents

Glossary ......................................................................................................................... i

Table of contents .......................................................................................................... ii

Figures ........................................................................................................................... iv

Tables ............................................................................................................................... v

Executive Summary ........................................................................................................ 1

Evaluation Purpose ......................................................................................................... 3

Introduction and Project background ............................................................................. 4

Evaluation Methods and Limitations .............................................................................. 5

  Evaluation target audience ......................................................................................... 5

  Conceptual framework for Barrier Analysis ............................................................... 6

  Evaluations methods and approaches ......................................................................... 7

  Study design ................................................................................................................. 7

    Study Population, Area and Sampling .................................................................... 7

    Sample size Determination .................................................................................... 8

    Data Collection ......................................................................................................... 8

    Field Enumerators Training .................................................................................... 10

  Quality control of field data ...................................................................................... 10

  Data analysis and report writing ................................................................................ 11

  Ethical principles for the assessment ........................................................................ 11

  Study limitations ........................................................................................................ 11

Results ............................................................................................................................. 12

  Response rate ............................................................................................................. 12

  Knowledge of contraception ....................................................................................... 12

  Contraception use, access, coverage and referrals ..................................................... 16

  Barrier analysis ........................................................................................................... 26

Discussions ....................................................................................................................... 39
Figures

Figure 1: Age of the Respondents

Figure 2: Number of clients of reproductive age receiving FP counseling by gender, age

Figure 3: Knowledge on contraception among WRA respondents

Figure 4: Where Women of Reproductive Age can obtain contraception

Figure 5: The proportion of benefits of waiting after abortion/miscarriage

Figure 6: Practices of contraception among Women of Reproductive Age

Figure 7: Use of contraception over the project period July 2014 to June 2016

Figure 8: Summary of monitoring data on the use of contraception

Figure 9: Integrated FP and MNCH services received in health facilities

Figure 10: Number of clients receiving FP information integrated into MNCH services at the same location and time, by gender

Figure 11: The number of community members reached with FP information by CHAs and CHVs

Figure 12: Number of clients receiving FP services integrated into MNCH services at the same location and time, by gender

Figure 13: Difficulty in remembering how to use contraception (Perceive Cues for action)

Figure 14: Difficulty in using contraception (Action efficacy)

Figure 15: Difficulty in accessing contraception (Perceived access)

Figure 16: Perceived risks on failure to provide adequately for the family

Figure 17: Perceived Severity of inability to provide adequately for the family

Figure 18: Presence of policies
Tables

Table 1: Behavior change continuum .................................................................................. 6
Table 2: Response rate ........................................................................................................ 12
Table 3: Self efficacy/what makes it easier to use contraception ........................................... 28
Table 4: What make it difficult to use modern contraception ................................................ 28
Table 5: Positive consequences- Advantages of using contraceptive .................................... 29
Table 6: Negative consequences-Disadvantages of using contraceptive ............................... 30
Table 7: Those who disapprove .......................................................................................... 31
Table 8: Who approves your use of contraception (Social norms) ......................................... 32
Executive Summary

The Garba Tulla Healthy Timing and Spacing of Pregnan-cies/Family Planning (HTSP/FP) project, was a three-year cooperative agreement funded by the Advancing Partners & Communities (APC) project, a five-year cooperative agreement funded by the U.S. Agency for International Development (USAID), beginning October 1, 2012. The project focused on advancing and supporting community programs that sought to improve the overall health-related impacts on family planning. Kenya’s unmet need for Family Planning services among women of reproductive age has remained stagnant at 24 percent since 1998 and the total fertility rate of 3.9 has persisted since 1995. The upper Eastern region of Kenya has the lowest uptake of family planning services, attributed mainly to geographic, cultural and religious barriers.

The main purpose of the end of the project evaluation was to establish the status of the project performance over the three years. This report is a result of three-week cross-sectional study design conducted between 20th March to 10th April 2017 using a mixed method approach, capturing both qualitative and quantitative data in the project area. A total of 633 respondents were interviewed through household surveys (356), barrier analysis (90), key informants’ interviews (13), and focused group discussions (174). The study population consisted of officials of implementing partners (Sub County Health Management Teams and four health facility In-Charges), and beneficiaries (women with children 0-23 months, women and men of reproductive age, religious leaders). Purposive and convenient sampling was used to select key stakeholders. Probability proportionate to size sample, simple random sampling village cluster and consecutive sampling were used to pick respondent beneficiaries in the four locations of Malkadaka, Iresa Boru, Sericho and Modogashe in Garba Tulla Sub County.

The survey experienced insecurity in the Garba Tulla location which delayed the evaluation process. The survey found that most of the project indicators improved during the implementation period. The most known contraception were the oral contraceptive pills (OCP) and male condoms both at 66.3% (CI=61.39%-71.21% at 95% CL), followed by injections at 56.3%, then female condoms at 37.6%. The women who knew at least three methods of contraception increased from 69.2% in the baseline to 73.4 % (CI=68.81%-77.99% at 95% CL) in the end line, though the difference being not statistically significant ($\chi^2=13.1, P<0.065$). The mothers who knew at least one long acting/permanent method also increased from 47.5% in the baseline to 53.3% (CI=48.12%-58.48% at 95% CL) at the end line with a significant statistical difference, ($\chi^2=73.4, P<0.001$). The percentage of women who knew the three lactational amenorrhea method criteria increased from 20.3% to 33.6% (CI=28.69%-38.51% at 95% CI), with a significant statistical difference, ($\chi^2=177.4, P<0.000$) in the end line. In the baseline, 66.4% of women would wait for 6 months before getting a baby which reduced 62.1% at the end line, with a significant statistical difference, ($\chi^2=177.4, P<0.000$). Barrier analysis cited the majority waited because they wanted good health for their children and their bodies to recover. The women who practiced modern contraception were 38.8% while 54.8% did not use any method. There was a significance
statistical difference ($\chi^2=45.9$, $P<0.000$) of the increase in use of modern methods of contraception. Women who gave birth while under 18 years reduced slightly from 39.0% in the baseline to 38.7% in the end line. Mothers who were at risk for a new pregnancy decreased to 61.2% at the end line from 68.5% the baseline. There was a low uptake of modern method contraception of 11.6% at the baseline and this rose to 18.3% in the end line with a significance statistical difference, ($\chi^2=14.2$, $P<0.011$) Mothers who received their modern contraceptive method from Community Health Volunteers increased from 37.4% at baseline to 44.3% at the end line.

The postpartum family planning acceptance increased from 41.1% at the baseline to 53.9% at the end line. Mothers who received integrated Maternal Infant and Young Child Nutrition-Family Planning services increased from 25.3% in the baseline to 32.6%. The total unmet need for FP among mothers reduced from 30.1% baseline to 27.7%. Community Health Volunteers referred clients from communities to the health facilities to access contraception. Men and women who needed LARC methods were referred to the Isiolo County referral hospital. At the four health facilities men accompanied their wives to health facilities where they were counselled together on contraception. The enablers of modern contraceptive method use by men and women included: 1) Advice from medical practitioners 33% of doers verses 2% non-doers; 2) Availability of the contraception methods in the health facility doers 38% and non-doers 9%; 3) Access to health facility 31% doers, 7% non-doers; and 4) Referral by the Community Health Volunteers Doers 18%, non-doers 4%. Barriers included: 1) lack of contraception in health facilities; 2 Community acceptance; 3) Side effects; and 3) Myths on contraception. The most common negative consequence mentioned by both the doers (38%) and non-doers (82%) was side effects. From the findings, we can conclude that with increased knowledge of men and women of reproductive health, as well as religious leaders and other influencers such as Mothers-in-Law on contraception, the uptake can improve in the community. Knowledge, perceived acceptability, and benefits of contraceptive use were nearly universal among women and men, but contraceptive use was suboptimal in Garba Tulla Sub-County.

It is recommended that: 1) there is need to expand access to and demand for a broader mix of family planning methods. The government and other stakeholders should work towards creating high demand for family planning and promote contraceptive use as a health and development agenda. 2) The community caregiver’s breastfeeding practices were low; there should be an increased awareness of the MoH country guidance on appropriate care and newborn/infant feeding practices. Some of these programming should guide mothers at delivery for postpartum contraception uptake. 3) There should be continuous encouragement of male involvement in family planning, especially in couple counselling and males accompanying their wives for Maternal Child Health (MCH) services. 4) Religious Leaders should continue to receive training in HTSP/FP information and messaging and encouraged to share those messages within the community.
Evaluation Purpose

This is an end of project evaluation report that sought to establish the extent to which the project objectives were achieved, establish the status of HTSP/FP services in Garba Tulla, HTSP coverage area and determine progress towards achievement of programme objectives as well as determine programme effectiveness and sustainability in order to improve future programming and promote learning within WV. In addition to family planning use of data collected throughout the life of the project, the evaluation report provides evidence of project effectiveness and areas for project change and adaptation. The end line used barrier analysis to understand how the different Health Timing and Spacing of Pregnancy and Family Planning (HTSP/FP) perceptions have changed from the beginning of the project through the end of the first phase (28 Feb 2017), in addition to documenting the role of men service providers and faith leaders to uptake of HTSP/FP services.

General Objective: To establish the utilization/uptake of Healthy Timing and Spacing of Pregnancy and Family Planning services in Garba Tulla coverage area.

In order to come up with a comprehensive report the evaluation set to achieve the following specific objectives:

1. Assess knowledge and practice of HTSP/FP within communities- Men and Women
   and health service providers.
2. Review and validate data on contraceptive use by sex and contraceptive method over the project period via project monitoring data obtained by Ministry of Health District Health Information System 2 (MoH DHIS2), health facilities, and community health units.
3. Assess the access of HTSP/FP services and counselling services at community (4 community units) and Health facilities levels (4 health facilities); space in health facilities for FP services (privacy, and time); Availability of FP commodities; Counselling Skills of provider; and impact of “Male Friendly Spaces” on male uptake of FP services.
4. Review the referral and counter referral system of the MoH and as implemented within the project referral from community to health facility and counter referrals to community- role of men and women community health volunteers how they target male and female clients.

---

1 We will agree if we want to assess the knowledge on HTSP and FP during the Skype Call and agree on which KPC questions to adapt and how this information will be presented
**Introduction and Project background**

Many effective contraceptive options are available in Kenya, however unintended and unwanted pregnancies still occur. The 2014 Kenya Bureau of Statistics (KNBS) report shows that Kenya is experiencing positive national trends in the areas of contraceptive prevalence rates\(^1\). However, recent studies report low contraceptive use rates (23%) among HIV-positive women in Kenya, despite stated desire for no future fertility\(^2\). The majority (57%) of HIV-positive women interviewed in the Kenya AIDS Indicator Survey 2014 had an unmet need for family planning\(^3\).

According to the Kenya Bureau of Statistics 2014, health concerns (15%), and fear of side effects (16%), were the main reasons why women reported not intending to use contraception in future. Religious prohibition (9%), husband/partner opposition (6%), distance from source (0.8%), and cost (0.4%) posed less of a reported barrier to use of contraception\(^4\). The fear of side effects such as pain and effect on libido, or health concerns such as infertility and birth defects are brought about by negative and inaccurate beliefs otherwise referred to as myths and misconceptions. In some cases, such beliefs were based on personal experiences or reports from relatives or community members, which were fabricated or exaggerated to discourage use of contraception.

The project’s goals were to increase access to and use of voluntary Family Planning services through integration of Healthy Timing and Spacing of Pregnancy (HTSP) and Family Planning (FP) into the Maternal and Child Health (MCH) Starting Strong Project via three strategic objectives:

a) Increase access to family planning services in the community by training Community Health Assistants (CHAs) and Community Health Volunteers (CHVs);

b) Increase knowledge and interest in HTSP/FP within communities by using community mobilization tools/messaging; and

c) Improve the social and policy environment for FP services and positive reproductive health behaviours by using grassroots advocacy and social accountability tools.

By building on World Vision’s (WV) existing strengths in community-based programming in HTSP/FP as well as advocacy for improved service delivery at local and national levels, the project strengthened integration of community-based programming for HTSP/FP as well as advocacy for improved service delivery at local and national levels through the Community Health Committees (CHCs) that were selected and attached to the Community Units (CUs).

The Garba Tulla HTSP/FP Integration Project, Award No APC-GM-0048 is a three-year cooperative agreement funded by the Advancing Partners & Communities (APC) project, a five-year cooperative agreement funded by the U.S. Agency for International Development (USAID) under Agreement No. AID-OAA-A-12-00047, that begun in October 1, 2012. The APC is implemented by JSI Research & Training Institute, Inc., in collaboration with Family Health International (FHI 360). The project focuses on advancing and supporting community programs that aims to improve the overall health of communities and achieve other health-related impacts, especially in relationship to family planning. The APC provided global leadership for community-based programming, executed and managed small and medium
sized sub awards, supported procurement reform by preparing awards for execution by USAID, and built technical capacity of organizations to implement effective programs.

The project was implemented in Garba Tulla, Isiolo County Kenya. Kenya unmet need for Family Planning services among women of reproductive age has remained stagnant at 24 percent since 1998 and the total fertility rate (TFR) of 3.9 has persisted (4-5 children), essentially unchanged, since 1995\(^4\). The upper Eastern region of Kenya has been reported to have the lowest uptake of family planning services, attributed mainly to geographic, cultural and religious barriers. In Garba Tulla Sub-County, the situation is even worse with any contraception method use of only 10.7% among married women and higher than average fertility rates. The estimated 43,118 inhabitants, primarily of Muslim background, live with high rates of illiteracy, malnutrition, communicable disease, food insecurity, poor terrain, and ill-distributed health facilities. This is coupled with a wide gender disparity between women and men that requires innovative ways in which community health messages is disseminated to men and women of reproductive age.

The Garba Tulla HTSP/FP project, was to contribute to increased access to and use of voluntary FP services through integration of HTSP/FP into the Starting Strong project 2. The Starting Strong project addressed key barriers to effective delivery of health services in Garba Tulla Sub-County and as such Maternal and Child Health (MCH) services were now comprehensively offered at the available primary health care facilities in the project locations.

The Garba Tulla HTSP Project worked hand in hand with the Ministry of Health (MOH) to support the strengthening of the health system both at facility and community levels by targeting four health facilities, 78 Community Health Volunteers (CHVs), four Community Health Extension Workers (CHEWs) now Community Health Assistants (CHAs), and four facility based health care providers with HTSP/FP trainings and mentorship. Each location had a Community Unit (CU) comprising of an average of 20 CHVs that provided basic health services to between 20 to 30 households.

**Evaluation Methods and Limitations**

**Evaluation target audience**

This end of project survey report is intended to assess the contribution of the project to increased knowledge and practice of HTSP. The evaluation report will be useful for World Vision to understand the success factors and learning for future projects. The report will provide a new perspective to the donor, APC, and USAID on the role of faith leaders and men in Muslim communities in influencing contraceptive use. Additionally, the MoH at National and County levels, the key partner in Maternal and Child Health, and other relevant stakeholders at National and Garba Tulla Sub-County will make reference to the results for future programming. Internally the evaluation report survey will be used by the operations team at the WV National Office and field offices. Finally, the evaluation report will be shared with the donor, JSI, and ultimately, USAID.

---

\(^2\) Starting Strong (SS) was a 3-year, Maternal and Child Health and Nutrition (MCHN) initiative privately funded by World Vision Canada (WVC) initiated in that ended in 2011. The Garba Tulla HTSP Integration project activities were integrated into Starting Strong.
Conceptual framework for Barrier Analysis

In the investigation of family planning uptake behavior in this program, the consulting team was tasked to apply the Behavior Change Model/approach. The main thrust of this approach was developed from The Theory of Reasoned Action, a theory which suggests that a person's behavior is determined, in part, by his/her "subjective norm." Subjective norm is defined as a person's "perception that most people who are important to him/her think s/he should or should not perform the behavior in question or what is called “perceived social acceptability”.

This theory is built on the basis of four important things that need to be taken into account when we try to decide the goal of health education activities. The four important things include the following;

**If a person knows what s/he should do, it does NOT mean that s/he will do it.**
Other factors influence our decisions. Having knowledge about a behavior is only one factor. People often learn about a behavior long before they are willing to adopt it.

**If a person wants to do a behavior, it does NOT mean that s/he will do it.**
Sometimes we are blocked and cannot do what we want to do and know we need to do (e.g., for lack of time, money). In addition, people often do not seek help from others (e.g., friends, health providers, God) to overcome a problem or change a habit.

**Many times we try to increase the level of FEAR that a person has in order to get him/her to do a preventive action.** However, sometimes the problem is too much rather than too little fear of the disease or problem. For example, we speak of the danger of giving birth at old age to convince a person to use the contraception. However, sometimes too much fear can keep a person from doing something. Concerning perceived severity of a disease, it is important to determine if the problem is that the person has too much fear or not enough fear.

**Many of the actions that people engage in that improve their health are NOT necessarily done for health reasons.** It is possible to encourage a person to do something that improves his/her health for reasons that are not directed at improving health (e.g., having fewer children to be able to take care). We need to find reasons that motivate (or would motivate) people to do something that will improve their health, even if the reason is not health related (e.g., birth spacing to rejuvenate the body).

1.3.1 The Behavior Change Continuum

Long-term changes in health behavior involve multiple actions and adaptations over time. Some people may not be ready to attempt changes, while others may have already begun implementing changes in their early marriages, having babies too soon or too late. The construct of “stage of change” is a key element of The Transtheoretical Model (TTM) of behavior change, and proposes that people are at different stages of readiness to adopt healthy or appropriate behaviors.

Table 1: Behavior change continuum
Evaluations methods and approaches

Study design
This study was a three-week cross-sectional design using a mixed method approach capturing both qualitative and quantitative data of the healthy timing and spacing of pregnancy.

Study Population, Area and Sampling

The study population

The study population was drawn from targeted beneficiaries and key stakeholders of the project in three levels of assessment: 1) Targeted community members, women of children 0-23 months, women and men of reproductive age, Imams, Sheik}; 2) Sub County Health Management Teams (SCHMT), 2) Community Health Assistants, and 3) Community Health Volunteers.

The four locations within the Garba Tulla Ward were all purposively picked for the study. The project areas included in the study were Iresa Boru, Sericho, Malkadaka and Modogashe locations. A sample of 384 households from the projects area was done.

Map of the study area

Probability and non-probability methods were used to sample the study population. All the four study locations were purposively sampled for the end line evaluation in the Garba Tulla Ward.
The specific 4 locations were selected through convenient sampling since some locations carried the characteristics required such as sociocultural and religious practices affecting or influencing family planning, as well as poor adolescent, maternal and child health outcomes. In the study, 4 health facilities were purposively chosen for the study in the 4 locations. The sampling frame is presented as Annex IV. The study was purposively conducted in public health facilities under the Ministry of Health Kenya, since they were where the targeted beneficiaries of the HTSP project obtain services.

**Sample size Determination**

To determine a representative sample in the event the study population is less than 10,000, Fishers model for determination of sample size below was applied.

**Equation 1:**

\[
\text{n} = \frac{(Z^2pq)D}{e^2}
\]

Where: 

- \(Z\) = is the corresponding standard score with a confidence level of 95%, which is 1.96
- \(p\) = is the occurrence level of the phenomenon under study and is equal to 0.5 where the occurrence level is not known
- \(q\) = is the absence of the phenomenon under consideration and is equal to 0.5 where the value is not known
- \(D\) = is the design effect and is equal to the number of groups to be compared in this case
- \(e\) = is the selected probability of error (error margin) of the study

Corresponding with 95% confidence level

\[
n = \text{sample size}
\]

In this evaluation, the probability error/error margin influenced high influence on the sample size. The smaller the error margin, the greater the sample size and the higher the accuracy level. The consultant used an error margin of 5% giving a 95% confidence limit resulting into a sample size of 384 households.

**Data Collection**

A comprehensive data collection was done targeting all the beneficiaries and stakeholders in the HTSP in the sampled project area. Both qualitative and quantitative data was collected using various methods. All the tools used are attached in annex 3.

**Desk review**

The desk review was done by reviewing previously undertaken baseline report, Barrier Analysis by health partners as well as DHIS2, and project annual/quarterly reports informed the evaluation exercise and report preparation.

The desk review was conducted to capture the social cultural practices that affect health seeking behaviour as well as the uptake of FP. The review included a search for relevant data to identify religious, cultural and social-economic factors that affect the uptake of FP products; health seeking behaviour that enhances or undermines uptake and access to the
FP services; and search for relevant data, especially about the Borana community and FP and Maternal and Child health outcomes.

**Household survey**
A closed and open-ended questionnaire was used to collect the quantitative information to identify enablers and challenges in family planning and maternal child health services and how the project activities addressed them. The questionnaires were administered to mothers with children 0-23 months.

**Barrier Analysis**
The Barrier Analysis is an assessment tool used in community health and other community development projects to identify behavioral determinants associated with a particular behavior so that more effective behavior change communication messages and support activities (e.g., changing social norms) can be developed. A total of 90 respondents consisting 60 women and 30 men of reproductive age were interviewed at household level. Below is an outline of the process that was used in Barrier Analysis.

1. **Defining the objective, behavior and priority group.**
   At the inception, this involved defining what the project wants to happen as a result of the Behavior Change (BC) strategy, for example, “mothers with children 0-23 months, who do not want to become pregnant, and or use a modern contraceptive method”.

2. **Developing the behavior screening questions.**
   These were non-leading questions (or set of questions) that helped determine if a respondent is a doer or a non-doer. Examples include: “Are you currently using a contraceptive method? What contraceptive method are you currently using?” etc. Attempts were made to ensure data collectors were consistent in how they defined doers and non-doers during the study.

3. **Developing questions about determinants and pre-testing questionnaires.**
   This involved identifying one or two questions for each of the determinants being studied and preparing the questionnaire and coding guide with potential responses.

4. **Organizing the field work.**
   This involved deciding in which sites in the 4 locations the research team needed to conduct interviews. This began by seeking permission from appropriate authorities especially the village chief, clinic managers and local administration. Proportionate to size sampling was to interview both women and men. The targeted population were women and men of reproductive age. Sixty (60) women were interviewed while thirty (30) men were in the four locations.

5. **Collection of field data for barrier analysis**
   The data collection involved conducting at least 45 interviews of priority group members who are doers and at least 45 interviews with non-doers, recording their responses on the questionnaire and specifying any other responses not directly

---

3This sample size is a standard sample size estimate based on the sample size needed to detect a difference between those who transition and those who do not on key behavioral determinants in the study at a significance level of p < 0.05, based on similar study designs for barrier analysis.
related to the questionnaire and writing these in the respondents own words. At the end of the research a total of 90 interviews were undertaken for the family planning behavior statement.

**Key informant interviews (KIIs)**

The Key informants are custodians of information that is important in understanding the knowledge, practices and health seeking behavior of the targeted beneficiaries. One-on-one interviews were done with 13 key stakeholders using predetermined guides with open ended questions. The KII were conducted with the one SCHMT, 4 Facility in-Charges, 4 CHEWs/CHAs and 4 Imams. The KII guides covered knowledge, attitudes, behaviour, practice and access on MNCH and Family planning services. The key informants list is in the annex IV.

**Focus group discussions (FGDs)**

In this study 12 focus group discussions were conducted with 110 stakeholders and beneficiaries. Each FGD was composed between of 8-10 respondents. Each FGD consisted of a facilitator to lead the discussion and a clerk to record the discussion. The trained data collectors, using predetermined guides with relevant themes, conducted FGDs. The target respondents for the FGDs were Community Health Volunteers (CHVs) of specific 4 health facilities’ Community Units (CUs), pregnant and lactating women and women and men of reproductive age, and Sheiks. The groups discussed factors that affected or aided the availability, access, uptake of MNCH and FP services and their results to the Maternal and Newborn Child health outcomes in the project area. List of the respondents are attached in the annex IV.

**Field Enumerators Training**

Research assistants with previous data collection experience were recruited for the exercise. A 2-day training workshop was organized to standardize data collection of research assistants and supervisors. Research assistants (14) and supervisors (5) were trained in background of the project, objectives of the data collection, research ethics, general design of the study, data collection tools (qualitative, quantitative), good data collection skills and administration of consent forms. Research assistants were given practical data collection skills through role-plays as well as pre-testing at the Sericho in Malkadaka. After pre-test, the tools were modified before the instruments were used in the field.

**Quality control of field data**

A commitment of maintaining very high quality data collection in fieldwork was undertaken by the research assistants through signing a declaration. To ensure quality data, the following measures were taken: 1) Two day comprehensive training; 2) Pre-testing and ensuring that the enumerators are familiar with terminologies; 3) Reviewing of the study tools, standardization of the training; 3) Field supervision; 4) In built mechanisms in the Open Data source Kit to cross-check consistency of the responses through skip patterns, constrains, required responses etc.; 5) A supervisor checked 100% of all data entry and there was adequate logistic planning during field work.
Data analysis and report writing
All the in-depth and focused group discussions were recoded in mobile phones for transcription. The entire transcribed field notes of key informant interviews and focus group discussions were registered in a central book. Upon registration, the data were coded and processed for entry into the computers under strict supervision of the quality controller and the lead consultant. A number of techniques were employed to analyse, truncate and triangulate the qualitative and quantitative data that were obtained from both primary and secondary data sources from the five tools. The analysis included looking at some of the emerging themes, cause and effect relationships on access, use, practice and behaviour on HTSP with the aim of using findings for developing policies, programming and benchmarking. Qualitative data were recoded and analysed using basic thematic sorting and frequencies in Nudist software.

Ethical principles for the assessment
The research team observed three universal ethical principles, including respect for participants, beneficence and justice. The purpose of this evaluation was for learning, therefore no risks were associated with participation. There were no direct benefits to participants as the benefits shall be indirect in future i.e. the findings will inform on how best to improve FP project implementation in future. All information was treated with strict confidentiality with participant’s names not being reproduced in the report.

Study limitations
The study takes cognizance of valid hurdles to completion of this work in this regard the consultants identified three limitations to the formative research process as follows:

- A major limitation to program evaluation including the execution of the formative research was language barriers between the lead research team and the local community. Reliance on the research assistants to undertake probing and capture qualitative information from the respondents was therefore limited by capacity leading to loss of some qualitative information that would have provided additional depth in the analysis of some of the behavior.
- There was insecurity in the project area which hindered the consultant to visit all the project sites, however the research assistants who were locals were able to effectively collect data. Insecurity also caused a delay of 2 months because of inability to access the communities.
- During the data collection period, there was heavy rains resulting to low movements of the vehicle; the research assistants were able to walk to the sampled villages.
Results

Response rate

The study targeted to study a total of 384 respondents, but due to insecurity, poor roads, rains a total of 356 respondents were interviewed. This is still within the margin of error envisaged in the study as shown in the table below.

Table 2: Response rate

<table>
<thead>
<tr>
<th>Locations</th>
<th>Targeted sample</th>
<th>Actual sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Iresa_Boru</td>
<td>97</td>
<td>25.2</td>
</tr>
<tr>
<td>Malkadaka</td>
<td>54</td>
<td>14.0</td>
</tr>
<tr>
<td>Modagashe</td>
<td>127</td>
<td>33.0</td>
</tr>
<tr>
<td>Sericho</td>
<td>107</td>
<td>27.8</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100</td>
</tr>
</tbody>
</table>

The age of the respondents resulted in 1.7% (n=6) mothers under 18 years, 90.7% (n=323) were between the ages of 18-34, while 7.6% (n= 27) were above 34 years of age as shown in the table below.

Figure 1: Age of the Respondents

The level of school of most of the responds was zero 47.2% (n=168), followed by completing primary at 24.7% (n=88), lower primary 13.5% (n=48), pre-schooling 4.8% (n=17), and completed secondary 2.5% (n=9). The level of schooling in the four locations of the project with statistical significant difference at $\chi^2=33.4, P<0.0001$

Knowledge of contraception

The project reached out pupils, students, teachers, men and women of reproductive age, Sheiks, Imams with training and counseling on contraception to improve their knowledge.
The figure below shows the total number of people in the HTSP project area that were reached through counseling on contraception over the three years (July 2014 - June 2016) of the project.

**Figure 2: Number of clients of reproductive age receiving FP counseling by gender, age**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14 years</td>
<td>924</td>
<td>707</td>
</tr>
<tr>
<td>15-19 years</td>
<td>2073</td>
<td>7775</td>
</tr>
<tr>
<td>20-24 years</td>
<td>8697</td>
<td>11230</td>
</tr>
<tr>
<td>over 24 years</td>
<td>12880</td>
<td>14817</td>
</tr>
</tbody>
</table>

Source: Monitoring data

The most known contraception among the women of reproductive age in Garba Tulla ward are oral contraceptive pills and male condoms both at 66.3% (n=236), followed by injections at 56.3% (n=200), then female condoms at 37.6% (n=133). The least known method was vasectomy at 11.8% as shown in the figure below. “Other methods” known 19.9% (n=71) included withdrawal, abstaining from sex, fasting, staying away from the family and traditional methods. During the FGDs with CHVs in the four locations they reported providing information on the Emergency Contraception Pills (ECP), Female Condoms, Standard Days Method (SDM) and Cycle beads. The men and women of reproductive age during the FGDs indicated that they liked more natural methods which were acceptable in their Muslim religion. One of them said “…our culture and religion encourages us to learn more on natural methods like Forr⁴, Cycle beads, Lactational Amenorea Method, Standard Days methods…”

---

⁴ “FORR” is a seasonal/cyclical movement of men from their homes to pasture the animals in far areas during the drought. It would take between 5-9 months. A place where pastoralists take their animals during dry season.
The women who knew at least three methods increased from 69.2% (n=246) in the baseline to 73.4% (n=261) in the end line. The mothers who know at least one long acting/permanent (LARM/PM) method also increased from 47.5% (n=169) in the baseline to 53.3% (n=190) at the end line.

The percentage of mothers of children age 0-23 months who knew at least one place or person where they can obtain a modern contraceptive method increased from 57.1% (n=204) to 59.4% (n=212) in the end line.

A majority 72.2% (n=258) of the mothers of children age 0-23 months knew the government health facilities as the main source of the contraception followed by the Community Health Volunteers 45.6% (n=163), then private health facilities 40.2% (n=144), and lastly the pharmacy/chemist at 15.2% (n=54). The figure below shows the knowledge of the various places where one could obtain the contraception.
On the criteria on the LAM use, the percentage of mothers of children age 0-23 months who knew the three lactational amenorrhea method (LAM) criteria, where a mother should be within the first six months of her birth, at least be exclusively be breastfeeding her baby, and has not started her menses increased from 20.3% (n=73) in the baseline to 33.6% (n=120) in the end line.

The survey also investigated the percentage of mothers of children age 0-23 months who knew that a woman should wait at least 24 months after she gives birth before attempting to become pregnant again. It was reported that 66.4% (n=237) of women would wait, while in the baseline it was noted at 62.1% (n=222) from the barrier analysis majority cited the reasons why they did this was because they wanted good health for their children and that their bodies’ were to rejuvenate. The knowledge of the benefits also increased marginally from 74.8% (n=267) to 77.2% (n=276) in the period of the project.

The knowledge that a woman should wait at least 6 months after a miscarriage or abortion before attempting to become pregnant again for the recoveries by mothers of children age 0-23 months was determined at 51.1% (n=183) during the baseline survey while at the end line it was 62.4% (n=223) giving an increase in knowledge at 11.3% (n= 40). The knowledge of the benefits increased from 54.0% (191) to 66.3% (n=235). There was a highly statistically significant at $\chi^2=87.1$, $P<0.000$ of the increase in knowledge on the benefits of waiting before becoming pregnant after an abortion. The figure below represents the benefits as expressed by the women. The majority 95.2% (n=337) of the women mentioned the reduced risk of
anaemia to be the highest while the list mentioned was the benefits of lower risk of miscarriage/abortion at 43.4% (n=154).

Figure 5: The proportion of benefits of waiting after abortion/miscarriage

Percentage of mothers of children age 0-23 months who knew at least one benefit of a woman delaying a pregnancy until the age of 18 years increased from 54.0% (n=192) to 62.8% (n=223). The knowledge of mothers of children age 0-23 months who knew at least one health problem that may occur when a woman becomes pregnant when she is over the age of 34 years of increased risk in pregnancies over the age of 34 years increased from 19.8% (n=70) to 40.7% (n=144). There was a statistical significant difference in the increase in the knowledge among the mothers at $\chi^2=2.9$, $P<0.000$. Mothers who give birth to many children runs risk. The evaluation investigated the percentage of mothers of children age 0-23 months who knew at least one health problem that may occur when a woman who has four or more children becomes pregnant, the results indicated an increased knowledge from 16.2% (n=57) in the baseline to 36.2% (n=127). During the FGDs with women in Malkadaka one woman said “… it has benefit for you, your husband and even the child, it also helps you economically, you can educate them and if you don’t space them you can’t educate them and even the father will start stealing to provide for his family because little he has cannot manage them, and the wife will become weak because she gives birth often…”

Contraception use, access, coverage and referrals

The women of reproductive age who practiced modern methods of contraception among the sampled responds were 38.8% (n=138) while 54.8% (n=195) did not use any method. Of the 38.8% (n=138) women of reproductive age who used modern contraception, 53.6% (n=191) used injections, 50.7% (n=181) used the pill, 38.4% (n=137) their spouses used male condom, 23.9% (n=85) were using implants as shown in the figure below. The KIIIs from CHAs/CHEWs and FGDs from men and women of reproductive age confirmed that the most common method in Garba Tulla Ward is Depo, the injection. As one CHEW said “…because sometime they forget taking pills on time and sometime they go to reserve to look after
their livestock, you know they are pastoralist community hence the injection is taken more than pills....” “....They complain a lot about pills but mostly we give counselling and if it is serious we give bruffen and if in excess we cancel the method administered to another....” “....Mostly they complain about heavy bleeding from depo, body loss but after many counselling they are okay at least...”.

Side effects were very important barriers to contraception uptake as discussed in the barrier analysis. The study group did not express the need for LARC. The CHVs reported that on technical FP modules they were trained to distribute pills (which included Combined Oral Contraceptive, Progesterone Only Pills, Emergency Contraceptive Pills) and other methods including male and female condoms, and Cycle beads to women and men of reproductive age in the community. In the FGDs with women they said that they often used Emergency Contraception pills where their husbands were not allowing them to use methods of contraception. During the FGD one said “...you know when you are fertile and your man insists on being with you... you can not refuse, you just agree and the next day you call the CHV to provide you with an Emergency Contraception...” This information was further confirmed by the CHVs who usually provide the Emergency Contraception Pills on demand or call.

**Figure 6: Practices of contraception among Women of Reproductive Age**

During the KII with the CHVs in Modogashe it was reported that women used natural methods like Standard Days methods, Cycle beads and Forr without allowing their men to know about it. A majority 55.2% (n=196) of the respondents got their modern contraception from the government facilities, followed by private health facilities 22.1% (n=78), and (19.7% n=70) from the Community Health Volunteers (The difference in where FP were found in the four locations of the project were had statistical significant difference at $\chi^2 = 52.7$, $P < 0.0001$). In the KII with the CHEWs/CHAs who provided a lot of counseling to the prospective women at the health facilities, a majority of them said women were the
one taking contraception but lately men too are accepting some methods like condoms after many counseling sessions they had. “...At first we had challenges explaining to them about contraceptives but now there are progress leading to uptake, this happened after we had explained to them that it’s not only the pills and injectables that were there to be used but also LARC methods are there...”.

The monitoring data reported similar trends where the LARC methods (Implants, IUDs) were used less, compared to the short term methods like Condoms as shown in the figure below.

**Figure 7: Use of contraception over the project period July 2014 to June 2016**

![Figure 7: Use of contraception over the project period July 2014 to June 2016](image)

**Source: Monitoring Data**

The table below shows the trend of the use of the contraception over the three years of the project life. There was a slight overall increase in the different types of the contraception used.
Figure 8: Summary of monitoring data on the use of contraception

Source: Monitoring data

The percentage of the most recent children age 0-23 months who were born at least 24 months after a preceding birth increased from 74.6% (n=265) in the baseline survey to 76.2% (n=271) in the end line. In the FGDs and barrier analysis, it was also reported that the mothers-in-law were influencers for couples giving birth to more children. They mentioned that the Borana population is small and therefore they need to give birth to more children. During the FGDs with Sheiks in Modogashe one of them said “…As we all know even our forefathers used to practice family planning and make sure their wife breastfeed for 2 years at list, they used to go for “Forr” (is going to look for livestock pasture far from home over a long period of time) until the baby reaches 2 to 3 years that is when they come back, but these days there is no going to “Forr” so they just have to use available methods…”

The women in the project area who gave birth while under 18 years did reduce slightly from 39.0% (n=139) in the baseline to 38.7% (n=138) in the end of project evaluation, which was supported during the KII with health facility In-Charges that marriages in the community often occur even before the age of 18 years. The proportion of births of women who were more than 34 years increased from 9.7% (35) in the baseline to 11.5% (n=41) at the end line.

The proportion of women who had more than four children in the project decreased marginally from 40.5% (144) in the baseline to 38.2% (n=136) at the end line.

The percentage of women who would wanted to wait/postpone at least for two years from now/after the birth of the child they were expecting to have another child increased from 29.5% (n=105) in the baseline to 34.1% (n= 121) in the end line.
Percentage of mothers of children age 0-23 months who were at risk for a new pregnancy at the time of the end line survey were 68.5% (n=243) while during the baseline they were 61.2% (217) indicating a decrease of 7.3% (n=26). In the FGDs most women indicated that their religion and culture were affecting the uptake of modern methods of contraception, the most commonly cited people included the Sheiks, Imams, elders and in-laws. When the Sheiks and Imams were talked to they recognized that contraception use is allowed though some methods were not encouraged. In Malkadaka FGD with Sheiks one contributed by saying “...religious leaders uses methods mentioned in the Holy Quran, but you know the world is not the same as it used to be sometimes back, these days people as we went for training few months ago, people have accepted even the use of condoms but religious leaders have said it’s not in Holy Quran and refuse people from using, but people still use,... people use this condom to space their children...”

The methods that include the insertion of items in the body are the ones which are not encouraged e.g IUDs, Implants, especially when they are not removed when someone dies and is buried with them, it affects their next life.

There is a low uptake of contraception as the percent distribution of modern contraceptive users among mothers of children age 0-23 months by modern method improved by 7.1% (n=25) from 11.6% (n=41) at the baseline to 18.3% (n=65) in the end line. When evaluated by most recent source of the methods the percent distribution of modern contraceptive methods used by mothers of children age 0-23 months was at the 32.3% (n=115) at the end line.

The evaluation also estimated the percentage of mothers of children age 0-23 months who received their modern contraceptive method from a community health volunteer since the project trained and enhanced the CHVs efforts to reach the community. There was an increase from 37.4% (n=133) to 44.3% (n=156) at the end line. CHVs reported that they usually distribute mostly condoms and pills to the community. In the KII with a CHEW in Iresa Boru he reported by saying “...the short methods like condoms and pills are available in our health centers but the long method because of unavailability of the trained professional who can do insertion like implants people go for short method like condoms and whatever but because of unavailability of the methods like IUD and implant and that are technically inserted they don’t use it here that is why they use short (term) methods...”

The continuation rate of mothers of children age 0-23 months who had been using a modern contraceptive method for the past 12 months or longer increased from 46.3% (n=163) to 51.3% (n=181) due to the efforts of the CHVs.

The postpartum family planning acceptance by percentage of mothers of children age 0-23 months who received a contraceptive method(s) up to 12 months postpartum increased from 41.1% (n=145) at the baseline to 53.9% (n=190) at the end line. During the KII with the Iresa Boru health facility in charge he said “...we are trying to encourage men to bring their women to the clinic for family planning by ensuring that women who come with their spouses are not made to queue like the rest and are served promptly”...
The family planning acceptance via integrated services by mothers of children age 0-23 months who attended certain health services (ANC; delivery; pre-discharge; postnatal care; child immunization; well-child visits) in the 6 months preceding the survey who accepted a modern contraceptive method either during the time of service delivery or as a follow-up to the referral during that service increased from 20.8% (n=73) at the baseline to 35.1% (n=123) at the end line (with statistical significant difference at $\chi^2=71.8$, $P<0.000$).

In regards to integrated MNCH-FP counseling, the percentage of mothers of children age 0-23 months who reported having received counseling on both maternal, New child Health and Family Planning information or messages during one or more of the MNCH services in the 6 months preceding the survey increased from 25.3% (n=88) during the baseline to 32.6% (n=114) at the end line. The figure below shows proportion of the integrated services received by the women during their visits to health facilities.

**Figure 9: Integrated FP and MNCH services received in health facilities**

<table>
<thead>
<tr>
<th>Integrated services</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANC</td>
<td>60.1%</td>
</tr>
<tr>
<td>Delivery</td>
<td>36.2%</td>
</tr>
<tr>
<td>PNC</td>
<td>42.8%</td>
</tr>
<tr>
<td>Immunization</td>
<td>74.6%</td>
</tr>
<tr>
<td>Well Child Baby</td>
<td>39.9%</td>
</tr>
<tr>
<td>Growth Monitoring</td>
<td>28.9%</td>
</tr>
</tbody>
</table>

During the period of July 2014 to June 2016 the project reached a total of 12,591 with faming planning information integrated with MNCH as shown in the figure below. Males were 5,187 (41.2%) who were reached by the project while females were 7,404 representing 58.8%.

**Figure 10: Number of clients receiving FP information integrated into MNCH services at the same location and time, by gender**
Source: Monitoring data

Contraception coverage

The percentage of mothers of children age 0-23 months who reported discussing family planning with a health worker (doctors, nurse, midwife, CHV) in the 12 months preceding the survey increased from 32.5% (n=113) at the baseline to 35.7% (n=124) at the end line.

Family planning integration with other health services was one of the objectives of the project implementation. The evaluation found out that the percentage of mothers of children age 0-23 months who reported receiving information, messages, referrals, or a contraceptive method during one or more of the following services in the 6 months: antenatal care; delivery; pre-discharge; postnatal care; child immunization; well-child visits increased from the 47.8% (n=166) to 52.9% (n=184) at the end line. At the four health facilities that partnered with the project, men were able to play games such as darts at the facilities. At these “male friendly spaces” men were counselled by the facility staff on contraception and accepted majority of them picking condoms as they left in the evening.

The Community Health Volunteers were actively engaging the community members on a number of health issues. It was reported that the percentage of mothers of children age 0-23 months who reported discussing family planning with CHVs or who were given a referral for family planning services during any of these discussions with the CHVs in the 12 months preceding the survey improved from 17.2% (n=60) at baseline to 32.4% (n=113) in the end line.

The figure below shows a total of 20,422 community members reached with family planning information by Community Health Assistants and other health workers in health facilities (5,647, 27.6%) and those reached by the Community Health Volunteers in the community (14,775, 72.4%).
Figure 11: The number of community members reached with FP information by CHAs and CHVs

Source: Monitoring data of July 2014 to June 2016

The reason for non-use that were given during the FGDs and KIIIs included very strong cultural and religious influence among the community members. The percentage of mothers of children age 0-23 months who wanted to either postpone or avoid their next child but were not using a contraceptive method, by reasons for nonuse reduced from 54.8% (n=191) at the baseline to 40.3% (n=140) at the end line. The level of postponing pregnancy in the four locations of the project had statistical significance difference at $\chi^2=137.2, P<0.000$.

The total unmet need for family planning among mothers of children age 0-23 months who (1) were pregnant and wanted to either postpone or avoid their next child, or (2) who were fecund and wanted to either postpone or avoid their next child but were not using a contraceptive method reduced from 30.1% (n=105) baseline to 27.7% (n=97) at the end line, however the unmet need for limiting barely remained the same at 9.6% (n=33) and 9.2% (n=32) at the baseline. At the Iresa Boru FGD with the Sheiks one contributed by saying “...even before these things are practiced, in Borana culture if you can not space your children they will not grow well but if you space your children, the children will grow with good health......he has time with his mother, this means what sheikh has already said that you went for Forr until your child starts to walk or ask to be breastfed by her mother you can tell that the child has grown up for another child to be desired...”

Contraception Access
All the four health facilities in the project area had supply of contraception from the government Kenya Medical Supply Authority (KEMSA) supplier. However, the health facilities in-Charges indicated that sometimes they suffered stock out of the most highly consumed contraception like injectables. The four facilities provided services on LARC that included IUD, Depo, Norplant/Jadelle, implants. The four health facility in-Charges were trained on how to counsel and provide LARC methods. During the FGDs with women of children 0-23 months, they indicated that the contraception were available within the reach of most women since the four health facilities were within the community. The KIIIs with the CHAs and health facility in-Charges reported that they did not offer services on female and male sterilization within the four health facilities. This was further reported by the FGDs with women of children 0-23 months.

The project has had extensive experience in community-based distribution (CBD) of health services, particularly the distribution of family planning commodities using the CHVs. This approach has several advantages over clinic-based services: it makes services available and accessible at the home setting, and this had increased acceptance and particularly continuation rates of contraception. The involvement of locally known individuals (CHVs) in the service removes the fear of strangers discussing sensitive matters.

The monitoring data of July 2014 to June 2016 indicated that 4,238 female and 2,476 males received family planning services integrated into MNCH services.

Figure 12: Number of clients receiving FP services integrated into MNCH services at the same location and time, by gender
Referrals and Counter referrals

The health system in Kenya is organised around six levels of care based on the scope and complexity of services offered. The first level comprises community units (CUs) that are a collection of households staffed by volunteer community health workers. Activities at the community unit level focus mainly on promotive health through health education, treatment of minor ailments, and identification of cases for referral to health facilities. Levels 2 (dispensaries) and 3 (health centres) offer primary health care services. These levels of care form the interface between the community and the higher level facilities. These facilities offer basic outpatient care, minor surgical services, basic laboratory services, maternity care, and limited inpatient facilities. They also coordinate the community units under their jurisdiction. Levels 4 and 5, the secondary referral facilities, form the county referral facilities. They offer a broad spectrum of curative services, and some are also health training centres. Level 6 constitutes the tertiary referral facilities that offer specialised care and specialised training to health workers. The national government manages these facilities, but they are semi-autonomous organisations.

It was reported by the Sub-County Health Management Teams (SCHMTs) and CHEWs/CHAs that for some LARC methods prospective men and women of reproductive age were referred to the Isiolo County referral hospital and other health facilities where they obtained the contraception. From the FGDs, CHVs reported referring clients to the health facilities to access Tubal ligation or Vasectomy as contraception. The counter referrals were used where the men and women who were referred by the CHVs to the four health facilities were furthered referred to Isiolo Sub County and other health facilities for methods that were not available in Garba Tulla Sub County or where there were no

---

5 Counter referrals is when a referred client from the community to a health facility is further referred to another health facility due to lack of contraception, skill or both to provide the method to a prospective client.
adequate skills and equipment to offer the contraceptive services. The men also received condoms and they left the health facilities in the evening. There were various activities that improved male involvement in the matter of family planning and maternal child care services. During the FGDs with Men in Sericho when asked if men help their women to accept contraception one of them said, “...yah they do, as you know if we went together we will get advice together and agree on everything that we see is good for our baby so it won’t bring difference between us, but if she decides alone let’s say like using family planning it will bring problems because you may want to have another child and she is using family planning so it’s like bulleting a wall...”

The men and women who were referred for example for IUD, they were able to receive from the Isiolo Sub county hospital.

The Isiolo Sub County Health Officer reported that there is no coordination structure exists for the oversight of the implementation of the referral strategy at the national and county levels; Incentives exist to use lower-level facilities, such as provision of services free of charge in levels 2 and 3 facilities, but Kenya does not have a referral bypass policy. It has no policy to require clients to report at levels appropriate for the management of their health needs, which often results in inappropriate self-referral to higher levels of care.

A lack of quality standards and performance monitoring tools for referral services affects the auditing of the referral system and development of continuing education for referral service providers.

The Isiolo County lacks a written policy on health financing for referrals. No policy guidelines specify who is responsible for financing the referral service or the care provided at a receiving facility. During the FGDs with women it was reported that some of them lacked transport to take them to the facilities they were referred to. Usually transport for referral is only available for patients who require emergency services. Currently the County health sector lacks a transport policy that defines the type and number of vehicles required for an effective, efficient transport system at the different levels of health service delivery; a maintenance programme; procedures for the safe and economical use of vehicles, including ambulances; and guidelines for vehicle replacement.

Some health facilities in the Isiolo Sub County including the four health facilities the project partnered with provide inadequate services for their level of care, and they have insufficient human resources and infrastructure for their service norms and standards. These deficits affect the efficient management of referrals. Government health facility stock outs represent a missed opportunity to get family planning methods, especially long acting reversible contraceptives, to women and men of reproductive age.

**Barrier analysis**

**Description of priority and influencing groups**

**i) Men and women of reproductive age**
• **Demography and Religion:**
In Garba Tulla Ward, the men and women of reproductive age consist largely of farmers and pastoralists over a sparsely populated area. A majority of the men and women are illiterate or semi-literate and are between the ages of 16 – 45 years. A majority of the beneficiary population are Muslims who register very high attendance for their religious services, both for women and the men. They largely speak Borana language with limited Kiswahili and English.

• **Economic activities:**
Even though livestock keeping, especially cattle, is the mainstay of most households in community, the women also keep chicken and engage in milk vending as a source of income as well as traditional rain-fed farming of small plots. The main crops include corn (maize), millet, cassava (manioc), peanuts (groundnuts), and okra. The women and men in these communities depend a lot on trading of firewood and Miraa/Khat at the local. *(Catha edulis (khat, qat from Arabic)) is a flowering plant native to the Horn of Africa and the Arabian Peninsula. Among communities from these areas, khat chewing has a history as a social custom dating back thousands of years*. Khat contains the alkaloid cathinone, an amphetamine-like stimulant, which is said to cause excitement, loss of appetite, and euphoria at the local markets.

• **Common desire:**
Most of the reproductive aged men and women would like to be good mothers/fathers and wives/husbands, raise healthy children and enjoy a comfortable, long life with their family and let everything be controlled by Allah.

ii) **Barriers to contraceptive**
In Garba Tulla, a total of 17 determinants were investigated out which the research team found that sixteen were the most significant determinants that influenced the behavior for the adoption of contraception.

Admittedly, it was clear that religion and culture on the contraception was not a significant determinant as the difference in the range of doers and non-doers for the determinants were very low 7% even though 13% of the non-doers highlighted culture.

In terms of what makes it easier for men and women of reproductive age to use a modern contraceptive method there were statistically significant differences between doers and non-doers who mentioned the advice from medical practitioners 33% of doers verses 2% of non-doers (OR 22.00, p-Value 0.000). The doers are 8.8 times more likely to give this response than non-doers. The doers were 38% were more likely to say that the availability of the family planning methods in the health facility is a barrier factor than non-doers 9% (OR 3.11, p-Value 0.001). The accessibility to health facilities were cited by more doers, 31% than non-doers 7% (OR 6.20, p-Value 0.000), Doers are 4.5 times more likely to give this response than Non-doers. Referral by the Community Health Volunteers was cited by more doers 18% than non-doers 4% (OR 4.65, p-Value 0.045); doers are 3.5 times more likely to give
this response than non-doers. There was statistical significant difference that non-doers did not know or there was nothing that would make it easier to use a modern contraceptive than doers (OR 12.10, p-Value 0.004) (OR 9.27, p-Value 0.000) respectively as shown in the table.

Table 3: Self efficacy/what makes it easier to use contraception

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Doers %</th>
<th>Non-Doers %</th>
<th>Diff.</th>
<th>ERR</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of the FP at the health Centre</td>
<td>38</td>
<td>9</td>
<td>29</td>
<td>4.55</td>
<td>0.001</td>
</tr>
<tr>
<td>The price of Family Planning</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>Knowledge on Family Planning methods</td>
<td>9</td>
<td>13</td>
<td>-4</td>
<td>0.66</td>
<td>0.370</td>
</tr>
<tr>
<td>Advice from medical practitioners</td>
<td>33</td>
<td>2</td>
<td>31</td>
<td>8.88</td>
<td>0.000</td>
</tr>
<tr>
<td>I do not know</td>
<td>2</td>
<td>22</td>
<td>-20</td>
<td>0.09</td>
<td>0.004</td>
</tr>
<tr>
<td>Nothing</td>
<td>2</td>
<td>38</td>
<td>-36</td>
<td>0.04</td>
<td>0.000</td>
</tr>
<tr>
<td>Easy use of Family Planning</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2.61</td>
<td>0.308</td>
</tr>
<tr>
<td>Access of health facility</td>
<td>31</td>
<td>7</td>
<td>24</td>
<td>4.51</td>
<td>0.003</td>
</tr>
<tr>
<td>It reduces menstruation</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1.00</td>
<td>0.753</td>
</tr>
<tr>
<td>Referral by Community health volunteers</td>
<td>18</td>
<td>4</td>
<td>14</td>
<td>3.53</td>
<td>0.045</td>
</tr>
<tr>
<td>I wanted to space my children</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>It easy to handle</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2.61</td>
<td>0.308</td>
</tr>
<tr>
<td>Long term methods you do not have to remember it</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>My child needs attention</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1.00</td>
<td>0.753</td>
</tr>
<tr>
<td>Friendly health workers at the health center</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>We both agree to use the method</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>1.00</td>
<td>0.692</td>
</tr>
<tr>
<td>Information on use to avoiding unwanted pregnancy</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1.00</td>
<td>0.753</td>
</tr>
</tbody>
</table>

In the investigation of barriers for contraceptive practice among men and women of reproductive age most (29%) of those who have adopted (doers) the practice cited the availability of the family planning methods in health facilities as a major barrier to the adoption of this behavior (OR 17.88, p-Value 0.000). Doers are 7.9 times more likely to give this response than non-doers. Lack of community acceptance due to the religious inclination was second at 16% for the doers (OR 8.11, p-Value 0.029). Doers are 5.5 times more likely to give this response than non-doers. During the FGDs one of the Sheiks said how they have been trained through the project’s life “…even our religious leaders (referring to Imams) have been taken to a seminar and trained about family planning and also in Islamic Religion it’s not against family planning even our beloved Prophet used to practice it…..a method like withdraw, he did not call it child planning because planning is with Allah so spacing is allowed and after the training they do even advice the community when they come for their advice so even religious leaders contribute on the way.” This statement from Sheik showed that knowledge on contraception has been passed through the project.

Table 4: What make it difficult to use modern contraception

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Doers %</th>
<th>Non-Doers %</th>
<th>Diff.</th>
<th>ERR</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The positive consequences of family planning were mentioned more by doers than non-doers. Fifty-three percent of doers said that the use of contraceptive made their baby grow healthy, while amongst non-doers 4% mentioned this. There was a statistical significant difference between the doers and non-doers (OR 24.57, p-Value 0.000). Doers are 11.1 times more likely to give this response than non-doers. Most of the non-doers (33%) said they did not know of any advantages of contraception use, while only 2% of doers did not know? any advantage of contraception (OR 12.21, p-Value 0.000). Non-doers are 12.5 times more likely to give this response than doers. Twenty-seven percent of doers mentioned that the use of contraception allows parents to make savings, while only 2% of the non-doers mentioned the advantage (OR 16.00, p-Value 0.001). Doers are 7.4 times more likely to give this response than Non-doers. Better education of children was mentioned by 20% of the doers as an advantage while only 2% of non-doers mentioned it (OR 11.00, p-Value 0.008). Doers are 6 times more likely to give this response than non-doers. The other advantages were not significantly different among the doers and non-doers as can be seen in the table below.

Table 5: Positive consequences- Advantages of using contraceptive

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Doers %</th>
<th>Non-Doers %</th>
<th>Diff.</th>
<th>ERR</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby grow very well/ good health</td>
<td>53</td>
<td>4</td>
<td>49</td>
<td>11.10</td>
<td>0.000</td>
</tr>
<tr>
<td>Allows parents to make savings</td>
<td>27</td>
<td>2</td>
<td>25</td>
<td>7.43</td>
<td>0.001</td>
</tr>
</tbody>
</table>
The men and women of reproductive age named many negative consequences of family planning ranging from the community myths and misconceptions, lack of knowledge, and acceptance as shown in the table below. The most common negative consequence mentioned by both the doers (38%) and non-doers (82%) were that family planning causes side effects. The side effects mentioned included excessive bleeding, headaches, loss of weight, loss of appetite, fatigue, nausea, it makes people weak, and causes the skin to be darker, among others. There was a statistical significant difference between doers and no doers (OR 0.13, p-Value 0.000) who said that family planning causes side effects. Non-doers are 5.8 more likely to give this response than Doers. The second most important disadvantage mentioned were the development of cancer by 27% of non-doers and 9% of doers (OR 0.27, p-Value 0.026) and no disadvantage doers 20% while non-doers 2% (OR 11.00, p-Value 0.008). Doers were 13.6 times more likely to give this response than non-doers. The third most important negative consequence was that family planning could lead to divorce with non-doers 18%, while doers 4% (OR 0.22, p-Value 0.045).

Table 6: Negative consequences-Disadvantages of using contraceptive

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Doers %</th>
<th>Non-Doers %</th>
<th>Diff.</th>
<th>ERR</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad side effects (excessive blood loss, headache)</td>
<td>38</td>
<td>82</td>
<td>-44</td>
<td>0.17</td>
<td>0.000</td>
</tr>
<tr>
<td>Development of cancer</td>
<td>9</td>
<td>27</td>
<td>-18</td>
<td>0.29</td>
<td>0.026</td>
</tr>
<tr>
<td>Can cause barreness</td>
<td>4</td>
<td>11</td>
<td>-7</td>
<td>0.40</td>
<td>0.217</td>
</tr>
</tbody>
</table>
Condom reduces sexual pleasure 11 24 -13 0.42 0.083
It delays pregnancy/It take time to get pregnant 11 20 -9 0.53 0.192
It’s costly to find long method 4 2 2 1.86 0.500
Can lead to divorce 4 18 -14 0.24 0.045
I don’t know 2 11 -9 0.20 0.101
Lack of knowledge by community 11 4 7 2.32 0.217
None 20 2 18 6.00 0.008
People talk about you. 7 4 5 1.46 0.500
Family acceptance & goes against religion 7 9 -2 0.75 0.500
Sometimes not available in our remote villages 9 2 7 3.28 0.180
Hard to remember, I missed once & get pregnant 4 2 2 1.86 0.500
Leads to less children 2 7 -5 0.34 0.308

Relatives were the most people reported to disprove of those who use modern contraceptive family planning methods. There were significant differences among doers and non-doers who said their husbands and sheiks disapproved them using FP methods, as seen in the table below. Both husbands and Sheiks disapproved (20%) of non-Doers while (4%) disapproved amongst doers, (OR 5.38, p-Value 0.025), (OR 11.00, p-Value 0.025) respectively. Non-doers are 4.9 more likely to give this response than Doers. Mothers-in-Law were the most highly rated people who disapproved both doers (29%) and non-doers (36%) although there was no statistical difference. The In-Laws whether (women or men) had a lot of influence on men and women of reproductive age as they disapproved 20% doers and 33% of non-doers. According to some sheiks, the Holy Quran does not mention any contraception methods however, there are those that they are perceived not to be good especially the ones that are inserted and become part of someone’s body (implants and/or IUDs).

### Table 7: Those who disapprove

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Doers %</th>
<th>Non-Doers %</th>
<th>Diff.</th>
<th>ERR</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family</td>
<td>13</td>
<td>20</td>
<td>-7</td>
<td>0.64</td>
<td>0.286</td>
</tr>
<tr>
<td>My mother</td>
<td>16</td>
<td>24</td>
<td>-8</td>
<td>0.60</td>
<td>0.215</td>
</tr>
<tr>
<td>The elderly</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>1.46</td>
<td>0.500</td>
</tr>
</tbody>
</table>
Table 8: Who approves your use of contraception (Social norms)

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Doers %</th>
<th>Non-Doers %</th>
<th>Diff.</th>
<th>ERR</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health staffs</td>
<td>13</td>
<td>4</td>
<td>9</td>
<td>2.73</td>
<td>0.133</td>
</tr>
<tr>
<td>Colleagues</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>1.90</td>
<td>0.338</td>
</tr>
<tr>
<td>Women</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2.61</td>
<td>0.308</td>
</tr>
<tr>
<td>Community health workers</td>
<td>9</td>
<td>13</td>
<td>-4</td>
<td>0.66</td>
<td>0.370</td>
</tr>
<tr>
<td>Friends</td>
<td>20</td>
<td>4</td>
<td>16</td>
<td>3.92</td>
<td>0.025</td>
</tr>
<tr>
<td>My husband</td>
<td>53</td>
<td>9</td>
<td>44</td>
<td>7.43</td>
<td>0.000</td>
</tr>
<tr>
<td>Sister in law</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>Age mates who are male</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2.61</td>
<td>0.308</td>
</tr>
<tr>
<td>My sister</td>
<td>9</td>
<td>2</td>
<td>7</td>
<td>3.28</td>
<td>0.180</td>
</tr>
<tr>
<td>My wife</td>
<td>20</td>
<td>4</td>
<td>16</td>
<td>3.92</td>
<td>0.025</td>
</tr>
<tr>
<td>My siblings</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>Only myself</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1.86</td>
<td>0.500</td>
</tr>
<tr>
<td>Sheikhs</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>2.61</td>
<td>0.308</td>
</tr>
</tbody>
</table>

There was no difference between those who approved or disapproved men and women of reproductive age when they took contraceptive (χ²=0.067, P=0.724). Fifty-three percent of (women) Doers got approval from their husbands to use contraception, while 9% of Non-doers were approved by their husbands; this showed a statistical significant difference between the doers and non-doers (OR 11.71, p-Value 0.000). Doers are 7.4 times more likely to give this response than Non-doers. Friends were also formidable influencers especially to users of contraception. The table below shows in the community approves those who use contraception. The friends were identified to be very important influencers to contraception uptake, this is because they meet and interact often usually through water points, market day and auction days, Miraa bases for men, salon, food for work activities, mother to mother support groups.

When the respondents were asked how difficult it was to remember how to use a modern contraceptive method, 44% of non-doers said it was very difficult while only 18% of the doers said it was very difficult. Non-doers are 2.4 times more likely to give this response than doers. Thirty-eight percent of doers said it was somewhat difficult to remember how
to use the contraceptive. Forty-two percentage of the doers said that it was not difficult at all to remember to use modern methods as seen in the figure below.

Figure 13: Difficult in remembering how to use contraception (Perceive Cues for action)

Men and women of reproductive age who have adopted the use of contraception on the were 5.4 times more likely to mention that they saw no difficulty in taking contraception (71% Doers and 13% non-doers). Non-doers are 3.6 times more likely to say that it is difficult to use contraception than doers (33% non-doers and 9% doers) as shown in the figure below. They were also 3.6 times more likely to cite their husbands/wives and community health volunteers as those who are supportive of their behavior, making husbands/wives and CHVs a strong influencing group for the adoption of this behavior.

Figure 14: Difficulty in using contraception (Action efficacy)
In terms of access to modern contraception, 36% of the non-doers reported that it was very difficult to access the contraception they needed as opposed to only 22% of the doers giving a difference of up to 14%. These findings mean that access to modern contraception is a significant perceived barrier to adoption on the use of contraceptive.

**Figure 15: Difficulty in accessing contraception (Perceived access)**

In terms of perceived susceptibility or perceived risk, 27% of the doers were confident it is not difficult to be able to provide adequately (housing, clothes, food, education, dowry, land) for their children, while 11% of non-doers said it is not difficult at all as shown in the figure below.

In terms of perceived susceptibility or perceived risk, 27% of the doers were confident it is not difficult to be able to provide adequately (housing, clothes, food, education, dowry, land) for their children, while 11% of non-doers said it is not difficult at all as shown in the figure below.
Most of men and women of reproductive age placed a high risk premium with up to 62% doers and 40% non-doers feeling it was very serious if they were not able to provide adequately (housing, clothes, food, education, dowry, land) for their children. Almost the same (33% to 31%) doers and non-doers respectively mentioned it was somewhat serious. The non-doers were 7.3 times more likely to say that it is not serious not able to provide adequately (housing, clothes, food, education, dowry, land) for their children than doers (29% non-doers, 4% doers).

In terms of policies, 87% of doers identified that there were no policies guiding the use of contraception in the project area (OR 6.77, 0.047). Amongst Non-Doers 98% (OR 6.77, 0.047) say there were no policies affecting their uptake of contraception.
Implications for programming

One clear finding from the barrier analysis on contraceptive use was that standard approaches to family planning promotion focused on educating people about the positive and negative consequences of correct family planning practices, however it has not been able to result in the desired positive, sustained practice among this targeted group. The results also demonstrate that family planning practices are determined by a range of factors and are deeply-rooted in the environment (access to health facilities), culture, and religion in which the practice takes place. Among the non-doers, the most significant barriers to the adoption of family planning practice were ranked from highest to lowest as follows;

1. Low confidence levels in knowledge and skills to use family planning methods;
2. Perceived side effects (excess bleeding, headache, crumps, loss of appetite) etc.;
3. Difficulty in remembering to take the short term FP methods like pills;
4. Increased perception that family planning cause diseases like cancers;
5. Low premium on their risks and vulnerability to high number of children in a family.

In the design of the Behavior Change Framework, these findings point out to the following six most important bridges to activities;

1. Increasing the ability of men and women of reproductive age to access FP methods;
2. Reducing the perception that accessibility to health facility makes it easy to use FP;
3. Increasing the perception that family planning enhances the health of the whole family;
4. Increasing the ability of men and women of reproductive age to remember to take FP;
5. Increasing the perception among men and women of reproductive age that HTSP practices reduce vulnerability to economic shocks;
6. Reducing the perception that Garba Tulla culture, tradition and religion (Islam) is against family planning;
7. Increasing the access of health care through qualified health workers who can provide contraceptives, rather than referring women to distant facilities for services;
8. There is a strong need for Community Conversations/Dialogue Days to reach the mothers-in-law who influence contraceptive uptake.

Relevance of the project
Isiolo County has one of the highest unmet need of contraception in Kenya and with poor access to health services. The Garba Tulla sub county and Garba Tulla ward is predominantly Muslim region with negative perceptions on contraception, coupled with early or child marriages. The promotion of male involvement as was done in the HTSP/FP project was important in improving MNCH outcomes in the area.

Effectiveness
The project had well set smart objectives, which focused on resources from the community as CHVs and CHAs that increased the success seen in the HTSP project. The project conducted baseline as Lot Quality Assurance survey (LQAS). These enabled the project to have benchmarks upon which its performance is being measured. Having clear processes in place made it easy for projects to be rolled out in the target areas and also enabled the actions to be replicated elsewhere and even scaled up. The project had the community (WRA, Men, Sheiks, Imams and adolescent boys and girls), 4 health facilities, MoH staff, the sub County administration as core partners. This enabled the coordination of the project activities that were undertaken. Emphasis partnerships was best put on: 1) Defining the roles and responsibilities of all partners and team members; 2) Monitoring the project management process; 3) Identifying timelines and project milestones; 4) Developing a detailed budgets; 5) considering potential partnerships.

The project organized and reported the projects progress through annual reports and quarterly reports. However we only reviewed three out of a possible twelve quarterly reports. The project organized quarterly review meetings with stakeholders which validated the project activities thus enhanced efficient decision making on progress.
The project also facilitated monitoring and supportive supervision of 30 CHAs by Sub County Health Management Team (SCHMT) in the 4 CUs and linked them with 4 health facilities. This was done through assessing each CU report using existing standardized monitoring tools which are used by MoH and partners. This included review of the on-the-job-training (OJT) tools, Continuous Mentoring and Evaluation (CME) tools, CHV reporting tool (MoH 514), and the CHAs summary reporting tool (MoH 515). The monitoring and supportive supervision also involved tracking performance of project indicators as well identifying training needs. As a training need it was noted that out of the 10 Nurses supervised, only 4 could insert an implant while only one could insert IUD.

**Sustainability**

The MoH, County government and other key development partners (KRCS) in the community will be able to continue some of the activities of the HTSP project. The project trained many CHVs, CHAs, Facility In Charges, teachers, men and women of reproductive age, school children that would enable the activities on contraception in the community. The CHVs were also trained to elicit health problems in the community and to refer them to clinics; this included identification of malnourished children, as well as provision of de-worming tablets. They were also trained to convey health education on various health conditions, including STIs, reproductive organ cancers, and to encourage early reporting of symptoms at health facilities.

The project also created a demand for contraception which will continue to strengthen the supply chain of the contraception to maintain the access and use in the community. The darts and arrows at the male corners in the four health facilities will also continue to make men visit the health facilities for contraception.
Discussions

Contraception

Contraceptive prevalence and the unmet need for family planning are key indicators for measuring improvements in access to reproductive health. When women have access to family planning, everyone benefits. Women and children are healthier. Families and communities can invest more in education and health care, and poverty is reduced.

Many women intend to get pregnant. Each year an estimated 123 million succeed. But a substantial additional number of women around 87 million become pregnant unintentionally. Some 30 years of effort to bring contraceptive services within people’s reach have not been in vain. In developing countries, contraceptive prevalence has risen from around 10% in the early 1960s to 59% (Kenya 58%) at the turn of the millennium. In this project’s three years the contraceptive prevalence increased from 11.6% to 18.3%. The total unmet need for FP reduced from 30.1% b to 27.7%. The unmet need for spacing also reduced from 20.5% to 17.2%.

For the 3 years the HTSP project was implemented, WVK has been changing the way the community thinks about voluntary family planning. The community reported renewed community support for high-quality health programs that provided information, services, and contraceptive supplies and that the partners (WVK and MoH) played an important role in expanding access to contraception especially the long-acting reversible contraceptives (LARC) or permanent methods (PM).

The most commonly used contraception was Depo-Provera at 53.5%. A majority of the men and women of reproductive age in this end line reported that side effects were main barriers of contraception intake.

Mothers were able to name the susceptibility risks involved when you give birth over the age of 34 years like higher risk of Preeclampsia, premature birth, low birth weight babies, and with birth defects etc. Knowledge of increased risk in pregnancies over the age of 34 years increased from 19.8% to 25.7%.

Our findings indicate that 32.4% of mothers discussed contraception with CHVs during the community based outreaches likes action days, dialogue days, household visits, Chiefs’ Baraza etc. Given the strong connection between having such discussions and using contraceptives, the 67.6% of mothers who do not have conversations about contraceptives are heightening their risk for being involved in an unintended pregnancy.
Sixteen determinants in the barrier analysis studied were significantly associated with uptake of the contraception among men and women of reproductive age (although for opportunity costs and barriers, the significant associations are mediated by relationship and partner characteristics). These findings reinforce the relevance of using an ecological approach/migration patterns to better understanding predictors of sexual communication. We found no gender differences in the determinants that affects uptake of contraception the men and women of reproductive age i.e. men cited their wives, mother in laws, Sheiks and Imam to be barriers and at the same time women also cited their husbands, mother in laws, Sheiks and Imam.

A complete sexual history and a reproductive health plan make it much easier for health care providers to deliver patient-centered care, establish trust, and help patients use contraception effectively. But there may be barriers to overcome within a health care setting before the most effective patient-centered care can be delivered. Health care providers should take the time to review contraceptive options with women who are switching methods or electing to use FP methods for the first time. Many women choose either condoms or no contraception at all because they do not know about other highly effective options. It is also important for health care providers to be available to discuss side effects after patients start using certain methods.

In the report men and women of reproductive age noted how unskilled health workers oftentimes referred them to long-distance health facilities in the Isiolo County for methods like tubal ligation and Vasectomy and in cases where they were skilled they did not have the necessary equipment for the surgery. Health care professionals often underestimate the profound effect they can have on a woman’s use of contraception. Unfortunately, the health care system itself can create barriers for women who are seeking contraception. Clinician limitations presented another barrier and included lack of comfort with, or knowledge about, some contraceptive methods (patch), lack of experience with certain methods like IUD insertion and removal, and lack of time to discuss methods with patients.

Westoff C. F., (2001) Indicated that the most commonly given reason in about 45% of cases for not using a contraceptive method is a perceived lack of exposure to pregnancy. Fear of side-effects and cost is a reason for non-use in about one third of cases. Opposition to use is a lesser but still significant reason for non-use, frequently attributed to the husband. In our findings negative perceptions about contraceptives being for the poor or their use being wrong were mentioned. High level of contraceptive knowledge does not translate into
actual use in this study or from other studies\textsuperscript{13}. Religious beliefs as evidenced by lower use of contraceptives by Muslims have a clear negative influence of utilization; this has also been shown in other Muslim communities in Kenya\textsuperscript{14}. Religious and moral beliefs clearly overlap and need further exploration in a Garba Tulla sub County.

**Maternal and Child Health**

Globally, breastfeeding and complementary feeding practices are poor. Only 43 per cent of the world’s infants under 6 months of age are exclusively breastfed and the vast majority of young children are not fed a diverse diet during the complementary feeding period\textsuperscript{15}. In the project 27.2\% of the children were reported to be exclusively breastfed under the age of 6 months.

One of the biggest challenges is a lack of awareness on the part of national governments. This has, in turn, meant limited prioritization and financial investment for things like protective legislation, training of health workers, and counselling programmes to improve breastfeeding and complementary feeding practices. The project trained CHVs to reach out and support mothers for improved maternal and child health outcomes.

In the project percentage of mothers of children age 0-23 months who know the three lactational amenorrhea method (LAM) criteria changed over the time from 20.4\% to 33.6\%. Infants and young children need the right foods at the right time to grow and develop to their full potential. The most critical time for good nutrition is in the brief 1,000 day period from the start of a woman’s pregnancy until a child’s second birthday. Breastmilk is a crucial food for children’s health and development during this critical window. Breastmilk is safe: it is always the right temperature, requires no preparation, and is available even in environments with limited sanitation and drinking water like the Garba Tulla Ward.
Conclusions

From the findings, we can conclude that by increasing the knowledge of men and women of reproductive health, as well as religious leaders and other influencers such as Mothers-in-Law, on contraception the uptake will improve in the community as many still refer to a lot of misconceptions and myths on family planning. Knowledge, perceived acceptability and benefits of contraceptive use were nearly universal among women and men, but contraceptive use was suboptimal in Garba Tulla Sub-County.

Evidence gathered during the end of project evaluation indicates that despite the improvement in levels of use of family planning methods in the past three years there are still major barriers in accessing contraception services. It is notable that FP services are not universally accessible, available, and affordable. Evidence suggest that gender power inequities, religious norms, cultural norms and beliefs, lack of accurate information about FP, lack of routine supplies of FP commodities, and disapproval from mothers-in-law are some of the most common barriers to accessing FP services in the project area. Nevertheless, there are many opportunities for the Garba Tulla Ward and stakeholders to guarantee access to family planning services to all the community members.
Recommendations

1. The barrier analysis indicated that beneficiaries were not aware of any policies or regulations on contraception in the community. MoH should create awareness of the available policies and guidelines on contraception interventions that promote translation of knowledge (educational meetings and use of mentors, changing nurses’ behaviour for positive client outcomes) into proper sexual and reproductive health practices that are urgently needed in the Garba Tulla community;

2. The availability of the contraception was identified as a major barrier, therefore Community-based distribution, MoH, CHVs, and the community should lead a partnership to galvanize community commitment and investments to increase the access to contraception through the community distribution;

3. Expand access to and demand for a broader mix of family planning methods: The government and other stakeholders should work towards creating high demand for family planning and promote contraceptive use as a health and development agenda. A well balanced method-mix needs to be made available to all people to expand choice in FP. Long acting and permanent methods need to be promoted and made readily available in lower levels of health care delivery such as dispensaries and health centres where most couples seek health care services;

4. Evidence was available on successful delivery of injectables and emergency contraception pills in the project area through community based distribution. The MOH and County government should invest in community structures for effective delivery of FP services: The government and other stakeholders must acknowledge the significant contribution of community health volunteers in delivery of contraceptives to couples at the village level and invest adequately in this strategy;

5. It was reported that the removal of the LARC methods were being paid while insertions were free. Eliminate fees associated with access to family planning services in both public and private facilities: This is important in ensuring that everyone has access to comprehensive family planning services and contraceptives irrespective of their ability to pay for the services;

6. Address the socio-cultural barriers (disapprovals from mothers-in-law) to family planning with a view to ensure that all persons can access FP services without discrimination. Specifically, government and stakeholders/ development partners should initiate and/ or support advocacy initiatives seeking to transform the socio-
cultural and legal barriers women and men face in accessing family planning services and information;

7. The government and other stakeholders must ensure that the community access accurate information regarding family planning in order to enable them make informed choices. This is also so as to deal with misconceptions, myths and propaganda that were reported surrounding the use of family planning;

8. FP services should be integrated within the broader development agenda, beyond the health sector. Stakeholders and development partners should therefore promote and integrate FP services with development and well-being programmes such as agriculture, pastoralism, industrial investments, and environment conservations;

9. The county government and civil society should lobby the international community to devise and make available low cost brands of family planning commodities with a view to reduce the cost of procuring the commodities;

10. The community caregivers breastfeeding practices were low; there should be an increased awareness of the MoH country guidance on appropriate care and newborn/infant feeding practices. Some of these programming should guide mothers at delivery for postpartum contraception uptake;

11. There should be continued encouragement of the male involvement in the family planning, especially in couple counselling and males accompanying their wives for Maternal Child Health (MCH) services;

12. The project should use the developed and integrated course on contraception, including supportive supervision to build the capacity of health workers to better counsel and support mothers at Antenatal care, delivery and Prenatal care for training and capacity strengthening;

13. Religious Leaders and Mothers-in-law were identified as a major barrier to uptake of contraception since they provided contradicting information about religion and contraception. There should be a continuous passage of contraception messages on various methods, advantages and disadvantages to religious leaders and mothers-in-law in influencing contraceptive use.
Annexes

Annex I: Evaluation Statement of Work

This impact evaluation measured the change in knowledge, perception and coverage of contraception in Garba Tulla Sub County in four locations of the Garba Tulla Ward over the three years of the project implementation.

The report is a result of a cross-sectional study carried out in three weeks. A comparison of the baseline and end line results were done.
Annex II: Evaluation Methods and Limitations

The evaluation methods used in developing this report included:

1. Desk reviews of the project documents
2. Household survey targeting women with children 0-23 months
3. Household barrier analysis- Men and women of reproductive age
4. In-depth interviews targeting the key stakeholders of the project, SCHMT, CHAs, Imams
5. Focus Group Discussions targeting women and men of reproductive age as well religious leaders.
6. Observations of contraception services and sporting equipment for male involvements

- A major limitation to program evaluation including the execution of the formative research was language barriers between the lead research team and the local community. Reliance on the research assistants to undertake probing and capture qualitative information from the respondents was therefore limited by capacity leading to loss of some qualitative information that would have provided additional depth in the analysis of some of the behavior.

- There was insecurity in the project area which hindered the consultant to visit all the project sites; however the research assistants who were locals were able to effectively collect data. Insecurity also caused a delay of 2 months because of inability to access the Garba Tulla location beneficiaries.

- During the data collection period, there was heavy rains resulting to low movements of the vehicle; the research assistants were able to walk to the sampled villages.
Annex III: Data Collection Instruments

- Computerized-Tabulation-Sheets-Garba.xlsx
- MOTHER_0-23months_Isiolo.xls
- Final BA Modern Family Planning Use.docx
- Key Informant Interview.docx
- FGD.doc
Annex IV: Survey TOR

Garba Tulla Endline Survey ToR_Nov2016

Annex V: Sampling Frame and household population

Sampling Frame and household Population

Annex VI: Documents Reviewed

HTSP Annual Report March 1st to 31st December 2014

Project ITT since inception

1st January to 31st March 2016 Quarterly report

LQAS Baseline survey indicator results for starting Strong Project

DHIS2 data accessed on 11th- 15 April 2017

Kenya Demographic Health survey Report 2014

Databases

Data.zip

Annex VII: Indicator Summary Table

HTSP_Indicator_Summary.docx

Disclaimer
Sigmund Peak International cannot be held responsible for errors or any consequences arising from the use of information contained in this report. Any views and opinions expressed do not necessarily reflect those of WVK, USAID, JSI or Sigmund Peak International or any other contributing organization.
Acknowledgement

We would like to thank WV United States (WVUS) for technical support in the planning and preparation process of the project and funding of all the activities including the evaluation. We would like to thank the key stakeholders in the HTSP evaluation including the Ministry of Health in Garba Tulla Sub County, Kenya Red Cross Society, and World Vision International for their insightful information on the activities of the project including their participation as key actors for the evaluation.

We would like to thank the WVK staff at the National, Regional, and Garba Tulla offices for their valuable contribution in the evaluation process through logistics, review of documents and final validation of the report. The team includes; Job Wafula the National M&E and PMIS Specialist, Jonathan Magero, Research, Documentation and Knowledge Management Coordinator, Lydia Mukaye, Associate Director Strategy and Programme Effectiveness, Lilian Chebon the Programme Officer Health, Paul Titomet the Regional Monitoring & Evaluation and Capacity Building Coordinator, Leonard Kibet the Graduate Intern at the Regional office, Gibson Kimani the Manager for Isiolo-Garba Tulla Cluster, Elizabeth Murugi the Project Technical Specialist and Pauline Hajufle the Project Community Mobilizer. We also thank the dedicated research assistants who assisted in the data collection.

Our gratitude also goes to the Sub-County Health Management Teams, the health facility In-Charge, and the community health volunteers (CHVs) in the sampled health facilities in four locations of Garba Tulla,

Finally, we thank the community of the Garba Tulla sub County for giving their time and information for the project evaluation.
References


4 Kenya Demographic Health Survey (2014) Report


15 https://www.unicef.org/nutrition/index_breastfeeding.html