

The Last Ten Kilometers Project, JSI Research & Training Institute, Inc.

COMMUNITY-BASED FAMILY PLANNING, INCLUDING LONG-ACTING
CONTRACEPTIVE SERVICES AT SELECTED HEALTH CENTERS AND THEIR
SATELLITE HEALTH POSTS IN FOUR REGIONS OF ETHIOPIA: A SITUATION
ANALYSIS

A Situational Analysis Report

The Last Ten Kilometers: What it takes to improve health outcomes in rural Ethiopia

(L10K) works to strengthen the bridge between households and the primary health care unit (PHCU), Ethiopia's basic health service delivery structure. The aim is to improve high impact reproductive, maternal, newborn and child health (RMNCH) care behaviors and practices among the rural households and contribute towards achieving child and maternal health related Millennium Development Goals 4 and 5, decreasing child and maternal mortality rates. L10K is implemented by JSI Research & Training Institute, Inc., with grants primarily from the Bill & Melinda Gates Foundation and with additional funding from UNICEF and USAID. L10K works closely with the Ethiopian Government and other development partners, and provides technical and financial support to seven civil society organizations.

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Contents

List of Tables.....	5
List of Figures.....	6
ACRONYMS.....	7
ACKNOWLEDGMENT.....	8
EXECUTIVE SUMMARY.....	9
Background.....	9
Method.....	9
Result.....	10
Household Survey.....	10
Facility Assessment.....	10
Qualitative Study.....	11
Conclusion and Recommendations.....	11
BACKGROUND.....	13
OBJECTIVES.....	14
METHODS.....	15
Study Design.....	15
Objectives.....	15
Type of Study.....	15
Study Area and Population.....	15
Sampling Size Estimation and Sampling Technique.....	15
<i>Selection of Kebeles, Women, and HDAs for FGDs and In-depth Interviews.....</i>	16
Data Collection and Data Quality Management.....	17
Household Survey.....	17
Facility Assessment.....	17
Focused Group Discussions among Women and HAD Leaders.....	18
Analysis.....	19
Ethical Consideration.....	19
RESULTS.....	20
Background Characteristics of Women 15-49 Years of Age.....	20

Facility Characteristics	20
I. Household Survey	22
Knowledge and Approval of Family Planning Use.....	22
Sources of Family Planning Information.....	23
Current Contraceptive Use.....	25
Method Specific CPR	26
Postpartum Contraceptive Use	27
Method Mix.....	28
Sources of FP Methods	30
Informed Choice	30
Reasons for Non-Use	32
II. Facility Assessment	33
Infrastructure and Family Planning Service Delivery Environment.....	33
Staffing with FP Providers	33
Training	34
Availability of FP methods, Consumables and Job Aids.....	34
Availability of IEC Materials	35
Knowledge of FP Providers of FP Counseling.....	35
Integration of FP with Other Services	37
Referral Linkage	37
III. Qualitative Study	39
Awareness about Family Planning	39
Sources of Information about Family Planning.....	40
Factors or Contexts Affecting the Use of FP	41
Use of Family Planning	44
Targets for FP	45
Preferences for FP Methods	46
Contexts or Factors Related to FP Services	47
Recommendation and Suggestions by Participants.....	47
DISCUSSION	48

Knowledge and Approval of Family Planning Use	48
Source of Information about Family Planning	49
Current Contraceptive Use.....	50
Method Mix.....	51
Sources of FP Methods	51
Informed Choice.....	52
Reasons for Non-Use	52
Readiness of Health Facilities for Family Planning Service.....	53
CONCLUSION	54
RECOMMENDATIONS	54
REFERENCES.....	55

List of Tables

Table 1, Objectives and corresponding study types used, January 2015	15
Table 2, Sample areas for the situational analysis of FP service in selected PHUCs in Amhara, Oromia, SNNP, and Tigray regions, January 2015	16
Table 3, Background characteristics of respondent women from the eight PHCUs in Tigray, Amhara, Oromia and SNNP regions, January 2015	20
Table 4: Profile of service delivery points included in the study, January 2015	21
Table 5, Percentage of women who had heard of family planning, approved of family planning, or knew were to obtain a FP method, according to their background characteristics, January 2015	22
Table 6, Types of LAFP methods women knew, according to background characteristics, January 2015 23	
Table 7: Source of family planning information among women of reproductive age who had heard of FP, January 2015.....	24
Table 8, Source of information about LAFP for women of reproductive age, according to their background characteristics, January 2015.....	25
Table 9, Current contraceptive use among married women, according to their background characteristics, January 2015	26
Table 10, Method-specific CPR by background characteristics of women, January 2015	27
Table 11, Contraceptive use among women who had given birth during the 12 months preceding the survey (i.e., postpartum contraception), according to their background characteristics, January 2015 ...	28
Table 12, Method mix by background characteristics of women, January 2015.....	29
Table 13. Sources of family planning methods by women's background characteristics, January 2015	30
Table 14. Percentage of married women using FP following interaction with FP providers, January 2015	31
Table 15. Percentage of women not using a FP method, by reasons for non-use, January 2015.....	32
Table 16. Attributes of FP service-delivery environments of HPs and HCs, January 2015	33
Table 17. Availability of FP providers at the PHCUs in the intervention areas, January 2015	33
Table 18. Percentage of HPs with available FP methods on the day of the visit, January 2015.....	34
Table 19. Percentage of HEWs who spontaneously mentioned issues to be raised while counseling a new FP client, by region, January 2015.....	36
Table 20. Percentage of HEWs trained in Implanon insertion spontaneously mentioning side effects of Implanon, January 2015.....	36
Table 21. Percentage of HEWs trained in Implanon insertion who spontaneously mentioned post-insertion instructions, by region, January 2015	37
Table 22. Percentage of HEWs providing FP information while providing other services, by region.....	37
Table 23. Percentage of HEWs by the way they referred clients for FP services at a HC	38

List of Figures

Figure 1: Method mix among all users from the selected eight PHCUs in Tigray, Amhara, Oromia, and SNNP regions, January 2015.....	29
Figure 2. Information received by women using FP methods for within 12 months prior to the study by region, January 2015.....	31
Figure 3. Percentage of HEWs trained in Implanon insertion (N = 48), January 2015.	34
Figure 4. Availability of consumables for Implanon insertion among HPs with HEWs trained in Implanon insertion (N = 35).	35
Figure 5. Percentage of HPs with any IEC material, January 2015	35
Figure 6, Percentage of HEWs by the FP methods they referred clients for during the year before the survey (N = 25).	38

ACRONYMS

CBDDM	Community Based Data for Decision Making
CPR	Contraceptive Prevalence Rate
CSA	Central Statistics Agency
EC	Emergency Contraceptives
EDHS	Ethiopian Demographic and Health Survey
FHC	Family Health Card
FGD	Focused Group Discussion
FMoH	Federal Ministry of Health
FP	Family Planning
GoE	Government of Ethiopia
HDA	Health Development Army
HEP	Health Extension Program
HC	Health Center
HP	Health Post
HEW	Health extension Worker
IUCD	Intra-uterine Contraceptive Device
IRB	Internal Review Board
JSI	John Snow Incorporate
L10K	Last Ten Kilometers
LAFP	Long Acting Family Planning
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
OCP	Oral Combined Contraceptive
RHB	Regional Health Bureau
PMA	Performance Monitoring and Accountability
SNNP	Southern Nations and Nationalities People
USAID	United States of Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

Background

Contraceptive use in Ethiopia has shown tremendous increase in the last decade, following the launching of the health extension program (HEP). However, the need for family planning among nearly a quarter of women of reproductive age remains to be met. The unmet need is higher among younger women, poorer women, and those in rural settings. In addition, the method mix has remained largely tilted toward injectable contraceptives, which have a high discontinuation rate. Although nearly one third of women still prefer to delay their next birth for at least two years, only 6% of women are currently using long-acting family planning (LAFP) methods. To address the gap, since 2009, the government of Ethiopia (GoE) has embarked on an Implanon scale-up initiative aimed at expanding access to and enhanced use of Implanon at the community level through enabling health extension workers (HEWs) to provide Implanon insertion services.

The Last Ten Kilometers Project: What it Takes to Improve Health Outcomes in Rural Ethiopia (L10K), funded by the Bill & Melinda Gates Foundation and implemented by JSI Research & Training Institute, Inc. (JSI), is working closely with the GoE to demonstrate innovative solutions for addressing barriers to demand and quality of community-based LAFP services provided by primary health-care units (PHCUs). L10K conducted a literature review to identify areas of the national FP service delivery for which further understanding was needed. Following the literature review, this study was conducted to improve understanding of FP service provision and inform the design of the solutions. The study was conducted in eight PHCUs comprised of eight health centers (HCs) and 41 health posts (HPs). Geographically, it included the following regions in Ethiopia: Amhara; Oromia; the Southern Nations, Nationalities, and Peoples' (SNNP); and Tigray regions.

Method

A mixed-methods study design was implemented using quantitative and qualitative methods. Quantitative data were obtained from a cross-sectional survey of women of reproductive age (15-49 years) and health facilities (i.e., HPs and HCs). In the cross-sectional survey of women, a two-stage cluster sampling was employed to determine awareness, current use of FP, method preference, informed choice, and reasons for FP non-use among women. At the first stage, all kebeles in the eight selected PHCUs were sampled, and in the second stage, households were selected for an interview from each kebele, using the WHO 30 by 7 sampling method. All 41 kebeles were visited, and 812 women were interviewed. In the facility assessment, all eight HCs and 38 HPs were visited to complete facility questionnaires, and 11 FP providers at HCs and 48 HEWs were interviewed to determine the readiness of facilities to provide FP services. Forty focus group discussion (FGDs) among women representing five categories (i.e., contraceptive users and contraceptive non-users among newly married and those who had been married for more than two years and LAFP users) and eight FGDs among HDA leaders were conducted to explore the perceptions of women about FP methods, roles of influential members of communities, and attitudes of women toward the FP services available in their localities.

Result

Household Survey

The study revealed that the awareness and approval of FP use among women was almost universal. However, the nulliparous and younger women were less likely to have heard about and approved of FP use. The awareness of women on LAFP methods was generally low; Implanon was the most widely known LAFP method among women (85%), whereas intra-uterine contraceptive devices (IUCDs) and female sterilization were known by 13% and 4% of the women, respectively. Health workers, HEWs, and families or friends were sources of FP information for most of the women included in the study. A higher percentage of women in Tigray (33%) and SNNP (20%) regions indicated having heard about FP from HDA leaders than did women in Amhara (6%) and Oromia regions (3%).

An average of 46% of married women was using any FP method during the survey, with a regional variation ranging from 34% in Tigray region to 61% in Amhara region. Contraceptive use was higher among women 20-34 years of age, with higher educational status, living within half an hour walking distance from a health facility, and in the higher wealth quintile. Injectable contraceptives were being used by 78% of the women using FP while implants and pills were used by 16% and four percent of the women, respectively. Health posts and HCs were the source of FP methods for 75% and 23% of women, respectively. About 45% of FP users involved in the household survey reported being informed about side effects while 73% of the women were told of other methods. Postpartum amenorrhea and breast feeding were mentioned as reasons for FP non-use by 23% and 20% of the women currently not using FP, respectively.

Facility Assessment

The facility assessment showed that adequate water near the hand-washing facility in FP service delivery unit of HCs was available in only two of the eight HCs and 16% of the HPs. Electricity was available in six of the HCs and 53% of the HPs. Of the 38 HPs assessed, 16 (42%) had two HEWs trained in Implanon insertion while 19 (50%) HPs had only one HEW trained in Implanon insertion. The remaining three (8%) did not have a HEW trained concerning Implanon insertion.

Injectable contraceptives and Implanon were available in 78% and 68% of the HPs, respectively, while information, education, and communication (IEC) materials were available in 55% of the HPs. Only eight percent of HEWs reported they would mention FP methods not supposed to be available at the HP. When asked about side effects of Implanon, changes in menstrual bleeding pattern and headache were mentioned by 97% and 41% of HEWs trained in Implanon insertion, respectively, while the other side effects were mentioned by less than 20% of the HEWs. When asked whether the HEWs provided FP services along with other services, 81% and 69% of HEWs reported that they provided FP service during postnatal care (PNC) services and for women seeking curative services for their sick children, respectively.

Only 52% of HEWs reported having referred clients for FP services to HCs, largely by telling clients to go to a HC or with some written notes. The main purpose for referring women was Implanon removal.

Qualitative Study

The FGDs among women of reproductive age revealed awareness about FP and approval of its use was universal among discussants. The discussants reported they and probably most of the other women in their neighborhoods were aware of economic, social, psychological, and health benefits of FP. When asked about FP methods they knew, nearly all discussants mentioned pills, Depo-Provera, and Implanon. According to discussants, HEWs were the main source of information on FP, and HDA leaders were believed to have better understanding of FP than other people in their communities. Nearly all participants in the FGDs indicated they used multiple channels to share information about FP among themselves. The platforms women considered convenient for freely discussing FP were during meetings with kebele leaders, coffee ceremonies, and HDA meetings; on the way to market places; during *Iddir* meetings; at “development sites”; and during family conferences and other social events. The discussants indicated they share information about what they believe is true about FP. They also indicated discussing FP is considered taboo in some public places.

Misconceptions about FP methods were prevalent among both women and HDA leaders who participated in the FGDs. These misconceptions appeared to influence decisions of women to use FP methods. The roles of husbands, other women in the community, HDA leaders, and HEWs and women’s awareness about side effects of FP methods were raised during the FGDs as major factors influencing decisions of women to use FP methods. Unavailability of FP methods at HPs, pressure from mothers-in-law, and being newly married women were mentioned, as were previous bad experiences related to FP use, as reasons for FP non-use. Pressure from husbands, desire to have a child, rumors about FP methods, and side effects of methods were mentioned as reasons for discontinuing FP use.

Most of the discussants did not consider unmarried and newly married women as targets of FP services. They also stressed families with smaller incomes were good targets of FP services. Nearly all discussants opined that injectable contraceptive is the most preferred method, followed by Implanon, which they call “the one protective for three years.” Preference of implants appeared to be affected by the unavailability of and, in some instances, denial of removal service.

The discussants strongly suggested that making Implanon removal services available at the HPs; increasing the number of HEWs at HPs, especially those HPs with only one HEW; expanding method options at the HPs; improving side-effect management at the HPs; and ensuring availability of FP methods would help improve FP service delivery at the HP level. Women recommended improving understanding of HEWs through education and enhancing their roles in improving FP use in their communities.

Conclusion and Recommendations

The study showed that awareness and use of FP among young and nulliparous women were lower than they were among older and parous women. This fact is supported by the finding that younger and nulliparous women were less likely to have heard about FP from HEWs, which were the main source of FP methods, particularly Implanon. Thus, strategizing and fostering the HEP to reach younger and nulliparous women, particularly, with FP information and services is recommended. In addition,

improving the awareness of the community concerning the benefits of FP for younger and nulliparous women may help to improve contraceptive use among these groups of women.

The high prevalence of misconceptions about FP among women and HDA leaders indicates the need to design a strategy to enhance knowledge and communication skills of HDA leaders to use multiple communication channels efficiently for disseminating appropriate information and dispelling misconceptions among women. The fact that women in the communities were sharing FP information freely using multiple channels indicates the need to identify and use a convenient platform to disseminate FP information and dispel myths.

The largely skewed method-mix toward short-acting FP methods, suboptimal counseling services received by women, and inadequate readiness of HPs and HCs to provide quality counseling service strongly indicate the need to improve the counseling service. Although the use of implants as the method of choice for FP has been increasing over the past four years, this study showed that only one sixth of users in the intervention kebeles used implants. Considering that 16% of married women have unmet need for FP (EDHS2011), an urgent need exists to improve awareness and counseling concerning FP, with particular emphasis on LAFP methods, such as implants.

HPs were a source of contraceptives for almost all FP users in the study areas. Health workers, HEWs, family members, and friends were sources of FP information for most of the women participating in the study. Thus, improving the quality of FP information and services provided by HPs and HCs can greatly improve FP service in the intervention areas. According to the findings of the study, there is a room for improvement with respect to strengthening referral linkage for FP and integration of FP with MNH and other services.

BACKGROUND

The role of family planning (FP) programs in health and development is well known. FP contributes to the health and survival of women and children by reducing the number of pregnancies and lengthening birth intervals, especially among those who are at a greater risk of maternal, peri-natal, and child mortalities (1). The benefit of FP contributes to development as a whole by promoting reproductive rights, contributing to economic and social well-being, and decreasing environmental pollution (2).

Ethiopia has made considerable strides in providing access to FP services. Following the introduction of the health extension program (HEP) in 2004, the contraceptive prevalence rate (CPR) has more than doubled from 15% in 2005 to 42% in 2014 (4). Despite this achievement, about 25% of married women of reproductive age in the country have an unmet need for FP. The unmet need for FP is higher among the population groups that are at greater risk of the adverse consequences of unintended pregnancies, which include married young women ages 15 to 19 years (33% unmet need) and women in the poorest household wealth quintile (31%). The unmet need is very high among married rural women (28%) as compared to the unmet need among urban married women (15%) (4). If Ethiopia is to reach its Health Sector Transformation Plan target for CPR, which is 55% by 2020 with equitable access and optimum quality of service, the national FP program will not only have to address the unmet need, especially among the underserved groups, but also have to take measures to generate demand for FP methods across all population groups.

Ethiopia's challenge to meet its CPR target is complicated by the fact that the national FP program has been largely relying on injectable contraceptives. Consequently, the national FP program faces high logistics and service delivery costs for providing injectable contraceptives to the clients every three months. Moreover, the effectiveness of the method is questionable because the Ethiopian Demographic and Health Survey (EDHS) 2011 indicated 34% of injectable use clients discontinued use before 12 months.

Because 33% of the currently married women want to delay their next childbirth for two years or more (4), there is the potential need for long-acting FP (LAFP) methods (i.e., implants and intrauterine contraceptive devices [IUCDs]). However, mini EDHS 2014 indicated that only 6% were using a LAFP, with 1% using IUCDs and 5% using Implants. Not only is a LAFP convenient for clients who want to space the births of their children, but it is also the most cost-effective method to prevent unintended pregnancies (20; 21; 22; 23). Accordingly, the Government of Ethiopia (GoE) has taken initiatives to increase access to LAFP and permanent methods.

To increase access to LAFP methods, the Federal Ministry of Health (FMoH) in 2009 adopted a task-shifting strategy, that is, delegating clinical service-delivery tasks to less specialized providers (18; 19). Accordingly, the ministry decided to provide Implanon¹ (20) through its community-based HEP (i.e., health extension workers [HEWs]). Previously, Implanon was provided only by higher level health care providers (e.g., doctors, health officers, and nurses) at hospitals and health centers (HCs). However, the

¹ Implanon is a single rod contraceptive implanted under the skin that releases low levels of progestin and is highly effective in preventing unintended pregnancies for three years and is reversible.

HEWs are not trained to remove Implanon. Anyone needing Implanon removal services is referred to a health center.

Public health facilities, which provide free FP services, are the main sources of FP methods, serving about 82 percent of users, while the private sector serves about 13 percent of users. The health posts (HPs) provide condoms, oral contraceptive pills (OCP), emergency contraception (EC), injectables, and Implanon insertion services while HCs offer IUCD and implant insertion and removal services, in addition to the methods provided at HPs. Permanent methods are offered at primary hospitals or higher facilities (4).

To reach the targets of the national FP program associated with increasing CPR and promoting LAFP methods, there is a possibility that the public sector FP service providers (i.e., mainly the HEWs and HC staff) could be biased in encouraging clients to use LAFP methods without appropriate counseling. Lack of proper counseling could lead to increase in the Implanon discontinuation rate, which is currently low (only 4%), largely because menstrual bleeding patterns change following the insertion of Implanon (4). Thus, proper counseling of the client is required so that she does not prematurely decide to remove the Implanon. Excessive early removal of Implanon would increase the cost of the national FP program and could lead to program failure. The quality of community-based Implanon insertion services, including counseling service currently being provided by HEWs, is unclear. Therefore, it is critical for the GoE to assess the quality of LAFP services provided by the HEWs and to take measures accordingly to avoid unforeseen cost to the national FP program.

The Last Ten Kilometers Project: What it Takes to Improve Health Outcomes in Rural Ethiopia (L10K), funded by Bill & Melinda Gates Foundation and implemented by JSI Research & Training Institute, Inc., has been working closely with the GoE to bridge households and the HEP, including primary health care units (PHCUs) to improve reproductive, maternal, newborn, and child health care (RMNCH) behavior and practices and contribute toward achieving the country's Millennium Development Goals (MDGs) 4 and 5, related to improving child and maternal survival, respectively. To do so, L10K has been implementing innovative community-based strategies in 115 woredas in four of the most populous regions of the country—Amhara, Oromia, SNNP, and Tigray—covering a population of about 17 million. Until very recently, L10K's effort toward improving maternal and child survival has been focused on pregnancy, childbirth, and postnatal care while focus on FP within the continuum of care has been less than optimum. In August 2014, L10K received additional funding from the Foundation to address the gap. Specifically, the new FP initiative of L10K will demonstrate innovative solutions to address barriers to demand and quality of community-based LAFP services provided by the PHCUs.

OBJECTIVES

To design the innovative strategies, L10K conducted a series of assessments to identify gaps and the needs of the national FP program. A literature review was conducted first and was used to identify areas of the national FP service delivery for which further understanding was needed. The areas needing further investigation were the provision of LAFP methods in the HPs and HCs; how existing strategies target potential FP users and reach the underserved population; factors influencing use of

contraceptives; the role of males and other family and community members in use of FP services; referral practices between HPs and HCs for FP service provision; integration of FP services with other services; facility readiness to provide quality FP services, with a focus on quality of counseling services; and monitoring the support systems for high quality FP service delivery.

Thus, this study aimed at building on the findings of the review and enabling users to have a full picture of the overall situation of FP service provision and to inform the design of a strategy fitting the context. The specific objectives of the study are given in Table 1.

METHODS

Study Design

A mixed-methods study design was implemented. Quantitative data were obtained from cross-sectional surveys of women of reproductive age and health facilities (i.e., HPs and HCs). The qualitative part of the study was exploratory and was based on focused group discussions (FGDs) of five different groups of women of reproductive age and of HDA leaders (Table 1).

Table 1, Objectives and corresponding study types used, January 2015

	Objectives	Type of Study
1	The situation of the LAFP service provision in the selected PHCUs	Household survey, Facility Assessment, Qualitative study
2	Identify factors influencing use of contraceptives	Household survey, Qualitative study
3	Understand the role of males and other family and community members on use of FP services	Household survey Qualitative study
4	Assess the referral practices between HPs and HCs for FP service provision	Facility Assessment
5	Assess the integration of FP service with other services	Facility Assessment
6	Determine facility readiness to provide quality FP services;	Facility Assessment
7	Assess monitoring the support systems for high quality service delivery FP service delivery	Facility Assessment

Study Area and Population

Eight PHCUs from eight of the 115 L10K woredas, two from each of the four L10K regions (Amhara, Oromia, SNNP, and Tigray), were purposefully selected for the FP interventions and represented the study area (see Table 2). The major criterion for selection was having no or minimum FP support from other partners. The eight PHCUs included eight HCs and 41 HPs covering a population of about 250,000 people from 41 rural kebeles.

Sampling Size Estimation and Sampling Technique

For the household survey, the sample size was determined based on the assumptions that the proportion of current users told about side effects would increase from 40% at baseline survey to 60% during the follow-up survey and the power of the sample to detect the change would be 80%, with a 5% two-tailed alpha error, assuming the cluster-survey design effect would be 2. Two-stage cluster sampling

was used with, at stage one, all kebeles in the eight PHCUs selected as clusters and, at stage two, 20 women of reproductive age selected from each kebele. The EPI 30X7 cluster survey technique was used to identify respondents within a cluster.

For the facility survey, all the HPs and HCs in the FP intervention area were visited, and all FP providers at HCs and all HEWs available on the day of visit at the HPs (11 FP providers at HCs and 48 HEWs) were interviewed using structured questionnaires.

For the qualitative study, 40 FGDs (each with 6-12 participants) comprised of five different groups of women of reproductive age and eight FGDs of (each with 6-12 participants) comprised of HDA leaders were conducted. The five groups of women of reproductive age were as follows:

- a. Married women who had been married for less than two years and who were not currently using any FP method,
- b. Married women who had been married for less than two years and who were currently using any FP method,
- c. Married women who had been married for more than two years and were currently not using a modern FP method,
- d. Married women who had been married for more than two years and were currently using a short-term FP method, and
- e. Married women who had been married for more than two years and were currently using a LAFP method.

Table 2, Sample areas for the situational analysis of FP service in selected PHUCs in Amhara, Oromia, SNNP, and Tigray regions, January 2015

Region	Zone	Woreda	PHCU	Samples for qualitative and quantitative interviews and facility inventory
Amhara	North Shoa	Ensaro	Lemi	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
	West Gojjam	Bure Zuria	Alefa	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
Oromiya	Illu Aba Bora	Chora	Kumbabe	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
	Jimma	Seka-chekorssa	Sentema	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
SNNP	Silite	Dalocha	Ebot Tirora	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
	Yem	Yem	Fofa	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
Tigray	South East	Samre Sehart	Finarwa	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD
	South East	Samre Sehart	Gijet	All FP providers in HCs, all HEWs in selected HPs, Five women FGDs and one HDA FGD

Selection of Kebeles, Women, and HDAs for FGDs and In-depth Interviews

Variation in the performance of FP service delivery among HPs was expected. Therefore, kebeles in which the HPs are found were classified into three categories—best, average, and worst performing

kebeles—, based on their service-delivery statistics and local experts' views. The married women FGDs equally represented the three categories of kebeles. The three FGDs among married women who had been married for more than two years were conducted in three types of kebeles, based on their performance. FGDs of married FP non-user women were conducted in the best performing kebele, whereas FGDs among women who were using any short-term and long-term FP method were conducted in average and worst performing kebeles. In the case of married women who had been married for less than two years, the FP users' FGD was conducted in the worst performing kebeles while the FP non-users' FGDs were conducted in the best performing kebeles. The HDA leaders' FGDs were conducted in the best performing kebele of one PHCU and in a worst performing kebele of another PHCU in a region. The kebeles were selected in consultation with the heads of PHCUs and woreda health extension coordinators.

Data Collection and Data Quality Management

Household Survey

Questionnaires were developed by adopting DHS and PMA2020² questions. The questionnaires were translated into regional working languages (that is, Amharic, Oromifa, and Tigrigna). Survey data were collected and archived using a web-based mHealth platform (i.e., SurveyCTO)³ using smart phones. The platform allowed data quality assurance through ensuring appropriate skip patterns during the interview and allowing entry of only logical values. Data were uploaded to the cloud using smart phones. The data collection was conducted in January-February 2015.

The interviewers and supervisors for the household survey were the health professionals from health centers and woreda health offices who were knowledgeable about the services provided by the PHCUs. They received five days of training, including a day of field practice, on administering the questionnaires and using Survey CTO software with smart phones. The training of data collectors was rigorous enough to enable them to understand the data collection tools. Role playing, conducting mock interviews, and pilot testing were part of the training. Survey supervisors and regional coordinators were also trained to monitor and supervise the process and ensure data quality. Regional coordinators were consultants hired to monitor the quality of data collection by revisiting randomly selected households to validate responses.

Facility Assessment

The facility assessment included interviewing PHCU directors, health center FP providers, and HEWs; conducting facility inventories; and reviewing documents. Structured questionnaires were pre-tested in PHCUs other than those selected for the study.

The data were collected by L10K Regional FP Technical Officers during January and February 2015. Data were collected using hard-copy structured questionnaires, with responses later electronically captured

² Performance Monitoring and Accountability 2020 (PMA2020) is a five-year project that uses a mobile-assisted data collection system to conduct nationally representative surveys on family planning, water, and sanitation at household and facility levels in 10 countries.

³ Please visit <http://www.surveyccto.com/index.html> for the details on SurveyCTO

using Epi Info. Pre-data-entry editing of questionnaires was done by the central M & E advisor. Checks for consistency and validity of data, outlying values, and inconsistencies were addressed during data cleaning. Automatic skip patterns and constraints were in place during data entry.

The data collection process was supervised by regional and central level L10K M&E staff. All data collectors had experience in collecting quantitative and qualitative data and were health professionals with extensive experience with the FP program in Ethiopia.

Facility inventory: Data collectors used a structured data collection tool to interview the facility director or head of a FP/MCH unit and to extract data for services available at the facility. Availability of equipment, essential FP commodities, trained FP providers, supplies, basic infrastructures, staff, IEC materials, counseling guides, screening tools, supportive supervision, recording, and reporting were assessed.

Provider interview (providers at HCs and HEWs): A structured questionnaire was used to interview all FP providers at the HCs and HEWs at HPs available on the day of the visit. Data concerning types of trainings received; experience in providing FP methods, especially counseling services and LAFP methods provision; and supervision were collected.

Document review: Data concerning FP service-delivery statistics were extracted from service registers and reports available in the facilities. Attributes of how the system functions in recording and reporting on FP service delivery were sought. Family planning registers, wall charts, service reports, and stock cards were sources of data for the document review. Stock cards were checked in terms of whether they were regularly updated and to determine how FP supplies were stored and dispensed.

Focused Group Discussions among Women and HDA Leaders

The focused group discussions were guided by semi-structured questionnaires with open-ended questions. The FGDs of HDA leaders were focused on exploring the perceptions of HDA leaders about FP methods, especially the long-acting FP methods; their role in reaching potential FP clients in their communities with information on FP; and their role in identifying, counseling, and referring potential FP clients to HEWs. In addition, focus was on the use of CBDDM maps, FHC, and other IEC materials by HDA leaders and how they identified, counseled, and referred potential FP users.

The FGDs among women were focused on exploring the factors influencing women's use of and preference of FP methods and their perceptions about FP methods, especially the LAFP methods. They also addressed the roles of males and other influencers on use of FP services at the community level.

Inclusion criteria: All FP service providers assigned at selected HCs and HPs, women selected from the community, and HDA leaders who consented to participate were interviewed. Data extraction was conducted in the selected facilities after obtaining consent from FP providers and the heads of the HCs and HPs.

Exclusion criteria: Those who refused to participate were excluded from the study.

Analysis

Stata version 13.1 was used to conduct the analyses. All point estimates (means and proportions) were adjusted for sampling weights. Bivariate statistical analyses, adjusted for cluster-survey design effect, were done to compare the indicators of interest across regions and the background characteristics of women. The cut-off point for the two-sided alpha error was set at five percent.

The role of HDAs in identifying, counseling, and referring potential FP clients and factors leveraging the use of FP services by eligible women, including the targeting of all eligible women and those at high risk of unplanned pregnancies, were analyzed thematically.

Ethical Consideration

Ethical clearance was obtained from the respective regional health bureaus' and JSI's IRB. All study participants were informed about the purpose of the study and their right to opt out or to respond to questions. Verbal consent from the respondents was sought and documented by the interviewers prior to interviewing. For any respondent younger than 18 years of age, consent was sought from her husband or guardian. Because most respondents were not able to read or write, written consent was not sought. When the respondent agreed to be interviewed after listening to the consent statement, the interviewer marked the questionnaire as consent given and signed below that.

Standard survey instruments and procedures were put in place so as not to cause any inconvenience to the study participants, the community, the data collectors, and supervisors involved in the survey.

RESULTS

Background Characteristics of Women 15-49 Years of Age

From the 41 kebles of the eight intervention PHCUs (from eight woredas), 812 women of reproductive age were interviewed. More than half (60%) of the women included in the survey fell in the age range of 20-34 years. Eighty nine percent of them were in wedlock during the survey, and more than half (55%) were not able to read and write (Table 3).

Table 3, Background characteristics of respondent women from the eight PHCUs in Tigray, Amhara, Oromia and SNNP regions, January 2015

Background characteristics	Total	Percentage
Total	812	100
Region		
Amhara	165	20.3
Oromia	163	20.1
SNNPR	240	29.6
Tigray	244	30.0
Age group		
15-19	92	11.3
20-34	487	60.0
35-49	233	28.7
Marital status		
Currently married	722	88.9
Living with a man	6	0.7
Not in union	84	10.4
Parity		
None	87	10.7
1-2	208	25.6
3	106	13.1
4+	411	50.6
Fertility Intention		
Undecided	46	5.7
Have children soon	56	6.9
Have children after 2 years	434	53.5
No more children	276	34.0
Education		
Cannot read and write/No schooling	444	54.7
Primary	217	26.7
Higher	151	18.6
Distance from a health facility		
<30 min	446	54.9
30 min – 1 hour	242	29.8
1 -2 hours	124	15.3
Wealth quintile		
Lowest	161	19.8
Second	161	19.8
Middle	170	20.9
Fourth	159	19.6
Highest	161	19.8

Facility Characteristics

Eight HCs and 41 HPs are in the selected eight PHCUs. The PHCUs have a catchment population ranging from 19,017 to 43,380. The catchment population for HPs also exhibited wide variation, from 2,080 to 7,066 people. The average catchment populations were 30,507 for HCs and 5,367 for HPs

(Table 4). An average of 2.4 FP providers was available in each of the HCs. It was found that IPAS Ethiopia has been working on FP in Alefa PHCU of Amhara and Qumbabe HC of Oromia regions and Marie Stopes International was present in Lemi HC of Amhara, largely supporting provision of post-abortion FP and LAFP services at the health-center level.

Table 4: Profile of service delivery points included in the study, January 2015

Region	Woreda	PHCU	No. FP providers (HCs)	No. of HPs	No. of HEWs	Catchment Population of PHCU	Average Catchment Population of HP
Amhara	Bure Zuria	Alefa	2	5	11	31,488	6,303
	Ensaro	Lemi	3	3	4	19,928	5,033
	Chora	Qumbabe	3	8	13	41,456	4,072
Oromia	Sekachekorsa	Sentema	1	4	8	36,442	6,563
	Dalocha	Ebot T	2	5	10	31,363	6,272
SNNP	Yem	Fofa	5	7	9	20,984	2,080
	Lailay Adiabo	Adi Neb	1	6	9	43,380	7,066
Tigray	Saharti Samre	Finarwa	2	3	4	19,07	5,007
Total			19	41	68	Ave=30,507	Ave=5367

I. Household Survey

Knowledge and Approval of Family Planning Use

As illustrated in Table 5, about 96% of the women interviewed have ever heard about FP while 92% of them approved of FP use. The percentage of women who had heard of FP, approved of FP use, and knew where to obtain FP methods was higher among older women and those who had one or more children. Having heard of FP methods, approval of FP use, and knowledge where to obtain FP methods varied statistically significantly by age and parity of the women. Younger and nulliparous women were less likely to have heard about a FP method, to approve of FP use, and to know where to obtain a FP method than were those who were older and those with a child or children.

Table 5, Percentage of women who had heard of family planning, approved of family planning, or knew where to obtain a FP method, according to their background characteristics, January 2015

Background characteristics	No. of women of reproductive age	Ever heard of FP	Ever heard of LAFP	Approve of FP	Know a place to obtain FP method
Total	812	96.3	81.2	92.4	94.8
Region					
Tigray	165	97.0	81.7	96.3	95.0
Amhara	163	97.2	90.1	90.4	96.5
Oromia	240	95.4	82.1	92.0	92.4
SNNP	244	96.2	79.0	92.4	95.0
Age					
15-19	92	86.5	68.6	79.4	86.1
20-34	487	98.5	81.8	94.2	96.5
35-49	233	95.4	84.5	93.2	94.3
No of children					
None	87	85.9	68.9	78.7	85.3
1-2	208	98.4	83.3	93.1	97.4
3	106	99.8	87.4	93.5	97.3
4+	411	96.7	81.2	94.3	94.6
Fertility Intention					
Undecided	46	88.0	51.2	77.3	83.4
Have children soon	56	97.6	93.4	83.3	96.7
Have children after 2 years	434	97.0	81.0	93.9	95.2
No more children	276	95.8	83.1	92.7	94.8
Education					
Cannot read and write/No schooling	444	95.3	77.1	91.0	92.9
Primary	217	96.3	86.2	92.4	95.6
Higher	151	99.8	86.6	96.7	99.3
Distance from a health facility					
<30 min	446	97.7	83.9	94.5	96.6
30 min – 1 hour	242	92.5	76.9	91.1	89.0
1 -2 hours	124	98.9	81.8	90.2	98.8
Wealth quintile					
Lowest	161	96.4	79.7	88.7	95.3
Second	161	94.1	72.8	91.8	92.3
Middle	170	98.0	82.4	93.5	93.6
Fourth	159	94.6	83.2	91.1	94.5
Highest	161	99.0	90.1	97.8	98.9

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation.

Knowledge of Specific LAFP Methods

Implants were the most widely known LAFP methods (97% of participants), whereas IUCDs and female sterilization were known by only 15% and 5%, respectively. Knowledge of IUCDs and female sterilization vary statistically significantly across regions. Women in Amhara were more likely to know about IUCDs and female sterilization than women in the other regions. Similarly, younger, nulliparous, more educated, and richer women were more likely to know about female sterilization than their counterparts. Women in the higher wealth quintile were also more likely to know about IUCDs but less likely to know about implants (Table 6).

Table 6, Types of LAFP methods women knew, according to background characteristics, January 2015

Background Characteristics	No. of women of reproductive age	Female Sterilization	Male Sterilization	IUD	Implants
Total	467	4.8	0.5	15.2	97.0
Region					
Tigray	129	0.0	0.0	5.2	97.5
Amhara	147	15.5	3.1	50.9	95.5
Oromia	-	-	-	-	-
SNNP	191	2.9	0.2	8.0	97.3
Age					
15-19	35	10.8	0.0	10.8	86.5
20-34	274	3.5	0.5	14.9	98.0
35-49	158	5.9	0.8	16.6	95.9
No of children					
None	51	10.3	0.5	16.6	87.8
1-2	113	2.8	1.2	25.2	98.2
3	64	6.4	0.0	17.5	98.3
4+	239	4.4	0.4	10.9	97.7
Education					
Cannot read and write/No schooling	234	2.4	0.5	8.9	96.8
Primary	130	7.1	0.9	20.0	99.8
Higher	103	7.9	0.2	25.0	93.7
Distance from a health facility					
<30 min	257	8.0	1.3	25.0	96.2
30 min – 1 hour	119	1.5	0.0	9.4	98.0
1-2 hours	91	3.4	0.0	6.3	87.3
Wealth quintile					
Lowest	112	0.0	0.0	5.5	99.6
Second	103	10.0	1.0	12.0	97.1
Middle	97	0.9	0.0	9.8	96.2
Fourth	79	7.8	1.7	29.7	93.3
Highest	76	8.1	0.3	29.8	98.0

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation. The data from Oromia region was not analyzed for knowledge on LAFP methods because there was an error in the Oromiffa language version of the question.

Sources of Family Planning Information

Table 7 shows, among women of reproductive age who were aware of FP, the major sources of FP information were health workers (78%) and HEWs (68%), followed by friends or family members (34%), radio (30%), and HDA (17%). Women in Tigray and SNNP were more likely to have heard about FP

from HDA leaders than were women in Amhara and Oromia. Younger and nulliparous women were less likely to have heard from HEWs about FP than their counterparts were. Television was a source of information in higher proportion for younger, nulliparous, more educated, and richer women than it was for their counterparts.

Table 7: Source of family planning information among women of reproductive age who had heard of FP, January 2015

Background characteristics	Total respondents	Radio	Television	Friends/Family	Health worker	HEW	HDA
Total	786	30.3	2.4	33.5	78.0	67.9	17.1
Region							
Tigray	156	20.7	3.1	14.6	78.5	60.5	32.7
Amhara	160	35.5	6.2	43.1	60.1	59.4	9.0
Oromia	235	13.8	1.7	14.9	73.4	66.8	2.9
SNNP	235	34.8	1.7	39.0	82.3	71.7	20.3
Age							
15-19	84	39.8	7.0	34.7	62.5	42.0	11.4
20-34	480	29.0	2.5	32.7	81.3	73.2	15.7
35-49	222	29.6	0.6	34.9	76.4	66.1	22.2
No of children							
None	79	46.1	7.6	38.1	51.2	33.4	12.6
1-2	204	34.4	3.0	34.6	82.1	76.0	16.2
3	105	32.3	4.9	43.7	78.6	71.2	22.0
4+	398	25.4	0.7	30.0	81.0	70.2	17.2
Fertility Intention							
Undecided	42	30.0	1.3	26.6	47.8	33.2	4.5
Have children soon	52	37.5	3.4	19.7	55.8	37.0	12.0
Have children after 2 years	424	32.6	2.3	35.5	82.5	74.3	16.5
No more children	268	24.2	2.6	32.6	75.9	63.8	20.8
Education							
Cannot read and write/No schooling	425	19.2	0.3	29.9	78.2	68.0	15.2
Primary	211	39.1	3.4	34.2	79.7	70.1	19.0
Higher	150	51.5	7.6	44.1	74.7	64.4	20.4
Distance from a health facility							
<30 min	433	36.1	4.3	29.8	76.4	68.8	15.7
30 min – 1 hour	231	27.5	1.3	35.8	72.1	58.8	18.4
1 -2 hours	122	23.4	0.5	37.4	88.4	78.1	18.0
Wealth quintile							
Lowest	152	18.1	0.0	35.0	77.3	72.2	15.5
Second	155	21.0	0.9	29.6	81.4	72.8	14.9
Middle	167	32.4	1.0	34.7	78.9	67.3	20.0
Fourth	152	38.8	1.8	41.8	78.0	60.5	17.4
Highest	160	45.0	9.8	26.1	73.4	65.1	18.0

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation.

Sources of Information about LAFP Methods

Health extension workers were reported to be sources of information about LAFP methods for most women interviewed (62%), followed by friends and families (42%) and health workers (29%). Using HDA leaders varied statistically significantly by region; women in the Tigray and SNNP regions were more

likely to have heard about LAFP methods from HDA leaders than were women in Amhara and Oromia. Younger and nulliparous women were less likely to have heard about LAFP methods from HEWs. Younger, nulliparous, and more educated women were more likely to have heard about LAFP methods from radio and television than were their counterparts (see table 8).

Table 8, Source of information about LAFP for women of reproductive age, according to their background characteristics, January 2015

Background Characteristics	No. of women of reproductive age	Radio	Television	Health Worker	Friends/Family	HEW	HDA
Total	812	17.2	3.3	29.3	41.6	61.9	10.7
Region							
Tigray	165	16.8	1.7	30.1	17.4	55.2	21.6
Amhara	163	33.9	6.7	26.9	47.5	56.9	5.9
Oromia	240	7.2	1.5	6.3	42.3	62.8	1.7
SNNP	244	15.9	3.2	35.8	43.5	63.8	12.7
Age							
15-19	92	31.9	11.4	34.1	55.5	41.0	12.2
20-34	487	16.0	3.3	32.5	33.9	66.9	12.2
35-49	233	15.5	0.8	21.3	53.2	57.8	7.2
No of children							
None	712	33.2	13.0	21.4	57.3	25.9	16.2
1-2	10	24.5	4.0	34.2	37.3	63.1	7.5
3	90	18.9	2.4	27.1	46.2	67.3	10.3
4+	87	11.4	1.8	28.9	39.8	65.6	11.3
Education							
Cannot read and write/No schooling	208	8.4	1.3	26.5	40.5	62.0	12.1
Primary	106	20.9	2.9	33.9	43.5	61.8	0.9
Higher	411	36.2	9.5	29.9	42.1	61.6	8.7
Distance from a health facility							
<30 min	444	20.8	3.3	26.0	35.0	63.1	13.1
30 min – 1 hour	217	15.9	2.1	20.4	44.7	61.7	8.9
1 -2 hours	151	11.9	4.8	46.2	50.4	59.1	8.4
Wealth quintile							
Lowest	161	8.3	0	24.3	45.8	53.8	19.0
Second	161	11.8	2.1	24.7	52.4	57.6	10.4
Middle	170	8.0	0.9	38.4	41.6	64.1	8.6
Fourth	159	18.4	6.2	33.0	41.5	68.0	8.6
Highest	161	41.5	7.8	25.1	26.0	66.2	6.7

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation.

Current Contraceptive Use

Table 9 shows that 46% of married women and 42% of all women were using some FP method during the survey. The percentage of women using traditional FP methods was 0.2%. The current contraceptive use by married women showed wide variation across regions, ranging from 34% in Tigray to 61% in Amhara. The contraceptive use varied statistically significantly by age, parity, and wealth quintile of women. Younger, nulliparous, and poorer women were less likely to use contraceptives than their counterparts.

Table 9, Current contraceptive use among married women, according to their background characteristics, January 2015

Background characteristics	Total Respondents Married women	Married women CPR		Total Respondents all women	All women CPR	
		Modern Methods	Any Method		Modern Methods	Any Method
Total	722	45.9	46.2	812	41.6	41.9
Region						
Tigray	145	33.8	33.8	165	32.9	32.9
Amhara	135	59.6	61.1	163	50.4	51.7
Oromia	226	45.9	47.0	240	44.4	45.4
SNNP	216	44.9	44.9	244	40.2	40.2
Age						
15-19	44	42.7	42.7	92	15.4	15.4
20-34	461	50.1	50.1	487	48.5	48.5
35-49	217	37.3	38.5	233	36.4	37.5
No of children						
None	27	28.7	28.7	87	7.0	7.0
1-2	193	55.1	55.1	208	52.7	52.7
3	101	39.5	39.5	106	38.8	38.8
4+	401	44.4	45.1	411	44.1	44.7
Education						
Cannot read and write/No schooling	421	40.8	40.8	444	39.7	39.7
Primary	195	52.0	53.3	217	47.6	48.9
Higher	106	56.7	56.7	151	38.3	38.3
Distance from a health facility						
<30 min	390	51.5	52.4	446	45.5	46.3
30 min – 1 hour	220	43.4	43.4	242	39.8	39.8
1 -2 hours	112	39.3	39.3	124	36.6	36.7
Wealth quintile						
Lowest	141	40.4	40.4	161	37.8	37.8
Second	145	29.0	29.0	161	26.7	26.7
Middle	156	48.9	48.9	170	42.2	42.2
Fourth	136	55.8	55.8	159	48.0	48.0
Highest	144	60.8	63.0	161	57.4	59.4

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation.

Method Specific CPR

Table 10 shows that CPR attributed to use of injectable contraceptive was predominantly higher than CPR ascribed to use of other FP methods. Long-acting FP method use was higher among women with more living children, those living closer to health facilities, and those in higher wealth quintiles. Implant use was higher among women in Amhara and Oromia regions and among those in higher wealth quintile than women in their counterparts.

Table 10, Method-specific CPR by background characteristics of women, January 2015

Background Characteristics	Sterilization	Injectable	Implants	Pills	IUCD	Periodic abstinence	Missing	Total
Total	0.4	35.8	7.4	2.0	0.3	0.2	0.2	46.2
Region								
Tigray	0.4	26.9	3.2	2.5	0.8	0.0	0.0	33.8
Amhara	3.1	45.4	11.0	0.0	0.0	1.6	0.0	61.1
Oromia	0.0	27.4	14.1	3.3	1.1	0.0	1.1	47.0
SNNP	0.0	37.6	5.4	1.9	0.0	0.0	0.0	44.9
Age								
15-19	0.0	33.5	9.2	0.0	0.0	0.0	0.0	42.7
20-34	0.4	40.0	7.4	2.2	0.1	0.0	0.0	50.1
35-49	1.2	27.1	6.8	1.6	0.6	0.6	0.6	38.5
No of children								
None	0.0	28.7	0.0	0.0	0.0	0.0	0.0	28.7
1-2	0.2	42.6	8.9	3.4	0.0	0.0	0.0	55.1
3	0.0	31.5	8.0	0.0	0.0	0.0	0.0	39.5
4+	0.6	34.7	6.9	1.9	0.4	0.3	0.3	45.1
Fertility Intention								
Undecided	0.0	26.8	7.2	0.0	0.0	0.0	0.0	34.0
Want to have children in the future	0.7	26.3	4.7	0.0	0.0	0.0	0.0	31.7
Says she cannot get pregnant	0.0	37.2	7.3	2.4	0.1	0.0	0.0	47.0
No more	1.2	35.3	8.0	1.3	0.6	0.6	0.6	47.6
Education								
Cannot read and write/No schooling	0.3	31.9	7.3	1.0	0.3	0.0	0.0	40.8
Primary	0.7	41.3	7.7	2.2	0.0	0.7	0.7	53.3
Higher	0.3	42.3	7.6	6.0	0.5	0.0	0.0	56.7
Distance from a health facility								
<30 min	0.5	38.8	9.4	2.3	0.6	0.4	0.4	52.4
30 min – 1 hour	0.6	36.0	5.6	1.2	0.0	0.0	0.0	43.4
1 -2 hours	0.0	30.8	6.2	2.3	0.0	0.0	0.0	39.3
Wealth quintile								
Lowest	0.0	38.2	2.2	0.0	0.0	0.0	0.0	40.4
Second	1.0	25.1	2.9	0.0	0.0	0.0	0.0	29.0
Middle	0.0	38.2	10.7	0.0	0.0	0.0	0.0	48.9
Fourth	0.0	38.0	11.4	6.4	0.0	0.0	0.0	55.8
Highest	1.1	42.0	11.8	4.4	1.5	1.1	1.1	63.0

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation.

Postpartum Contraceptive Use

As shown in Table 11, among women in their extended postpartum period (women with children of 0–11 months of age), implant use was higher among women in Oromia and those in higher wealth quintiles and among those aged 20–34 years.

Table 11, Contraceptive use among women who had given birth during the 12 months preceding the survey (i.e., postpartum contraception), according to their background characteristics, January 2015

Background Characteristics	No. of women of reproductive age	Injectable	Implants	Pills	Total
Total	232	36.5	6.0	2.9	45.6
Region					
Tigray	32	32.5	0.0	5.0	37.5
Amhara	35	44.9	0.0	0.0	44.9
Oromia	97	19.1	18.2	3.4	40.7
SNNP	68	41.0	3.8	3.1	48.8
Age					
15-19	16	26.1	21.0	0.0	47.1
20-34	182	39.6	5.7	3.6	48.9
35-49	34	21.0	0.0	0.0	21.0
No of children					
1-2	87	36.5	8.7	6.6	51.8
3	30	31.0	8.0	0.0	39.0
4+	115	37.9	3.4	0.8	40.1
Fertility Intention					
Undecided	5	48.1	0.0	0.0	48.1
Want to have children in the future	1	0.0	0.0	0.0	0.0
Says she cannot get pregnant	152	33.0	7.4	3.5	43.9
No more	74	46.4	1.9	1.4	49.7
Education					
Cannot read and write/No schooling	128	33.5	5.7	0.1	39.2
Primary	63	37.9	6.6	1.3	45.8
Higher	41	42.8	5.8	12.8	61.4
Distance from a health facility					
<30 min	126	32.3	8.4	5.2	45.9
30 min – 1 hour	67	42.3	4.6	2.3	49.1
1 -2 hours	39	37.1	3.5	0.0	40.1
Wealth quintile					
Lowest	33	40.4	0.5	0.0	40.9
Second	47	25.6	2.0	0.0	27.6
Middle	62	33.6	11.8	0.3	45.6
Fourth	43	46.8	6.3	15.0	68.1
Highest	47	44.8	8.7	4.8	58.3

Method Mix

Figure 1 shows the percentage distribution of FP users by the method they were using during the survey (i.e., method mix). Injectable contraceptive was the most frequently used method, adopted by 78% of all users FP users. The second most frequently used method was implants, which were used by 16% of FP users. The remaining 6% of users adopted pills (4%), IUCD (1%) and others (<1%). Nearly four in five of the women were using short-term FP methods.

Table 12 shows the method mix by background characteristics of women. The percentage of implant users was higher among women in Oromia and Amhara regions, among women with one or more children, and among women from the higher wealth quintiles. The percentage of injectable users was

higher among women in the SNNP region, among women with no children, and among those from the lowest wealth quintile.

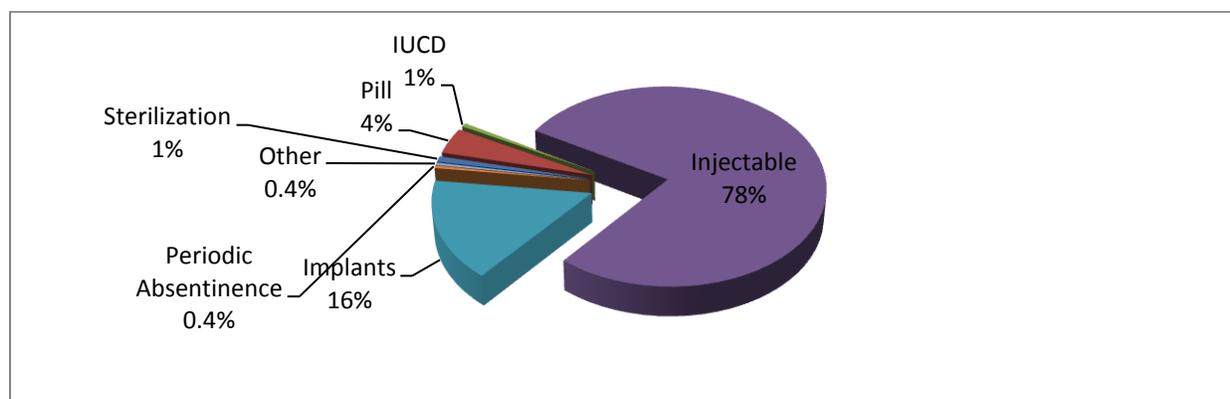


Figure 1: Method mix among all users from the selected eight PHCUs in Tigray, Amhara, Oromia, and SNNP regions, January 2015.

Table 12, Method mix by background characteristics of women, January 2015

Background Characteristics	Sterilization	Injectable	Implants	Pills	IUCD	Periodic abstinence	Missing	Total
Total	0.9	77.6	16.0	4.2	0.6	0.4	0.4	100
Region								
Tigray	1.1	79.5	9.5	7.5	2.4	0.0	0.0	100
Amhara	5.1	74.3	18.0	0.0	0.0	2.6	0.0	100
Oromia	0.0	58.3	30.0	7.1	2.3	0.0	2.3	100
SNNP	0.0	83.7	12.1	4.2	0.0	0.0	0.0	100
Age								
15-19	0.0	78.3	21.7	0.0	0.0	0.0	0.0	100
20-34	0.1	80.0	15.2	4.5	0.2	0.0	0.0	100
35-49	3.2	70.2	17.7	4.1	1.6	1.6	1.6	100
No of children								
None	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100
1-2	0.3	77.4	16.2	6.1	0.0	0.0	0.0	100
3	0.0	79.8	20.2	0.0	0.0	0.0	0.0	100
4+	1.4	76.6	15.4	4.3	0.9	0.7	0.7	100
Education								
Cannot read and write/No schooling	0.8	78.3	17.6	2.5	0.8	0.0	0.0	100
Primary	1.3	77.6	14.4	4.1	0.0	1.3	1.3	100
Higher	0.5	74.5	13.4	10.6	1.0	0.0	0.0	100
Distance from a health facility								
<30 min	1.0	73.9	18.0	4.4	1.1	0.8	0.8	100
30 min – 1 hour	1.4	82.9	12.9	2.8	0.0	0.0	0.0	100
1 -2 hours	0.0	78.2	15.9	5.9	0.0	0.0	0.0	100
Wealth quintile								
Lowest	0.0	94.5	5.5	0.0	0.0	0.0	0.0	100
Second	3.4	86.6	10.0	0.0	0.0	0.0	0.0	100
Middle	0.0	78.0	21.8	0.2	0.0	0.0	0.0	100
Fourth	0.0	68.1	20.3	11.6	0.0	0.0	0.0	100
Highest	1.7	66.8	18.7	7.0	2.3	1.8	1.7	100

Sources of FP Methods

As shown in Table 13, government HPs and HCs were the main sources of FP methods, from which 75% and 23%, respectively, of the users obtained FP methods. The remaining 2% obtained their FP methods from government hospitals (0.6%), private clinics (0.7%), and pharmacies (0.4). The proportion of FP users who obtained their methods from HCs during their last visit was lower among women in Oromia and was higher among nulliparous women than among their counterparts.

Table 13. Sources of family planning methods by women's background characteristics, January 2015

Background Characteristics	Total users	Gov. hospital	Gov. HC	Gov. HP	Private clinic	Pharmacy	Other	Total
Total	338	0.6	23.1	74.8	0.7	0.4	0.4	100
Region								
Tigray	50	3.4	39.1	57.5	0.0	0.0	0.0	100
Amhara	74	2.5	20.9	72.7	3.9	0.0	0.0	100
Oromia	111	0.0	10.0	85.2	0.5	2.3	2.0	100
SNNP	103	0.0	25.6	74.4	0.0	0.0	0.0	100
Age								
15-19	15	6.1	17.4	76.5	0.0	0.0	0.0	100
20-34	236	0.0	25.3	73.1	0.4	0.6	0.6	100
35-49	87	1.6	17.6	79.2	1.6	0.0	0.0	100
No of children								
None	5	0.0	48.0	47.7	4.3	0.0	0.0	100
1-2	108	0.9	15.3	81.9	0.4	1.5	0.0	100
3	51	0.0	35.2	64.8	0.0	0.0	0.0	100
4+	174	0.7	23.4	74.3	0.9	0.0	0.7	100
Education								
Cannot read and write/No schooling	176	0.0	27.1	72.1	0.0	0.0	0.8	100
Primary	106	2.1	19.5	76.8	1.6	0.0	0.0	100
Higher	56	0.0	16.5	79.9	1.1	2.5	0.0	100
Distance from a health facility								
<30 min	189	1.3	15.3	82.8	0.6	0.0	0.0	100
30 min – 1 hour	92	0.0	17.7	78.3	1.4	1.3	1.3	100
1 -2 hours	57	0.0	48.3	51.7	0.0	0.0	0.0	100
Wealth quintile								
Lowest	57	0.0	29.5	70.5	0.0	0.0	0.0	100
Second	59	1.7	23.6	74.7	0.0	0.0	0.0	100
Middle	66	0.0	22.2	75.8	2.0	0.0	0.0	100
Fourth	75	0.0	12.0	86.2	0.0	0.0	1.8	100
Highest	81	1.7	28.5	66.9	1.2	1.7	0.0	100

Informed Choice

To measure the quality of provider counseling on FP, recent users (i.e., those who had been using FP during the previous 12 months prior to the survey) were asked about the information they received during their FP visits. Figure 2 shows about 45% of users reported being told by their providers of side effects of the methods they were using. A higher percentage (73%) of clients were told of side effects in the Tigray region than in the other regions while the lowest percentage of users reported being told of side effects was in SNNP region (40%).

About 40% of all users reported being told of what to do if side effects arise. The percentage of users who were told of side effects also showed wide variation among regions, ranging from 73% in Tigray to 32% in SNNP region. The percentage of women reported being told of other methods ranged from 91% in Tigray region to 67% in Amhara region while 73% of all users reported being told of other methods.

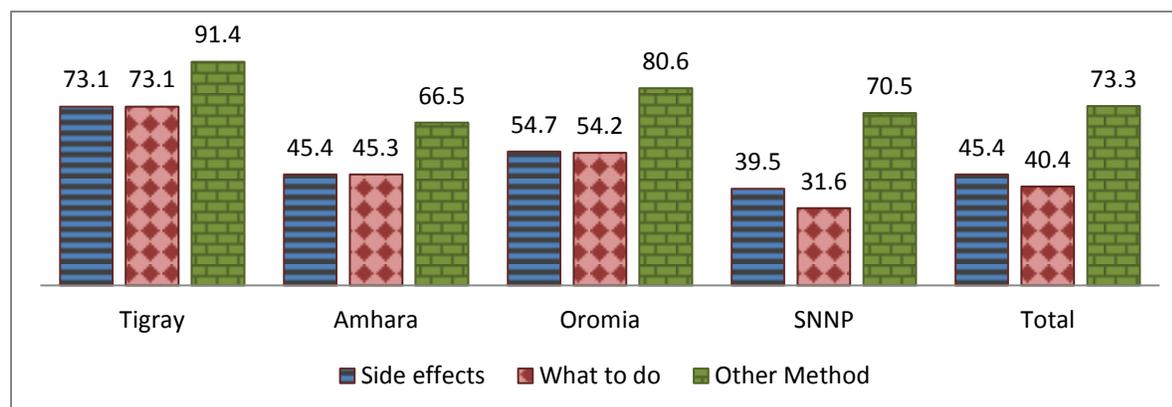


Figure 2. Information received by women using FP methods for within 12 months prior to the study by region, January 2015.

As shown in Table 14, 99% of the FP users obtained their FP method of choice during their most recent visit with a family planning provider. More than half (62%) of the FP clients had made the final decision about what method to adopt by themselves, and in 19% of cases, the FP users made the final decision jointly with their partners. Joint decision-making was much higher in Tigray and Oromia (48% and 45%, respectively) than in the other two regions (12% or less). Women with fewer children were more likely to make the final decision about what method to use by themselves.

Table 14. Percentage of married women using FP following interaction with FP providers, January 2015

Background Characteristics	Total users	Obtained method of choice	Who made the final decision about what method to take				Would refer relatives/friends to the provider	
			women alone	Provider	Partner	You and provider		You & partner
Total	282	98.9	62.1	1.9	13.7	3.7	18.6	89.6
Region								
Tigray	47	98.9	36.2	1.1	15.0	0.0	47.7	98.9
Amhara	55	96.3	66.7	5.0	3.7	12.7	12.0	91.7
Oromia	94	97.1	45.3	0.3	8.1	1.3	45.1	77.1
SNNP	86	100	69.0	1.8	17.3	3.0	8.9	91.6
Age								
15-19	13	100	22.1	0.0	12.5	0.0	65.4	67.4
20-34	197	99.8	64.4	1.4	13.4	3.4	17.5	89.4
35-49	72	96.2	62.9	3.8	14.9	5.1	13.2	94.4
No of children								
None	5	100	52.3	0.0	0.0	0.0	47.7	71.9
1-2	89	99.7	35.5	2.1	24.5	9.2	28.8	84.5
3	45	100	68.7	0.7	4.5	1.1	25.1	81.4
4+	143	98.3	72.4	2.1	11.4	2.0	18.6	94.2

Note. Shaded cells indicate statistically significant ($p < 0.05$) variation.

Reasons for Non-Use

Table 15 shows the reasons for not using FP. About a quarter (23%) of the women not using FP reported that postpartum amenorrhea was their reason for not using FP while 20% reported that breast feeding was their reason for not using FP.

Table 15. Percentage of women not using a FP method, by reasons for non-use, January 2015

Reasons for FP non-use (n=323)	Percentage
Postpartum amenorrhea	23.4
Breast feeding	19.8
Fatalistic	15.5
Not having sex	6.9
Husband/partner opposed	5.4
Menopausal	5.1
Fear of side effects	4.6
Infrequent sex	3.0
Health concern	1.9
Interferes with body's normal process	1.5
Respondent Opposed	1.5
Religious prohibition	0.5
Sub fecund/Infecund	0.5
Knows no method	0.4
Lack of access/too far	0.4
Others	9.6

II. Facility Assessment

Eight HCs and 38 HPs were assessed with a focus on the infrastructure of their FP service delivery units; staffing; availability of FP methods; consumables and job aids; and recording, reporting, monitoring, and technical support systems. All the service delivery points assessed were providing FP counseling and contraceptive services during the survey.

Infrastructure and Family Planning Service Delivery Environment

Water supply to health facilities was very low (Table 16). Piped water was available in only one HP (3%) and five of the HCs (63%). An adequate water supply near hand-washing facilities in the FP service delivery area was found in only 16% of HPs and 25% of HCs.

Table 16. Attributes of FP service-delivery environments of HPs and HCs, January 2015

Attributes of FP service provision area	HP (N=38)	HC (N=8)
Auditory privacy	78.9	100
Visual privacy	63.2	87.5
Cleanliness	65.8	75.0
Adequate light	94.7	87.5
Adequate water near hand washing areas	15.8	25.0
Sufficient waiting area	78.9	87.5
Sufficient space to counsel a couple	73.7	62.5
Electricity	53.0	75.0
Piped water	2.6	62.5

Staffing with FP Providers

Table 17 shows staffing with FP service providers at service delivery points included in the survey. The facilities in the study area had an average of 2.4 FP service providers per HC and about 1.7 HEWs per HP. Except for two HCs (Adinebried and Sentema, with only one FP provider each), the other HCs had two or more FP providers assigned to the FP units.

Table 17. Availability of FP providers at the PHCUs in the intervention areas, January 2015

Region	Woreda	PHCU	Professional Categories			Total	Total HPs	No. of HEWs
			Clinical Nurse	Midwife nurse	Health Officer			
Amhara	Bure Zuriya	Alefa	0	1	1	2	5	11
	Ensaro	Lemi	0	3	0	3	3	4
	Chora	Kumbabe	1	2	0	3	8	13
Oromia	Sekachekorssa	Sentema	0	0	1	1	4	8
	Yem	Fofa	1	3	1	5	5	10
SNNP	Dalocha	Ebot Tirora	0	2	0	2	7	9
	Laelay Adiabo	Adinebried	1	0	0	1	6	9
Tigray	Seharti Samre	Finarwa	0	2	0	2	3	4
Total			3	13	3	19	41	68

About 71% of HPs had two HEWs while 26% had only one HEW. Of the 68 HEWs available in the 41 HPs, 11 (25%) were level IV HEWs⁴.

Training

As shown in Figure 3, 77% of all HEWs were trained in Implanon insertion, and the lowest percentage of HEWs trained in Implanon insertion was in Amhara region (43%). Of the 38 HPs assessed, 16 (42%) had two HEWs trained in Implanon insertion while 19 (50%) had only one HEW trained in Implanon insertion. Ten of the 19 FP providers at HCs were trained in comprehensive FP (data not shown).

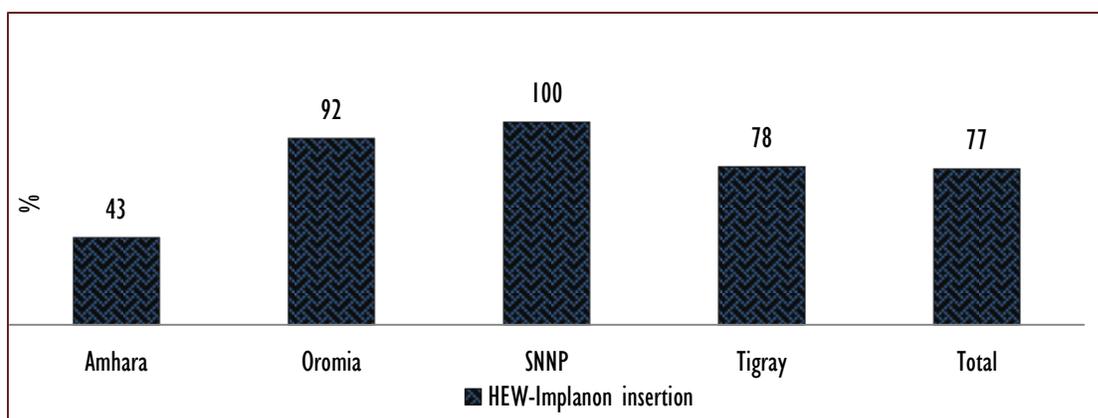


Figure 3. Percentage of HEWs trained in Implanon insertion (N = 48), January 2015.

Availability of FP methods, Consumables and Job Aids

Table 18 shows that about 71 percent of all HPs had at least one modern FP method available on the day of the visit while 68% of them had Implanon. Emergency contraceptive pills were the least available (in only 19% of the HPs). Counseling guides, FP method-specific screening tools, and WHO medical eligibility criteria were not available in all of the HPs, except the two in Amhara region, where a counseling guide was found.

Table 18. Percentage of HPs with available FP methods on the day of the visit, January 2015

Region	Any method	OCP	Injectable	Implanon	Male condom	Emergency Pills
Amhara	75.0	57.1	85.7	85.7	57.1	28.6
Oromia	63.6	28.6	100	57.1	42.9	0.0
SNNP	58.3	45.5	54.5	54.5	45.5	18.2
Tigray	100	42.9	85.7	85.7	100	28.6
Total	71.1	43.8	78.1	68.8	59.4	18.8

Concerning availability of consumables/supplies for Implanon insertion among HPs with at least one HEW trained in Implanon insertion, iodine was found in 51% of such HPs while lidocaine was available in 83% (Figure 4).

⁴ Level IV HEWs have an additional year of clinical training.

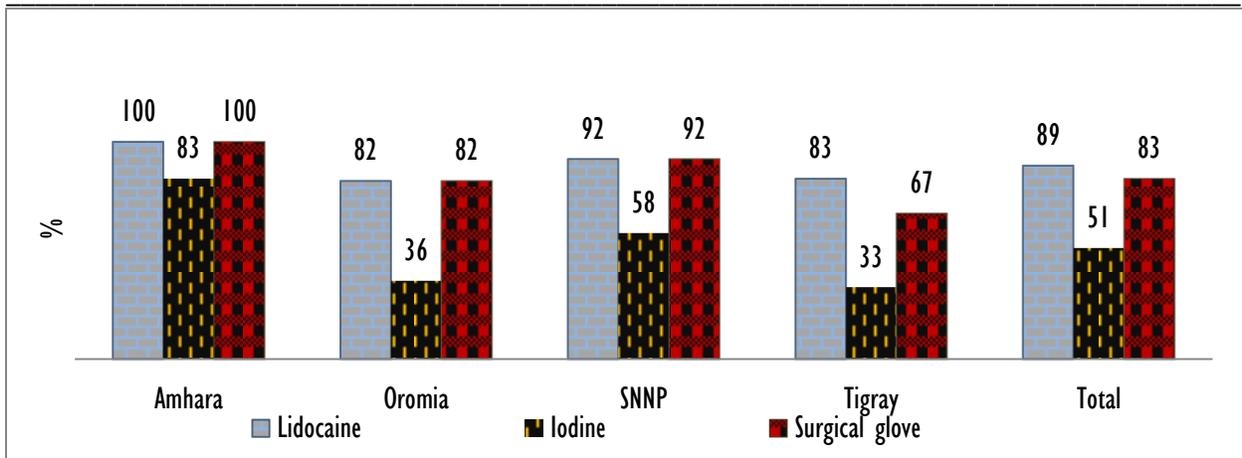


Figure 4. Availability of consumables for Implanon insertion among HPs with HEWs trained in Implanon insertion (N = 35).

Availability of IEC Materials

As shown in Figure 5, any IEC material was available in about 55 percent of the HPs. In Oromia, only one of the HPs had any IEC material available while 92% of the HPs in the SNNP region had some IEC material during the survey.

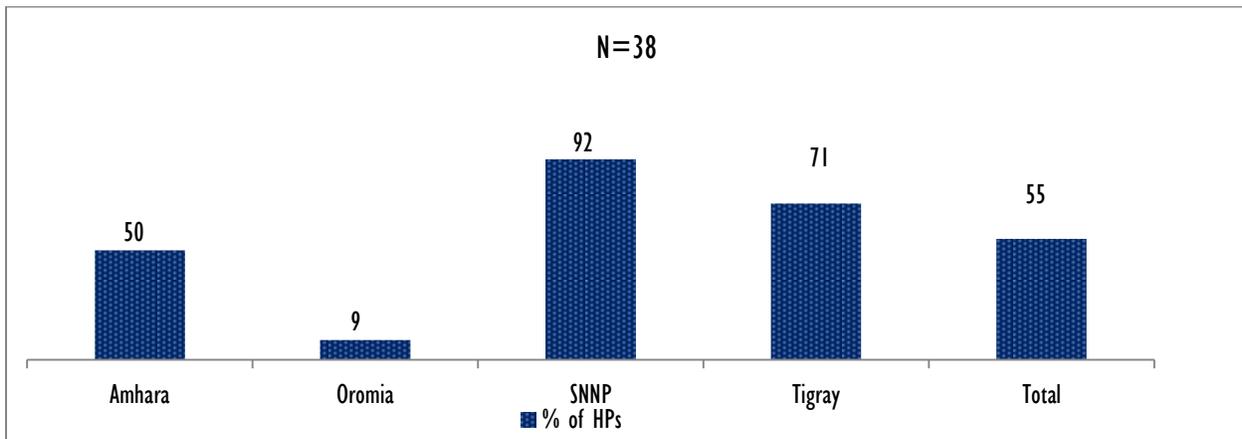


Figure 5. Percentage of HPs with any IEC material, January 2015

Knowledge of FP Providers of FP Counseling

Concerning the issues HEWs indicated they would raise while providing FP counseling to a new client, about 83 percent of the HEWs noted they would mention all FP methods available in the HP to the client while only 8% said they would also mention FP methods a client could access at higher health facilities (Table 19).

Table 19. Percentage of HEWs who spontaneously mentioned issues to be raised while counseling a new FP client, by region, January 2015

Issues raised	Amhara N=14	Oromia N=13	SNNP N=12	Tigray N=9	Total N=48
Mention all FP methods available in the HP	78.6	61.5	100	100	83.3
Mention all FP methods a client could take in HCs/Hosp.	0.0	0.0	16.7	22.7	8.3
Describe routes of administration for FP methods	0.0	0.0	58.3	33.3	20.8
Describe effectiveness of FP methods	35.7	30.8	16.7	33.3	29.2
Describe the side effects of FP methods	35.7	61.5	83.3	55.6	58.3
Describe the possible complications of FP methods	14.3	7.7	25.0	22.2	16.0
Describe what to do if any side effect arises	14.3	30.8	41.7	44.4	31.3
Telling how soon a woman could return to fertility	14.3	7.7	25.0	0.0	12.5
Addressing any concern a client would have	7.1	38.5	75.0	11.1	33.3

Table 20 shows that, among the side effects of Implanon, change in bleeding pattern was the most frequently spontaneously mentioned side effect by HEWs trained in Implanon insertion (97%), followed by headaches (41%). Other side effects were mentioned by 3–19% of trained HEWs.

Table 20. Percentage of HEWs trained in Implanon insertion spontaneously mentioning side effects of Implanon, January 2015

FP Methods	Amhara N=6	Oromia N=12	SNNP N=12	Tigray N=7	Total N=37
Changes in bleeding pattern	100	91.7	100	100	97.3
Headaches	33.3	25.0	66.7	28.6	40.5
Abdominal pain	16.7	0.0	0.0	14.3	5.4
Breast tenderness	16.7	0.0	0.0	0.0	2.7
Weight change	33.3	16.7	8.3	28.6	18.9
Dizziness	16.7	0.0	25	14.3	13.5
Mood changes	16.5	0.0	0.0	0.0	2.7
Nausea	16.7	0.0	0.0	0.0	2.7

Table 21 shows the post-insertion instructions for Implanon spontaneously mentioned by HEWs trained in Implanon insertion. Except for two instructions—reminding the client to keep the arm dry and reminding client to return, mentioned by 81% and 57% of HEWs, respectively—, all instructions were mentioned by less than 60% of the HEWs.

Table 21. Percentage of HEWs trained in Implanon insertion who spontaneously mentioned post-insertion instructions, by region, January 2015

Post Implanon insertion instructions	Amhara N=6	Oromia N=12	SNNP N=12	Tigray N=7	Total N=37
Remind client to keep arm dry	83.3	83.3	91.7	57.1	81.1
Inform client to expect soreness and bruising	33.3	16.7	16.7	85.7	32.4
Remind client to return in 3 years	33.3	83.3	66.7	14.3	56.8
Discuss how to remember the date to return	0.0	33.3	25.0	0.0	18.9
Remind client Implanon is effectively immediately; no need for backup method	16.7	8.3	16.7	14.3	13.5
Remind clients of condom use for STI protection	0.0	0.0	0.0	0.0	0.0
Remind client Implanon can be removed whenever the client wants, but needs to be done by a provider	33.3	16.7	25.0	0.0	18.9
Inform the client where to go if she has problems or questions	33.3	16.7	0.0	28.6	16.2
Ask client if she has any questions	16.7	16.7	83.3	14.3	37.8

Integration of FP with Other Services

Forty-eight HEWs were asked whether they offered FP information to clients coming for other services. About 69 percent indicated they provided FP information to clients seeking care for sick children while 56% said they provided FP information to ANC clients (Table 22).

Table 22. Percentage of HEWs providing FP information while providing other services, by region

Services sought	Amhara (N=14)	Oromia (N=13)	SNNP (N=12)	Tigray (N=9)	Total (N=48)
ANC	50.0	46.2	83.3	44.4	56.3
PNC	57.1	100	83.3	88.9	81.2
EPI	50.0	92.3	83.3	77.8	75.0
Men for curative services	7.1	38.5	16.7	0.0	16.7
GMP	28.6	53.9	41.7	55.6	43.8
Clients with sick children	64.3	69.2	66.7	77.8	68.8

Referral Linkage

About 52% of HEWs reported having referred clients for FP service to higher level health facilities. The main reason for referral was for implant removal while the percentage of HEWs referring clients for IUCD-related service was as low as 40% (Figure 6). Of those HEWs that referred clients for FP services, only 40% used a written note (Table 23).

Table 23. Percentage of HEWs by the way they referred clients for FP services at a HC

Referral mode	Amhara N=8	Oromia N=2	SNNP N=10	Tigray N=5	Total N=25
Just telling the client to go the HC	75.0	0.0	30.0	100	56.0
Refer with a referral slip	37.5	50.0	0.0	0.0	16
Refer with a written note	37.5	100	70.0	0.0	40.0
Accompany a client to the HC	12.5	0.0	0.0	20.0	8.0
Refer a woman with a volunteer	12.5	0.0	0.0	0.0	4.0
Refer a woman with a relative	12.5	0.0	0.0	0.0	4.0

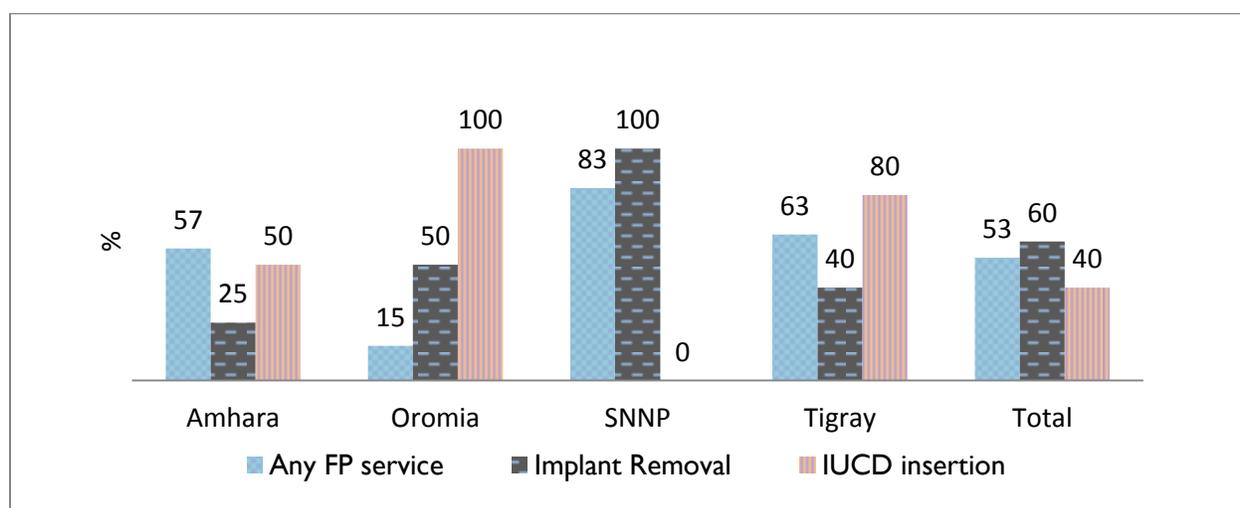


Figure 6, Percentage of HEWs by the FP methods they referred clients for during the year before the survey (N = 25).

III. Qualitative Study

Summary of the Findings of the Qualitative Study

- HEWs and HDA leaders were the primary sources of information and were the most influential in encouraging and initiating women to use FP services.
- Women appeared to share information about FP in social encounters with other women, indicating a possibility of exchanging both correct and incorrect information.
- The use of FP was highly affected by lack of awareness, misconceptions, and rumors about FP methods and religious, social, and cultural values in the community.
- Men involved in FP use appeared to be supportive in some cases, although there was a long way to go in increasing their awareness about and support of FP to increase and sustain FP use in the community.
- Significant others in the community, such as in-laws and older women with experience in using FP, were found to influence women's decisions to use FP.
- Many women appreciated FP services offered by HEWs in the HPs for their convenience and availability. However, some had reservations in this regard. They indicated room to improve, such as the staffing shortage, logistics problems, and intermittent unavailability of services.

Three hundred seventy-six women participated in the qualitative study. Through the thematic analysis of the transcripts and textual data, the qualitative study yielded the following key findings. The findings were largely about the contexts, experiences, and prevailing situations of family planning in selected woredas and are presented in seven thematic areas: women's awareness about FP, sources of information about FP, factors or contexts affecting the use of FP, use of FP, targets for FP, preferences for FP methods, and contexts or factors related to FP services.

Awareness about Family Planning

In each of the FGDs, a general question about what FP meant for the women (in their communities) was forwarded to participants to explore what people in the communities knew, believed, and misconceived about FP. When the explanations provided were insufficient and were difficult to understand, women were probed to get more insight into the context.

The discussants from all regions (Tigray, Amhara, Oromia, and SNNP) gave a range of definitions for FP. According to the discussants, FP is birth spacing, a birth control method, or avoiding early pregnancy, yet for some of the discussants, FP is a means to determine the number of children a family will have or to delay pregnancy. Some defined FP in terms of its benefits to mothers and children and leading economically viable and self-sufficient families. In general, few participants provided a comprehensive meaning of FP, defining it as planning and determining when to have a child and how many children to

have commensurate with the resources a family has to lead a happy life. One woman discussant defined FP as follows:

FP is spacing children and giving birth to the desired number of children. It is deciding how many children to have and when to have them. It's giving birth to a child when the older child is able to feed himself, look after the cattle, and help himself.

Despite the varying definitions participants provided, awareness about FP methods, its benefits, and where to get the service was universal among the study participants. When asked about the FP methods they knew, almost all participants mentioned pills, Depo-Provera, and Implanon. Most of the participants also knew for how long each of these contraceptive methods would prevent pregnancy. Few women knew about other long-acting reversible (IUCDs and other implants) and permanent methods. The permanent methods were mentioned only by participants from Amhara and Tigray regions.

Most of the participants in the FGDs believed that FP has economic, health, social, and psychological benefits for women, children, and families. The benefits most of the discussants ascribed to FP were associated with families' ability to attain the desired family size by using FP. Most participants opined that FP could help families to determine the number of children they can provide with adequate support (food, clothing, schooling, and medical care), care, and affection, which could ultimately help families to have healthy children that perform well in schools and increase the likelihood of having a healthy and happy family. Most women believed that FP decreases the risk of maternal ailments that can arise from the stress of frequent childbirth and its possible complications.

Enabling women and families to maintain the cleanliness of children and their homes was frequently raised by most of the women as a very important advantage of using FP. Women also believed that FP could assist them in remaining clean and attractive. They indicated that using FP could enable them to have extra time to participate in societal events, community development activities, and other extra-domestic activities that women believed would give them self-confidence. It would also give them the time to learn more about their societies, share experiences, and obtain advice on several issues from members of their communities, information that would eventually help them become productive and contributing members of their communities and allow them to lead happy lives.

Sources of Information about Family Planning

In all woredas, the most frequently mentioned sources of information on FP were HEWs, followed by HDA leaders, kebele leaders, peers, other health workers, and mass media (television and radio). A quote from one of the participants summarizes the apparently available sources of information in the community as follows.

HEWs are the main source of information, but we also get it from HDA leaders, kebele leaders, friends, and other family members. In addition, we were also taught about FP in schools by science teachers.

Women believed that HDA leaders had better understanding of FP and appeared actively engaged in informing women in their neighborhoods about it. According to the participants, HDA leaders, besides disseminating FP information, linked women intending to start or restart using FP methods to HEWs.

Nearly all women nodded when they were asked whether they discussed FP in their communities. The platforms women considered convenient to freely discuss FP were meetings with kebele leaders, coffee ceremonies, HDA meetings, on the way to market places, Iddir meetings, “development sites,” family conferences, and other social events. They also stressed that informal discussions about FP with neighbors and friends are very common. Women indicated they discussed benefit of FP, how long each method prevents pregnancy, where to get the methods, and the side effects of FP methods and their management. They also appeared to discuss misconceptions and to convey information about what they believed true about FP. Nevertheless, young and newly married women appeared less likely to actively discuss and share experiences with FP because they did not dare speak in public.

The discussants also mentioned that discussing FP in public places is sometimes difficult and even considered a taboo. They indicated there is a belief that “Allah is the only one to determine the number of children people would have” and people should not think and talk about it.

In conclusion, information about FP was disseminated in the study communities through multiple channels, indicating the chance of information reaching women can easily be propagated within the community.

Factors or Contexts Affecting the Use of FP

The FGDs revealed several factors affect women’s decisions to use FP methods.

Women’s Knowledge and Attitude

Most of the women exhibited a strong approval of FP use. That most of them believed modern FP methods, if used correctly, are very effective in preventing pregnancy and that FP is good for the health of women and children shows women’s interest in using FP methods. However, most of them believed that the minimum spacing between pregnancies should be 2-3 years, driving women’s interest in LAFP methods. One participant who was using a short-term contraceptive said.

Many people now approve of FP use after observing and understanding that families using FP are economically performing well and having well-nourished and healthy children. Children spaced well get good care from their parents, look clean, healthy and do well in schools.

Women’s Misconceptions about Family Planning Methods

Nearly all women acknowledged that misconceptions about FP are prevalent in their communities. Most of them opined the misconceptions affect use of FP in their communities. Misconceptions reported by participants fall into four categories: Some FP methods are harmful to the health of women and their children; using contraceptives interferes with daily activities of the women and makes accomplish some tasks difficult; use of contraceptives conflicts with religious principles; and use of contraceptives could change the social status of women and empower them so that men could lose their control over them.

The discussions revealed that women associated use of contraceptives with several consequences. Some believed that use of contraceptives could result in infertility, fatigue, or giving birth to a weak child. In some communities, participants mentioned that women tend to associate some incidents of illness or death of a woman with use of contraceptives. For instance, one participant said,

The pills [OCP] tend to accumulate in the stomach [uterus] and form a mass [tumor]. Due to this, one woman was operated to remove the mass which remained for long time in her uterus. The woman was using pills for long time which accumulated in her gut and the mass grew. And I think the injectable is better than pills.

Another participant said,

I know a woman who had some sort of problem in her stomach who got better right after Implanon was removed. It [Implanon] also causes edema, especially the one that prevents pregnancy for five years triggers edema. I also saw a woman who had a hard time with leg edema secondary to the implant.

The Roles of Husbands and Other People

Many women participating in the FGDs stated they were free to use any FP methods. However, some mentioned their husbands had strong influence concerning their decisions to begin using FP, choosing FP methods, and deciding how long to use FP methods. When the husbands disagreed, the women used FP secretly. Although it is difficult to estimate what percentage of men approved of FP use from this study, according to the discussants, many men did approve its use. Women mentioned that some husbands reminded their wives of appointments to take contraceptives and supported their wives when they experienced side effects of contraceptives. In fact, some husbands accompanied their wives to the health facilities for their appointment for FP services. For instance, one woman said,

My husband is very supportive of FP. He asks me if I suffer any side effects. He even reminds me of the next appointments

According to the women, some husbands approve of their wives using FP because they have “good knowledge of FP.” They also mentioned that some husbands openly discuss with their wives about how to improve the lives of their families and the number of children they need to have.

On the contrary, some husbands disapproved of using FP and barred their wives from using it. Thus, some women did not use it, used methods chosen by their husbands, or used convenient methods secretly. One participant shared,

My husband doesn't want me to use any FP methods. I'm using it secretly. I use Depo-Provera because I am afraid of the LAFP methods as I heard many bad things about Implanon.

Women opined that men opposed using FP because the men think “children are gifts of God,” they want to have large families, they believe contraceptives can result in infertility and are hazardous to the health of women and children. Some men also believe they would lose their control over women.

Mothers-in-law appeared to be major influencers of women's decision to use FP. Women indicated that mothers-in-law are usually inclined to advise their newly married sons and daughters to give birth right after marriage and to have many children for fear of losing some. When husbands take the advice of their mothers, they tend to force their wives to stop using contraceptives. In one instance, a husband

forced his wife to quit using FP methods and asked the HEWs not to provide any FP method to his wife. Related to this, one participant said,

There is a man who forcefully removed Implanon with a blade from his wife's arm, very recently. The case is under investigation and not concluded.

Older and experienced women had a strong influence on younger women; they shared much information with younger women. It appeared that older women with misconceptions about FP influenced the decisions of women who were newly married, new to FP, and or with no previous exposure to FP information.

The Roles of HEWs, HDA Leaders, and Other Women

Nearly all women indicated that HEWs were the primary source of information about FP in the community. They expressed their satisfaction with FP services provided by the HEWs because they live and work in the kebeles and were never far from reach. HEWs provided information, they counseled women, and their telephone numbers were available so women could call them for appointments for FP and other services. Women indicated that one of the HEWs was always available at the HP while the other was on outreach services. They also indicated HEWs helped, through counseling services, to dispel misconceptions women had about FP methods.

According to the discussants, HDA leaders, trained by HEWs, provided information about FP and other maternal and newborn health issues during house-to-house visits and family conferences/forums and influenced women, husbands, and other family members. They also used maps to locate women who should receive FP services and linked them with HEWs. In some instances, they used referral slips and asked about women they had referred during meetings with HEWs.

The Role of Religious Teaching and Beliefs

The participants of the FGDs in the study areas asserted that neither the Christian nor the Islam religion forbids the use of FP. Although neither religion publicly endorses or disallows using FP, some "radical" religious leaders taught their congregations not to use any FP method and considered using FP a sin against the will of Allah or God. It appeared there was controversy concerning whether modern FP should be used or disallowed among Muslims discussants. Few women indicated they had accepted such teachings and stopped using FP. Few Christian participants mentioned that using FP is a sin. Many participants said that many people in their communities were using FP, despite their believing FP is a sin.

Awareness about Side Effects of FP Methods

Despite most of the discussants demonstrating high awareness of types, benefits, and pregnancy protection of modern FP methods, they appeared to have little awareness about their side effects and what to do when side effects arise. In addition, rumors and unfounded beliefs about side effects of FP methods were prevalent and had been influencing use of FP by women.

The discussions revealed that misconceptions about side effects of FP methods were prevalent among the discussants and the communities at large. According to the participants, women using Implanon may face the problems of the implant disappearing in the body, infertility, complete cessation of menses,

fatigue, or giving birth to a weak child (conceived after implant removal). Women believed that use of Implanon is related to weakening of the arm and emotional instability, as indicated by one woman:

After starting on Implanon, I unknowingly became impatient and irritable. I easily got mad at my husband. Later on, when I got used to the implant, my emotion settled well, and I regained control over myself.

Women also believed that using an injectable contraceptive was related to irritability, dizziness, mood swings, and impatient reactions to minor triggers, and they added that irritability peaked when they were exposed to heat during cooking or to the sun or when they consumed alcohol. Some participants believed that amenorrhea associated with use of injectable contraceptives is beneficial while others believed it is dangerous to the health of the women. A young woman stated,

The menses is a blood which is not needed in our system. That is why it is sloughed off every month. If it stays long in our system, it will cause diseases like hypertension.

Women believed that use of pills was associated with loss of appetite, menstrual irregularities, cessation of menstruation for a long time, and growth of masses in the stomach (uterus). Some women also believed that women who had been using FP methods must undergo uterine cleaning or evacuation because the methods encourage growth of flesh inside the uterus, which affects fetal growth if the mother conceives.

Use of Family Planning

According to the discussants, because all were from rural kebeles, the use of FP had increased since the HEWs started to work in their kebeles. They noted that availability of FP methods at the HPs, private health facilities, and any HCs; increasing cost of living and child raising; and the need to improve the living conditions of families are factors that increased the use of FP in the communities.

Reasons for FP Non-use

The most important reason for not using FP among the participants was the intention to have a child, particularly in the case of young newly married woman. Among the FGD participants and community members, there was a strong belief that newly married woman should not use FP until they proved their fertility by giving birth to at least one child and met the expectations of mothers-in-law and other relatives. Some also mentioned fear of side effects as reasons not to use FP methods. Lack of awareness, bad experiences in relation to previous use of some FP methods, beliefs held, and rumors aired in the community are the reasons for FP non-use in the communities.

Moreover, some women emphasized that pressure from fathers-in-law, mothers-in-law, and some religious fathers and, in some instances, unavailability of the services at the HPs were obstacles to using FP methods.

Reasons for Discontinuing Using FP

The main reasons women discontinued using FP methods were inconveniences related to the side effects of the FP methods, opposition from their husbands, their intentions to have children, rumors in

their communities, religious beliefs, and lack of awareness. In addition, some women discontinued FP use for a while whenever they wanted to change to another method.

Targets for FP

When women were asked who they and people in their communities think should use FP, they said that families with large plots of land, smaller family size, financial wealth, and the capacity to take care of many children are not supposed to use any FP method. However, families not having these major factors should be flexible in using FP, with three groups of women identified concerning whether they should use FP, according to the discussants.

Young and Unmarried Women

According to the participants, young and unmarried women are not normally supposed to engage in sexually activity and, hence, use FP. However, if such women were sexually active, most of the women believed they should use FP because it is not socially acceptable for young and unmarried women to have children. The short-term FP methods were considered the best options for these women. Nevertheless, the participants pointed out young and unmarried women were not targeted for FP services. They recommended increasing awareness for these women, increasing accessibility to emergency contraceptives and other FP methods, and using schools as entry points to teach these young women about FP and unsafe sex.

Newly Married Women

According to the participants, newly married women (married less than two years) are not supposed to use FP because their families and communities expect the women to prove their fertility by giving birth to at least one child. In some exceptions, for example, if the woman is a student, her family may accept her use of FP. In the absence of such justification, a woman cannot convince her husband or community members she should use FP, and if she decides to use it, particularly for long time, she might be considered infertile, which could ruin her marriage. However, when newly married couples jointly decide to use FP, short-term FP methods are the most commonly used methods. One participant described the situation a friend in her neighborhood was in:

There was a young woman newly married and started on FP as she was not ready to have a child. She was not conceiving, and the husband started questioning her fertility and what was happening. The other woman who got married at the same time as they did was already five months pregnant by then. As a result, the young woman was forced to quit FP. That usually happens with new couples. Even some women who were married for a long time have to use FP methods secretly from their husbands.

Women Married for More Than Two Years

The participants noted that women who were married for more than two years, because most of them already had at least one child and had proved their fertility, were good targets for FP services. Discussants believed these women could use either short-term or long-term FP methods, depending on their preferences.

Preferences for FP Methods

The participants indicated method preferences of women differed according to their reproductive goals, the length of time they had been married, their awareness of FP methods, their previous experience with using FP, the involvement of men in the decision to use FP methods, and other related factors. Women were identified as being in one of two categories based on their preferred FP methods.

Short-term FP Methods

Many of the women preferred short-term FP methods, particularly injectable contraceptives. They thought these methods were used by many women and their effectiveness and safety were proved. According to the women, Depo-Provera injectable contraceptives appeared to be the most widely used in all communities the participants were drawn from. They also mentioned that, previously, the pills were the most widely used methods but currently are not considered good options for women using FP secretly because they have to be taken on daily basis.

Some women, because of intolerance to the side effects, sought advice and treatment from HEWs and, some of them switched to other FP methods. Some women quit using pills because they believed pills caused severe heartburn and black spots and boils on the facial skin. In addition, women lacked awareness and skills to use the pills correctly, resulting in failure and getting pregnant. Women believed the drawbacks of these short-term methods were the need for women to visit providers frequently, a chance of missing doses or an appointment and providers may not be available on appointment dates. However, their immediate reversibility was what women liked about short-term FP methods.

Long-Acting Family Planning Methods

The discussion revealed that Implanon is the most widely known LAFP method, which the women referred to as “the one preventive for three years.” In relative terms, implants were the most preferred LAFP methods. Women liked using implants to avoid the need to come to the HP every three months. The women using Implanon were those who had children and who wanted to prevent pregnancy for three or more years. Women also mentioned that any women could use this method. One woman said,

If the woman intends to delay pregnancy for two or more years, Implanon is the best choice. She has to take it once and get rested for three years.

The women indicated that providers’ unwillingness to remove implants when women requested it and providers trying to force clients to continue using implants once inserted were obstacles to using implants in their communities. This was corroborated by a quote from one participant:

The providers asked me to sign an agreement not to ask for the removal of the implant at least for the coming six months, no matter what happens.

The misconceptions related to use of Implanon women knew were prevalent in their communities were the implant can disappear in the body or may protrude (come out) during heavy tasks, it causes infertility, children born after its use would be weak, and the insertion site remains as unhealed wound for a week. However, none of the implant users involved in the discussions indicated experiencing any of these rumored issues.

Contexts or Factors Related to FP Services

Women indicated they were happy about the context in which the services were delivered, including accessibility and service delivery environment (HPs), except a few HPs located far away or beyond geographic barriers. Participants from some woredas pointed out that health posts were often closed, particularly those run by only one HEW when the HEW was providing outreach services. Shortage of supplies was also mentioned as an obstacle to using FP methods. One woman explained that HEWs have many activities to carry out:

It is not to blame the HEWs, but they are supposed to attend many meetings at the district office, and they have to go there frequently. When they attend meetings/trainings, we can't find them. We are forced to discontinue or look for FP services somewhere else.

Another participant using Implanon said,

This is a failed health post; whenever we come here, they said, "The injectable [Depo-Provera] is not available. So, you should go to the health center," which is thirty kilometers away from here.

Some women indicated that, disappointed by the quality of services and inconveniences, they had tried to access FP service from private health facilities, which are usually located in towns and are few in number.

Recommendation and Suggestions by Participants

The discussants strongly suggested that making Implanon removal services available at the HPs; increasing the number of HEWs at HP, especially where there was only one HEW; expanding method options at the HPs; enhancing the skills of HEWs in side-effect management; and ensuring adequate logistics required for better quality of services would help improve the FP service delivery at the HP level. Further explaining this, one participant said,

We want to see our HP's capacity improved in all aspects. There should be adequate goods and medical equipment that will enable us to get better FP services and others services that can improve the health of mothers and children.

Continuous and further training for HDA leaders, ensured availability of IEC materials, and continuous support from HEWs could maximize their roles in improving FP use in their communities.

DISCUSSION

The findings from this study showed the context in which FP services were delivered in the intervention areas. The following discussion expands on the major findings of the studies, thematically indicating areas that need programmatic actions and further investigation.

Knowledge and Approval of Family Planning Use

Knowledge of FP is the first step to seeking and effectively using a contraceptive method. The study revealed that the knowledge of FP, approval of its use, and knowing where to obtain the service were nearly universal. The household survey showed that, among all interviewed women in the eight districts, 96% had heard of FP, 95% knew where to obtain such services, and 92% approved of FP use. The qualitative study also revealed that awareness about FP, its benefits, and where to obtain the service was universal among the FGD participants (HDA leaders and other women). The discussants noted FP has numerous benefits in four categories: health, economic, social, and psychological benefits to children, women, and families. The findings of this study were consistent with the findings of nationwide surveys in Ethiopia that showed more than 90% of the women had heard of a FP method, approved of FP use, or knew where to obtain a FP method (3, 4, 5, and 25).

The household survey and the qualitative study showed that pills, Depo-Provera, and Implanon were the most widely known FP methods among women. The findings of the household survey indicated that Implanon (known by 85% of the women) was the most widely known LAFP method followed by IUCDs (13%) and female sterilization (4%). Only women from Amhara (15%) and SNNP (3%) knew about female sterilization, and women in Amhara were more likely to know about IUCDs and female sterilization than women in the other regions. Similarly, Implanon, known by most of the discussants as “the one preventive for three years,” appeared to be known by most of the FGD participants, whereas permanent methods were mentioned only by discussants from the Amhara and Tigray regions. The mini-DHS conducted in 2014 in Ethiopia showed that implants and IUCDs were known by 72% and 38% of women at the national level. Thus, the percentage of this study’s participants who knew about IUCDs was lower than the national survey findings (5). The fact that the study participants were selected from rural kebeles could contribute to this discrepancy to some extent.

The above findings were corroborated by the findings of the facility assessment, which showed, during counseling, a small percentage of the HEWs (8%) told their FP clients about methods that were not supposed to be available at the HP level (i.e., implants other than Implanon, IUCDs, and permanent methods).

Concerning different categories of women, younger and nulliparous women were less likely to have heard about FP in general but were more likely to know about female sterilization than their counterparts were. Similarly, more educated and richer women were more likely to know about female sterilization than their counterparts. Furthermore, richer women were also more likely to know about IUCDs but less likely to know about implants. The findings from the FGDs also revealed that young women did not usually speak up and share information about FP in their communities and, particularly, those unmarried young women were not supposed to be engaged in any sexual activity so were considered ineligible for FP services.

The findings of the study indicate a need to improve awareness of women concerning LAFP methods. The lack of awareness was pronounced among young and nulliparous women, signifying the need for investigating factors contributing to this phenomenon and designing tailored interventions to address the gap. The study also showed room for improvement in the quality of FP counseling services provided by HEWs to ensure that women seeking FP services from HEWs are informed about all types of FP methods provided within the Ethiopian health system.

Source of Information about Family Planning

The household survey showed health workers were sources of information about FP for 78% of the women, whereas 68% of the women reported they heard about FP from HEWs. Only 17% of the women claimed to have heard about FP from HDA leaders. However, most FGD participants mentioned that HEWs and HDA leaders were the main sources of information about FP. A further look into HDA leaders as sources of FP information showed that women in the Tigray (where the HDA strategy was first developed and pilot tested) and SNNP regions were more likely to have heard from HDA leaders about FP than were women in Amhara and Oromia regions.

The survey also revealed that younger and nulliparous women were less likely to have heard from HEWs about FP than were older and parous women. In addition, television and radio were sources of information for a greater proportion of younger, nulliparous, more educated, and richer women than they were for their counterparts. Similarly, the 2011 EDHS showed that a greater percentage of younger and richer women had heard of FP from radio and television (4). Concerning sources of information about LAFP methods, HEWs were sources of information for most of the women (62%), followed by friends and families (42%) and health workers (29%). HEWs, being main sources of information about LAFP methods, informed women about Implanon only as a LAFP method because they usually informed women about FP methods that were supposed to be provided at the HP. On the other hand, HDA leaders were sources of information about LAFP methods for only 10% of the respondents.

The FGD participants believed that HDA leaders had better understanding of FP and were active in informing women in their neighborhoods about FP. Nearly all discussants said they discussed FP in their communities using multiple platforms. Most of the discussants said they heard about FP during meetings with kebele leaders, coffee ceremonies, HDA meetings, on the way to market places, at Iddir meetings, at “development sites,” and in family conferences. The 2011 EDHS, conducted before the HDA strategy was fully implemented, showed 37% of women had reported having heard about FP during community events. The FGD participants also stressed that informal discussions about FP with neighbors and friends were very common. In addition, the household survey showed that 34% of FP users had heard about FP from their friends or families, which, in the face of widespread misconceptions about FP methods, indicates a possibility of women receiving either appropriate or wrong information about FP from their friends and families.

The findings indicate the contribution of the HDA network to disseminating FP information, particularly about LAFP methods, can be greatly improved. The role of HEWs as sources of information about FP for younger and nulliparous women and in informing women about FP methods that were not supposed

to be available at the HP level was found to be less than optimum, indicating the need to enhance their contributions. Because women used multiple channels to share information about FP, determining the most effective platform for disseminating information about FP among women is important to reach a large proportion of women and thereby to dispel misconceptions. There is a need for HEWs to target young and nulliparous women better. Designing appropriate BCC approaches can also help to address the knowledge gap and debunk misconceptions and rumors among women and communities.

Current Contraceptive Use

Contraceptive use among married women in the eight districts was 46%, ranging from 33% in Tigray to 61% in Amhara (5). Similarly, the mini-DHS conducted in 2014 showed that CPR among married women ranged from 29% in Tigray to 45% in Amhara while the national average was 42%. The PMA2020 second-round survey showed married CPR was 29% in Tigray and 48% in Amhara (3, 5).

The household survey showed that contraceptive use among younger and nulliparous married women was lower than among older and parous women. Consistent with this finding, the FGDs revealed newly married and nulliparous women were not supposed to use FP in their communities until they had proved their fertility and met expectations of relatives by giving birth to a child. Several studies conducted in Ethiopia also showed that CPR was lower among the married younger women between the ages of 15 and 19 years (3, 4, 5, and 25). Furthermore, CPR was higher among married women with higher educational status and those in higher wealth quintiles, a finding consistent with findings of other surveys (3, 4, and 5). However, this finding appears to contradict the opinion of the discussants that families with higher wealth status were appropriate targets for FP.

The qualitative study showed that various misconceptions and rumors, influence of in-laws and significant others, knowledge and attitudes of husbands, and religion appeared to affect the decision of women and couples to use FP services. The misconceptions and rumors prevalent among the discussants (both the women and HDA leaders) and their communities were essentially related to the side effects of FP methods. Some discussants mentioned that women in their areas believed pills, when taken for a long time, would accumulate in the body and result in masses in the abdomen or uterus. However, other discussants thought women in their communities believed that implants, after being inserted, moved inside the body. Some participants of the FGDs appeared to associate some instances of women developing severe illnesses and dying to use of contraceptives.

Most of the women participating in the FGDs appreciated FP services offered by HEWs in the HPs for their convenience, proximity, and availability, which was consonant with the fact that 75% of FP users obtained their recent FP methods from HPs. However, few FGD participants had reservations in this regard. They indicated room for improvement, such as the staffing shortage, logistics shortage, and occasional unavailability of services.

The results of the survey indicate a need to improve contraceptive use among young and nulliparous women. Determining the extent of influence of others, particularly in-laws and husbands, and designing appropriate strategies to reach those people with appropriate FP messages would affect the decisions of women. Family forums or meetings could be instrumental in reaching these and other people around women with tailored information about FP. The prevalent misconceptions and rumors about FP

methods among women and HDA leaders indicate the need to improve the knowledge of HDA leaders and develop strategies to dispel misconceptions and rumors among women.

Method Mix

Injectable contraceptives have been the most frequently used contraceptive in Ethiopia. According to the mini-DHS and PMA2020 round-one survey, 74% of all married FP clients were using injectable contraceptives in 2014 (3, 5). Likewise, the findings of the household survey showed that Depo-Provera was the most widely used contraceptive, adopted by 78% of married women. The FGDs also revealed that Depo-Provera is the most widely used FP method because women consider its effectiveness and safety have been already proven.

Concerning the trend of LAFP use, it showed a recent steady rise. Although the overall use of implants continues to be low, their use has increased in the last 10 years, from less than one percent (0.2 percent) in 2005 to five percent in 2014 (3, 4, 5, and 25). In this study, 7.4% of the married users were using implants. The facility assessment revealed that knowledge of providers about FP counseling was less than optimum and that HEWs did not usually inform women about FP methods that were not supposed to be provided at the HP level. Subsequently, women counseled at the HPs for FP were not, in most cases, referred to the HCs and higher facilities for LAFP methods other than Implanon. Thus, improving the quality of FP service at the facilities could help ensure all clients receive appropriate FP counseling services to make informed voluntary decisions about the types of FP methods in line with their reproductive goals and preferences.

Further examination of the method mix among women in the study area shows the proportion of women using injectable contraceptives was higher among married women of young ages and those in the lower wealth quintile, whereas the proportion of women using implants or IUCDs was higher among women in the higher wealth quintiles. In terms of the regions, the proportion of women using implants was higher in Oromia (30%) and Amhara (18%) than in SNNP (12%) and Tigray (10%) regions.

The findings indicate a great need to inform mothers about all types of FP methods, including LAFP methods, which may require effective strategies to raise the awareness of women concerning LAFP methods.

Sources of FP Methods

Government HCs (23%) and HPs (75%) were sources of FP methods for most (98%) of FP users interviewed in this household survey. The 2011 DHS indicated 75% of users obtained contraceptives from public HCs and HPs. This finding indicates the HEP has been a major contributor to the provision of FP service. The DHS included women residing both in rural and in urban areas, unlike this survey, which included only rural women who generally did not have private health facilities and hospitals available. The contribution of private health facilities and public hospitals in the provision of family planning service, particularly for rural women, is negligible (3, 4, 5, 8, and 25). Furthermore, the contribution of HCs as sources of FP methods was the lowest in Oromia (10%) while it was the highest in Tigray (39%). A greater proportion of married women without children had obtained FP methods from HCs than had women with children.

The qualitative study showed that some women had faced problems in accessing FP services at the HPs. The women mentioned that, sometimes, HEWs would not be available at the HPs or in the kebeles because they had many tasks. Training sessions and meetings were mentioned as reasons that kept HEWs away from their HPs. Disappointed by the inconveniences and the quality of services at the HPs, some women claimed they had tried to access FP service from private health facilities, usually located in towns and few in number.

The findings from the studies showed that HPs are the major sources of FP services, indicating that improving the skills of HEWs is crucial in increasing provision of FP services and addressing the methods skewed toward injectable contraceptives.

Informed Choice

Informing clients about all options, about potential side effects of methods, and about what they should do if they experience side effects is an important integral part of quality FP-service delivery. Doing so helps clients to cope with side effects and consider changing methods whenever the need arises, hence avoiding discontinuation of method use (3, 4, 5, and 25). The household survey showed that 45% of the participants were informed about side effects, 40% were told what to do if side effects arose, and 74% were told about other methods. In 2014, the PMA2020 round-two survey indicated 46% of respondents were informed about side effects and 60% were told about other methods. The 2011 DHS indicated that 28% of FP users were informed about side effects of the methods they were using, 24% were informed about what to do if they experienced side effects, and 37% were told about other methods (4). Although the proportion of women given these pieces of information appears to be improving over the years, the proportion of FP users told about side effects and other methods is still less than 50%, indicating the need to improve the quality of FP counseling by the providers.

Concerning knowledge about FP providers in counseling, most (92%) HEWs failed to indicate spontaneously that they would mention to new clients methods that were not supposed to be available in the HPs. Withholding this information would narrow method options for women seeking FP services at HPs. Various important issues supposed to be discussed with a new FP client during counseling were spontaneously mentioned by less than 50% of the HEWs. In addition, the knowledge of the HEWs who were trained in Implanon insertion concerning side effects of Implanon and post-insertion instructions was inadequate; although 97% of them mentioned changes in bleeding pattern and 41% mentioned headaches as potential side effects of Implanon, the rest of the potential side effects of Implanon were mentioned by less than 20% of the HEWs. These findings were consistent with the findings of the study conducted in SNNP region in 2014 (6).

These issues and the unavailability of FP counseling tools at the visited HCs and HPs could significantly compromise the quality of FP counseling provided by FP providers, indicating a need to improve the counseling skills of FP providers and availability and use of FP counseling aids.

Reasons for Non-Use

Concerning reasons for FP non-use, postpartum amenorrhea and breast feeding were reported as reasons for FP non-use by 23% and 20%, respectively, of the women interviewed for the household survey. However, the PMA2020 first-round survey showed that sub-fecundity or menopause and

opposition to methods were the main reasons for FP non-use for 12% and 10% of women. The qualitative assessment also revealed that the most important reason for not using FP among the participants was the intention to have a child, particularly in the case of young newly married women. In addition, pressure from in-laws, lack of awareness, bad experiences in relation to previous use of some FP methods, personal beliefs, and rumors in the communities were the reasons for FP non-use given in the communities, indicating the need for further investigation of rumors and wrong beliefs and development of tailored BCC approaches to increase women's awareness and debunk misconceptions.

Readiness of Health Facilities for Family Planning Service

The facility assessment section of this study showed that most of the health facilities assessed did not have basic infrastructures for providing FP services. Less than a quarter of the facilities had adequate water near hand-washing facilities. Electricity was available in 53% of HPs and six (75%) of the HCs. In the SNNP region in 2014, the Implanon scale-up initiative evaluation showed that electricity was available in 69% of HCs and 13% of HPs and piped water was available in 39% of HPs and 46% of HCs. These conditions could directly affect the quality of FP services, particularly infection prevention service, provided at the health facilities.

The availability of FP methods at the HPs was less than optimum. The most widely available methods, Depo-Provera and Implanon, were available in about 78% and 69% of HPs, respectively, and emergency pills were the least available, available in only 19% of the HPs. Concerning availability of consumables for Implanon insertion service, iodine was available in 51% of the HPs while lidocaine and surgical gloves were available in 89% and 83% of the HPs, respectively.

Seventy-seven percent of all HEWs were trained in Implanon insertion. Amhara region had the largest percentage of HEWs not trained in Implanon insertion, with 57% of HEWs not trained. Although all HEWs were reported to have been trained in Implanon insertion in Tigray and Oromia regions, only in SNNP region were 100% of HEWs trained in Implanon insertion, with 78% of HEWs in Tigray so trained. In addition, the referral linkage and integration of FP services with other services was found less than optimum.

The findings of the assessment indicate a huge gap in the readiness of health facilities to provide comprehensive FP services. Conducting training sessions to address knowledge gaps, ensuring availability of FP methods and other supplies, and improving the infrastructure of the facilities are important steps to enabling health facilities to provide quality FP services.

CONCLUSION

This study showed that contraception awareness among women participating in the study was nearly universal. However, a small proportion of young and nulliparous women had ever heard of FP. This fact is buttressed by the finding that younger and nulliparous women were less likely to have heard about FP from HEWs, which were the main sources of FP, particularly Implanon insertion. Health workers, HEWs, family members, and friends were sources of FP information for most of the women participating in the study. Contraception use in the study areas was higher than the 2014 national average and exhibited a wide regional variation. In addition, young, nulliparous, and poorer women had lower CPR. The injectable contraceptive was the most widely known and used method adopted by more than three quarters of FP users. Although the share of implants as the method of choice for FP has been increasing over the past four years, only one sixth of women using contraceptive were using implants. HPs and HCs were the sources of contraceptives for almost all FP users in the study areas. Nonetheless, the quality of FP counseling services provided at these facilities was less than optimum. Wealth and educational status, age, influence from significant others of women, and proximity of health facilities were important factors determining use of contraceptives by women. Rumors and unfounded beliefs about FP methods were widespread and appeared to influence substantially women's decisions to use FP services. Above all, the readiness of health facilities to provide appropriate FP services to address the above-mentioned gaps was limited.

RECOMMENDATIONS

In light of the findings of the studies, the following strategies and programmatic actions are recommended to enhance demand for and quality of community-based FP services, including long-term services.

- Use the existing community networks, including HDA network and other social structures, to improve the knowledge of women and their significant others about FP, especially LAFP methods, and identify and link potential FP clients to the HEP, with a focus on young, nulliparous, and poorer women.
- Design innovative BBC approaches to developing and disseminating appropriate messages targeted at debunking prevalent rumors and unfounded beliefs in the communities and ensure availability and encourage the use of IEC/BCC materials.
- Enhance the role of husbands, in-laws, and other influential people in advocating the use of FP at the community level for better results and sustainability of the FP interventions.
- Develop capacity and ongoing technical assistance interventions to enhance quality of FP service, focusing on quality of counseling referral linkage and integration of FP with other services.
- Ensure availability of FP methods, supplies, and infrastructures required for FP services.
- Exploit the opportunity to create demand for LAFP methods, particularly among women who do not want more children and want to space their children over two years and among women delivering at health facilities
- Robust monitoring and evaluation should be in place to ensure effective implementation of the proposed interventions

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