Uptake of LARCs Amongst New Users: Testing a Service-Delivery Model for Youth in Ethiopia

Policy Brief
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About E2A

The Evidence to Action for Strengthened Family Planning and Reproductive Health Services for Women and Girls Project (E2A) is USAID's global flagship for strengthening family planning and reproductive health service delivery. The project aims to address the reproductive healthcare needs of girls, women, and underserved communities around the world by increasing support, building evidence, and facilitating the scale-up of best practices that improve family planning services. Awarded in September 2011, this project will continue for eight years, until September 2019. The project is led by Pathfinder International, in partnership with ExpandNet, IntraHealth International, Management Sciences for Health, and PATH.

About IFHP+

IFHP+ is a USAID-funded program that promotes an integrated model for strengthening family planning; reproductive health; and maternal, newborn, and child health services for rural and underserved populations. IFHP is implemented in 301 woredas of four major regions of Ethiopia by Pathfinder International and John Snow, Inc., in partnership with local implementing partner organizations.

Introduction

The demography of Ethiopia, like many other sub-Saharan African countries, is experiencing a surge in their young populations. Globally, the number of young people aged 10-24 years is fast approaching 2 billion and majority of them live in the poorest countries, straining limited government capacities and resources.[1] Approximately 33 million young people aged 10-24 years live in Ethiopia.[2] Governments, like Ethiopia's, are challenged to make evidence-based investments in youth that will drive economic returns and allow young people to claim their rights to health and development. To arrive at healthy working populations, with fewer dependents, and greater opportunities for growth and stability, it is widely acknowledged that birth and death rates must decline in the poorest countries and Ethiopia is no exception.

Resources must be spent on high-quality, accessible sexual and reproductive health (SRH) services that offer a wide range of contraceptive options and allow all individuals—including young people—to decide freely and responsibly whether, when, and how often they wish to have children. Findings from the 2011 Demographic and Health Survey found that among Ethiopians aged 15-19, 12 percent of young women have started childbearing and only 5 percent of female Ethiopians aged 15-19 are using a modern contraceptive method despite high unmet need for spacing (30 percent) and total demand for spacing (53 percent).[3]

Although use of modern contraceptives has risen among young Ethiopians over the past five years, as shown in the 2014 Mini Demographic and Health Survey (9 percent among 15-19-year olds; 31 percent among 20–24-year olds), the majority of them—like most young people across sub-Saharan Africa—are using short-acting methods. Among 20-24 year- olds using a contraceptive method, a majority, 72 percent are using injectables.[4] However, compliance among young women for short-acting methods (barrier methods, oral pills, and injectables) is poor—adolescent use is characterized by shorter periods of consistent use, more contraceptive failure, and more stopping for other reasons.[5] Additionally, adolescents choosing implants over oral pills and barrier methods are

less likely to become pregnant and more likely to continue over the long-term.[6]

E2A and IFHP+

IFHP+, a USAID-funded program implemented from June 2008 through March 2017, promotes an integrated model for strengthening family planning (FP), reproductive health (RH), and maternal, newborn and child health (MNCH) services for rural and underserved populations in 301 woredas in four major regions of Ethiopia. IFHP+ supports youth friendly service (YFS) sites. IFHP+ works with the Ministry of Health to establish YFS corners or units within health centers, hospitals and university clinics with the aim of providing tailored, confidential and youth-friendly SRH services. The YFS package of services includes the following:

- Counseling and provision of accurate information on SRH, including puberty and sexuality education;
- Sexually transmitted infection counseling, and/or syndromic management, and treatment;
- HIV counseling and testing, and provision of or referral for antiretroviral therapy and other care and support services;
- Prevention of mother-to-child transmission;
- Pregnancy testing;
- Antenatal and postnatal care and referral for delivery;
- Postabortion care;
- Contraceptive counseling for all methods;
- Provision of short-acting methods and referrals to FP facilities for long-acting and reversible contraceptives (LARCs);
- Sexual abuse and violence counseling, treatment, follow-up and referral;
- Nutrition counseling;
- Other medical care.

This YFS package of services is delivered through healthcare providers (health officers, nurses or midwives) trained to deliver YFS in a designated YFS unit within existing health facilities, and through a volunteer cadre of peer educators (PE). At the outset of IFHP+'s support to these sites, providers trained to offer services in the YFS units were not specifically trained to provide contraceptive implants or IUDs to young clientele; nor were the PEs trained to dispel myths and misperceptions about LARCs.

IFHP+ and Evidence to Action (E2A) collaborated to conduct a study to test whether a model for strengthening service delivery for sexually active young people that offered full method choice, including LARCS, within the YFS unit, led to an increase in the uptake of LARCs. The study aimed to do this by improving counseling and skills for LARCs insertion and removal by YFS providers though competency-based skills training on LARCs insertion, removal and infection control and refresher training for peer educations to counsel clients on safety and effectiveness of LARCS and refer them for services.

The research focused on five objectives:

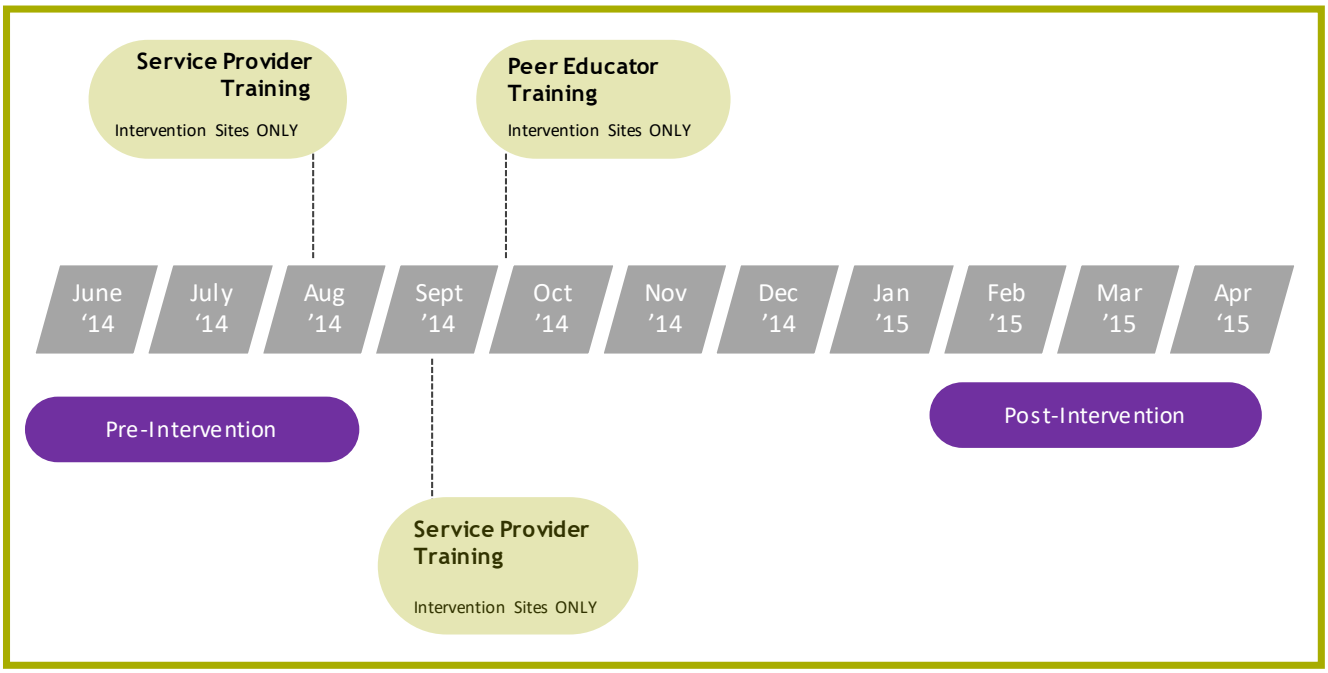
1. Measure providers' average knowledge and competency scores before, immediately after, and six months after training to assess providers' acquisition and retention of knowledge of FP and LARCs counseling and service provision;
2. Gather program information about PE characteristics, motivations, and outreach activity;
3. Measure PEs' average knowledge and competency scores before, immediately after, and six months after training to assess PEs' acquisition and retention of knowledge of FP and LARCs counseling;
4. Examine trends in FP and LARCs uptake among new acceptors after training and subsequent provision of implants by providers, and to statistically compare uptake rates in intervention vs. comparison sites; and
5. Conduct an exploratory, descriptive analysis to better understand characteristics and motivations of switchers and clients seeking an IUD or implant removal.

This brief will focus on findings related to objective 4, trends in FP and LARCs uptake among new acceptors after training and subsequent provision of implants by providers at YFS sites and to statistically compare uptake rates in intervention vs. comparison sites. A full report that encompasses all 5 objectives is available on E2A's website.[7]

Methodology

To test whether the intervention described above led to an increase in the uptake of LARCs, a quasi-experimental study was designed and implemented in 10 intervention and 10 non-equivalent comparison sites in Amhara and Tigray regions. At the ten intervention sites, the model described above was tested and the comparison sites continued to offer IFHP+'s routine adolescent and youth

Figure 1: Intervention Timeline



sexual and reproductive health AYSRH services with no additional training or supportive supervision beyond what was routinely scheduled.

Data was collected from FP registers maintained in the respective YFS units on monthly uptake of condoms, pills, injections, implants and IUDs for 11 months, from June 2014- April 2015. The timeline below highlights the pre-intervention and post-intervention phases along with the timing of the intervention trainings. As the trainings were organized in August and October 2014, the 3 months prior, June-August 2014 were treated as pre-intervention period, and February-April 2015 were treated as the post-intervention period for the purposes of this analysis.

An analysis plan was developed to address the objectives of the study. It included a descriptive analysis of the sociodemographic characteristics of women and contraceptive uptake in both intervention and comparison sites. Pearson chi-square and t-tests were used to compare method uptake during the pre- and post-intervention phases in the intervention sites as well as the comparison sites.

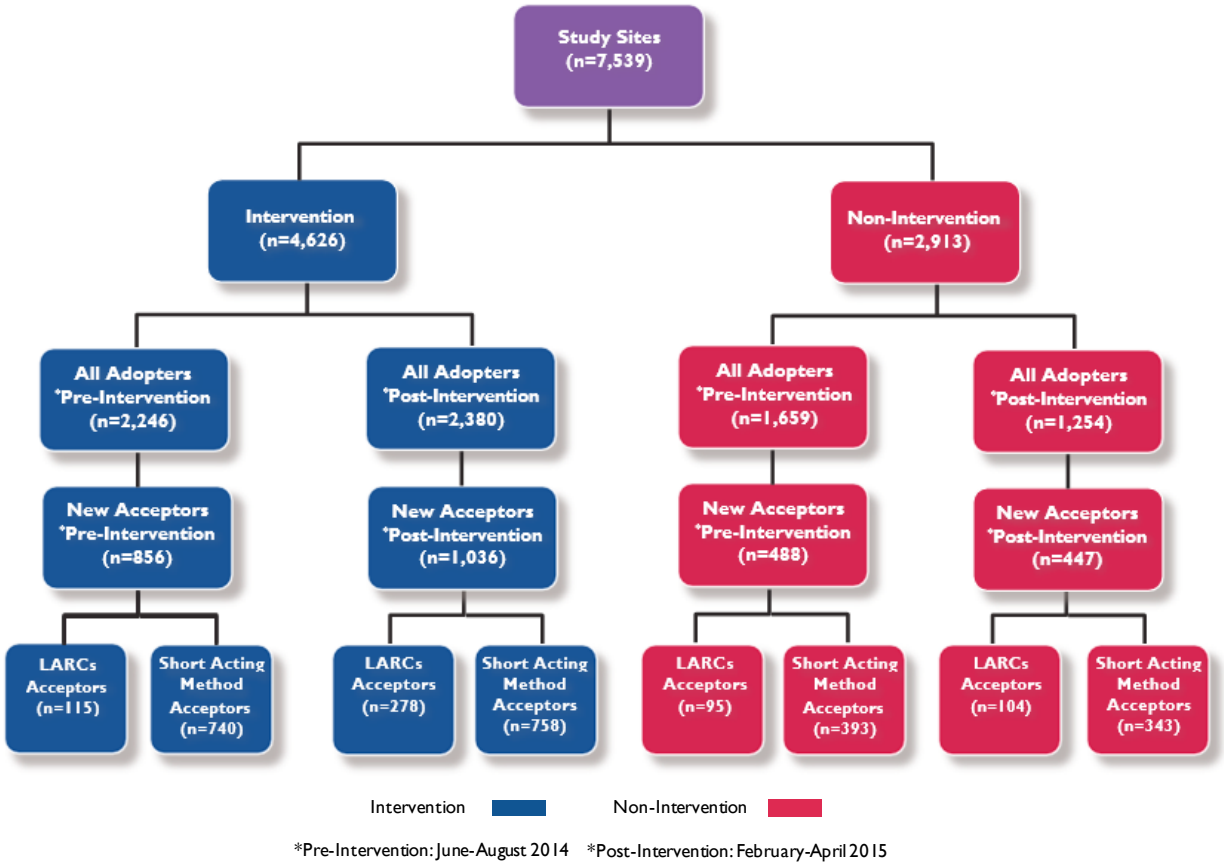
A difference in differences multiple regression (DiD) analysis[a] was also conducted to determine whether the training and supportive supervision intervention had an effect on number of new acceptors of any method and new acceptors of LARCs at the facility as measured by monthly FP registry service statistics.

Study Limitations

The study design was not an operations research study or a randomized clinical trial where the environment is carefully controlled. Instead, the project applied an implementation science approach that corresponded to field needs and intentionally aligned with IFHP+'s routine youth-friendly services program. Regional health bureaus made decisions about how the trainings were conducted, leading to five trained providers per facility in Tigray and two trained providers per facility in Amhara. Some providers in Tigray were trained to provide LARCs, but not youth-friendly services, while in Amhara, all providers who were trained to provide LARCs were previously trained to provide youth-friendly services. This approach did not allow for uniformity between intervention sites in each region and may have led to differences in method uptake. Some providers at both intervention and non-intervention sites transferred, resigned or took extended leave, which may have adversely affected LARCs uptake. Some peer educators also took vacations, resigned, or became involved in income-generating schemes, which may have affected demand generation for LARCs.

[9] A Difference in Differences (DiD) multiple regression analysis uses data from a quasi-experimental design to estimate a causal effect by comparing the changes in outcomes over times between a population that is enrolled in a program and a population that is not. For the purposes of this analysis, the DiD was used to compare the mean number of clients per facility in the pre-intervention versus post-intervention period and comparing the intervention and non-intervention facilities.

Figure 2: Distribution of female FP clients (all adopters and new acceptors) at intervention and comparison sites, for the pre- and post-intervention period, and by type of method accepted (LARC vs. short-acting)



*Pre-Intervention: June-August 2014 *Post-Intervention: February-April 2015

Key Findings

Figure 2 illustrates the breakdown of those clients between intervention and comparison sites, pre/ post intervention, along with the type of method accepted. During the three-month pre-intervention (June-August 2014) and three-month post-intervention period (February-April 2015), a total of 7,539 female clients accepted a FP method. Overall, there were more clients attending the intervention facilities (4,626) than those attending the com¬parison facilities (2,913) during these two phases. Thirty-seven percent of female planning clients were women who had accepted a family plan-ning method for the first time ("new acceptors") during both time periods in both groups of facilities. Among all new acceptors over both time periods and in both groups of facilities, 21% of clients accepted an implant or IUD (LARC).

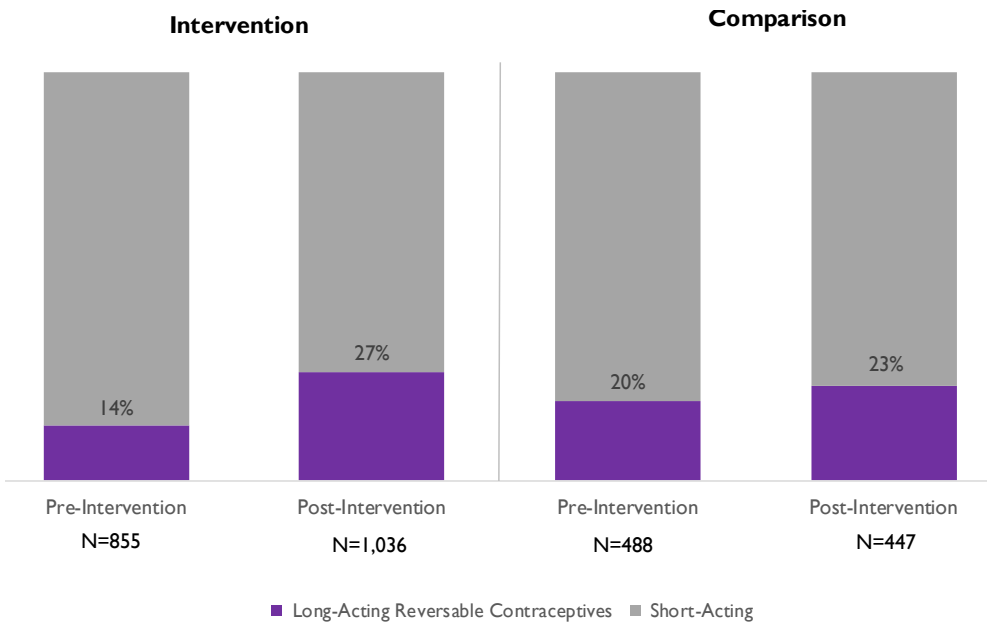
A descriptive analysis of the characteristics of clients, including new acceptors of LARCs, was completed to rule out differences in demographics accounting for changes in FP uptake over time and to give an overall description of client characteristics. No significant changes were noted among new acceptors of LARCs from pre-intervention to post-intervention in either the intervention or the non-intervention sites in key socio-demographic variables, including marital status and parity (a change in age was noted in non-intervention sites, and changes in region and referral patterns were noted in both sites, however; data not shown). Most new acceptors of LARCs (56%) during the pre- and post-intervention period were between the ages of 10-19 years and a majority (81%) were married (data not shown). Notably, a large proportion (73%) of new LARC acceptors were nulliparous (without children born alive; data not shown). An analysis of uptake of new acceptors of both short-acting methods and LARCs over time and in both groups of facilities was conducted. Figure 3 graphically demonstrates the change in the percentage of new acceptors who adopted short-acting and LARCs at the intervention and comparison sites between the pre- and post-intervention phases. There was a total of 855 new acceptors at the intervention sites during the pre-intervention period and 1,036 new acceptors during the post-intervention period. At the comparison sites, there were 488 new acceptors during the pre-intervention period and

447 during the post intervention period. The proportion of new LARCs acceptors (vs. other short-acting methods of FP) increased over time at intervention facilities, but not at comparison facilities.

A descriptive analysis using t-tests of mean monthly uptake of LARCs by new acceptors was also completed by facility group (intervention vs. comparison). Figure 4 illustrates this analysis, which shows that there was a statistically significant increase in the number of LARCs accepted amongst new users at the intervention facilities between the pre- and post-period. However, there was not a statistically significant change in the LARC uptake amongst new users in the comparison sites for the same period. There were on average 3.87 new LARC acceptors at the intervention sites during the pre-intervention period, with the monthly average rising to 9.27 in the post-intervention phase. In contrast, the non-intervention sites provided a monthly average of 3.17 LARCs to new acceptors in the pre-intervention phase, which in¬creased to 3.47 in the post-intervention period.

Finally, to understand whether the increase in LARC uptake amongst new users was statistically significant and a result of the intervention, a difference in-difference regression analysis (DiD) was conducted. The DiD analysis was used to determine whether there was a significant increase in LARCs uptake in the intervention sites between pre- and post-intervention periods as compared to the change in LARCs uptake at the comparison sites for the same period. The average monthly uptake of LARCs per facility was compared to complete this analysis. The DiD analysis showed a statistically significant interaction result, meaning that the intervention resulted in a greater increase in the overall number of new acceptors per month over time than in the comparison sites. The intervention resulted in a monthly mean increase in approximately five new LARC acceptors over time (interpreting the unstandardized beta coefficient; data not shown).

Figure 3: LARC Method Uptake Amongst New Users during the Pre-Intervention (June-August 2014) and Post-Intervention (February-April 2015) Period



N values represent total number of new acceptors

Other Findings

Looking at all clients during both time periods and in both groups of facilities, the 7,539 FP clients mostly preferred short-acting methods, namely injectables and pills (82%; data not shown). The three most preferred methods were injectables (70%), implants (16%), and pills (12%). Uptake of IUDs at all sites during both time periods remained very low (2.2% and 1.3%). On the contrary, uptake of implants over time more than doubled at both intervention and comparison sites, from around 10% to 21% (data not shown).

Figure 4: Average Monthly Uptake of LARCS Amongst New Acceptors Between Pre and Post-Intervention Amongst Intervention and Comparison Sites

Conclusions & Recommendations

The study findings show that the training intervention was successful in increasing the number of young women who sought services and accepted a contraceptive method to delay or avoid pregnancy. During the 11- month study period, there were more new acceptors at the intervention than at the comparison sites. The descriptive and multivariate results indicate that enabling YFS providers to counsel on and provide all reversible contraceptives (LARCs and short-acting methods) in YFS units (one-stop shop) has a positive influence on the number of LARC new acceptors. In conclusion, the combined effect of the tested service delivery model successfully achieved the program's primary objective: increasing LARCs uptake among female adolescents and youth. The following are a few recommendations related to scale up of services and generating new knowledge in this area:

Train youth-friendly service providers on LARCs:
Training youth-friendly service providers to counsel and provide short- and long-acting methods at one location has the potential to increase the uptake of LARCs among youth. To maximize the benefits of full method choice for youth, all service providers should receive additional skills training to offer full method choice. While institution¬alizing such trainings might be time-consuming and costly, a phased approach should commence with LARCs training for all youth-friendly service provid¬ers and subsequently expand to include all providers through pre- and in-service trainings.

Conduct supportive supervision, examine service providers' attitudes to LARCs for adolescents and young people, and monitor client satisfaction:
This study did not examine service providers' attitudes toward LARCs or client's satisfaction and experience with LARCs. Ongoing efforts to ensure quality and feedback on these elements would provide a much richer assessment of the contribution of various supply-side attributes to improving LARCs uptake.

Citations

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