Strengthening Family Planning Project

تعزيز تنظيم الأسرة

Evaluation of *Careline* Follow-up Calls

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Executive Summary

Introduction

The Strengthening Family Planning Projects (Ta'ziz) seeks to increase demand for modern family planning (FP) products and services. To achieve this objective, Ta'ziz uses its Community Outreach Program, a key activity of community health workers (CHWs) who conduct door-to-door visits and provide FP counseling to women in their homes. Ta'ziz engaged the Circassian Charity Association (CCA) and the General Union of Voluntary Associations (GUVS) which recruited and trained the activity's more than 120 CHWs.

During the home visits, the CHWs offer interested women a voucher for free FP services to be redeemed at facilities from the Project's network of private physicians and non-governmental organizations (NGOs). In collaboration with CCA, Ta'ziz piloted *Careline* follow-up calls to increase the women's voucher use uptake of modern FP methods and three-month continuation rate of usage of modern FP methods among outreach clients. During *Careline* calls, the counselors encouraged the women to redeem their vouchers and provided them with an opportunity to ask questions about the use and side effects of the modern FP methods.

Using an experimental evaluation design, Ta'ziz evaluated the effectiveness of this pilot on two tiers: 1) voucher follow-up and 2) new acceptor follow-up.

Tier 1: Voucher follow-up
The Project trained the counselors on randomizing the outreach clients who were visited for the first time between April 1 and June 30, 2013. The selection of the women for telephone counseling did not affect the protocol for outreach home counseling visits to these clients.

Initially, the Project randomly assigned 3,589 clients who received vouchers for free FP services into a treatment group or control group at a 50:50 ratio. The counselors photocopied data entry cards received from the field (which had been checked for quality and entered into the greater outreach database) and arranged these data cards into two piles for each of the two counselors located at each office. Each counselor then randomly assigned the other counselor's pile into two halves by simply separating the pile into two other piles (one for the treatment group and another for the control group). Since the cards were organized according to CHW, the cards were separated into two piles systematically, thus assuring that clients who were visited by a CHW would be randomly assigned into the treatment and control groups.

The counselors called women from the treatment group one week, one month and three months after the women had received the vouchers for FP services, up to a maximum of three phone calls. Counselors only called women from the control group three months after they received the vouchers. Through these calls, counselors were able to ascertain whether clients acted upon the free voucher by seeking a FP service at one of the network doctors (NWDs) or at a partnering NGO. The counselors also asked the clients if they had started using an FP method. Women who did not act upon the vouchers were asked why, and based on each client's

response, the counselor tried to provide the woman with reassurance or advice to help the client fulfill her unmet need for FP.

Tier 2: New acceptor follow-up
All women who had been randomly assigned into Tier 1 treatment group and who stated that they acted upon the vouchers and started to use a modern FP method, formed the pool for the sample of Tier 2 follow-up calls.

The counselors initially flipped a coin to randomly assign women from Tier 1 treatment group into a Tier 2 control group and a Tier 2 treatment group. Due to the impracticality of coin-flipping, the counselors instead randomly assigned each other's piles by separating photocopied data cards into two parts. The counselors called each woman from the treatment group one week, one month and three months after they learned the woman became a user of a modern FP method, up to a maximum of three phone calls. The counselors called each woman from the control group only three months after the counselor learned that the woman had become a modern FP user. During these calls, counselors inquired about any concerns or side effects that woman might have with relation to her FP method of choice and provided her with the appropriate counseling according to international medical standards. Counselors also asked the women whether they had discontinued the method, why and when they discontinued use, and they advised them on alternative FP methods if the woman still had an unmet need for FP.

Key Findings

- The randomized controlled design of this evaluation was successful in generating two comparable samples for the control and treatment groups for both tiers.
- *Tier 1*
    - The *Careline* follow-up telephone calls appear to be effective at increasing the uptake of free FP vouchers among outreach clients. Results are statistically significant and demonstrate that more women in the treatment group acted upon the vouchers as compared to the control group (58% and 52%, respectively).
    - The *Careline* follow-up telephone calls also increased the proportion of women who reported initiating use of a modern FP method as compared to the control group (52% and 46%, respectively; difference is also statistically significant).
    - C*areline* follow-up calls positively and statistically significant affect the uptake of a modern FP method even if the woman ended up seeking FP services without using the voucher and going to another source, (e.g., Ministry of Health health center or a pharmacy) suggesting that the calls, not the vouchers, are one of the key driving factors in shifting women from the contemplation to the action stage of behavior.
    - Those who acted on the vouchers and took up a method chose the IUD (64%), followed by COCs (10%), implants (8%), POPs (4%), injections (2%) and condoms (2%). No statistically significant differences were noted in the distribution of FP

methods taken up when comparing the treatment group (overall when considering uptake at any of the three follow-up calls) and the control group.

- *Tier 2*
    - The majority of women had questions about the modern FP method of their choice. Their questions mostly were associated with the side effects of the method of choice.
        - When considering the treatment group alone, the proportion of women with inquiries decreased as the number of calls increased, suggesting that their concerns were addressed by the counselors.
        - Women in the treatment group had statistically significantly fewer concerns or questions about side effects at the three-month follow-up call, with 28% having any concerns about side effects, compared to 40% from women in the control group.
    - The discontinuation of the modern FP method at the three-month follow-up call was statistically significantly lower among women in the treatment group (7%) as compared to those in the control group (13%).

Programmatic Implementation

The full implementation of *Careline* follow-up phone calls as a complementary arm of the Outreach Program is associated with a noted increase in the redemption rate of free vouchers among outreach clients.

Recommendations

- *Careline* follow-up calls are a good complement to the Outreach Program and should be continued to help in increasing the demand for modern FP methods.
- The findings of this report should be used to improve the outcomes of the Outreach Program by informing the CHWs of the obstacles faced by clients attempting to act upon the vouchers and the main concerns among acceptors of modern FP methods.

Introduction

The goal of the Strengthening Family Planning Project (Ta'ziz Tanzim Al Usra, or Ta'ziz in short), managed and led by Abt Associates Inc., is to expand the access, quality, and usage of family planning (FP) services and methods. Expected outcomes are:

1. Strengthened management and governance systems and increased financial sustainability at the Jordanian Association for Family Planning and Protection (JAFPP)
2. Increased access to and improved quality of private sector family planning - services
3. Increased demand for FP products and services in the total market.

Ta'ziz implemented a home outreach program for hard-to-reach population groups, a key activity for the project. Home outreach visits focus on sharing information about modern methods of contraception, increasing use of family planning services, and making referrals to FP services in both the public and private sectors. This outreach program is a continuation of the outreach program implemented by the Private Sector Project for Women's Health from 2005 to 2012. This predecessor project visited an estimated 1.5 million women.

Ta'ziz, with support from its non-governmental organization (NGO) partners Circassian Charity Association (CCA) and General Union of Voluntary Associations (GUVS), recruited and trained more than 120 community health workers (CHWs) to visit door-to-door and counsel women in their homes about modern FP methods.

Home outreach begins with home visits conducted with women residing in geographical areas with low contraceptive prevalence rates, high unmet need for FP, and recognized poverty pockets or camps. These women are screened for age and reproductive needs. At least 70 percent of the women met during the first visits should be married and of reproductive age (15 to 49 years). Fifty percent of all women receive second follow-up visits. CHWs conduct third and fourth visits with a minimum of 25 percent of the women to address health problems, provide follow-up with new adopters of modern FP methods, or discuss unmet need for FP. Eleven percent of the women receive fifth visits. Depending on the woman's need, a CHW may provide additional visits, totaling no more than eight per woman.

Married women of reproductive age (MWRA) who want to adopt a modern FP method and meet specific criteria are given a voucher to a private physician if private sector services are preferred. The Project has a network of private doctors as well as agreements with NGOs who accept the voucher. In order to be a referral point in the network, doctors undergo training on the general principles of FP, IUD insertion, counseling, and other relevant topics. The voucher, which expires three months after receipt date, covers the cost of the FP method and a follow-up visit. Redeemed vouchers are returned to the Project to be reconciled so that the doctors and the JAFPP may be reimbursed services rendered.

Women also may receive a regular referral to receive free services at the Ministry of Health or United Nations Relief UNRWA clinics if they do not wish to go to the private sector. Historically, the proportion of women who act upon these regular referrals is higher than the proportion of those who act upon the free service vouchers. In order to improve the redemption of the vouchers and the uptake of modern FP methods of free service vouchers, the project initiated *Careline*.

Careline

Ta'ziz, in collaboration with CCA, implemented the *Careline* telephone follow-up pilot which aimed to increase the number of new users of modern FP methods among outreach clients who received vouchers for free FP services and methods. The Project trained counselors to conduct follow-up phone calls. During these phone calls, the counselors encouraged the women to redeem their vouchers and provided them with an opportunity to ask questions about the use and side effects of any modern FP methods.

The main objectives of this pilot were:

1. To increase the rates of voucher redemption and the uptake of modern FP methods among outreach clients receiving vouchers to free FP services from CHW.

2. To increase continuation rates among new adopters of modern FP among outreach clients during a three-month time period.

Careline Development Phase

a) The Project and CCA developed a written script for the counselors to follow during each of the two types of follow-up phone calls:
    - Telephone counseling for women receiving vouchers for free FP services and methods (vouchers follow-up)
    - Telephone counseling for new adopters of modern FP methods (new acceptor follow-up)

   The script included an introduction, through which the counselor introduces herself and her affiliation to the CHW, who had informed the woman that someone from the office may call to follow-up on the use of the voucher.

b) The Project and CCA trained the telephone counselors on:
    - Script use
    - Interpersonal communication skills
    - FP methods
    - Side effects and contraindications of modern FP methods
    - Accurately recording information in the data collection form:
        - Date(s) of telephone counseling
        - Type of counseling (voucher follow-up or new adopter follow-up)
        - Results of each voucher follow-up counseling call:
            - Visited the physician
            - Did not visit the physician and reason
        - Result of each new adopter follow-up counseling call:

- Continued use of FP method
- Discontinued use of FP method (during this time period), and reason

c) The Project developed a database in Microsoft Access to electronically record information collected in the data collection forms.

Careline Implementation and Evaluation Phases

Tier 1: Voucher follow-up

The Project used an experimental evaluation design to measure the effectiveness of the *Careline* intervention in increasing the rate of vouchers used by outreach clients receiving vouchers for free FP services from CHWs. The pilot was implemented in Amman, Zarqa and Irbid governorates in partnership with CCA, which had a central office in each governorate. Dedicated resources were assigned to the *Careline* pilot: in each office, a room with computers and filing systems; two counselors who also were responsible for data entry into a Microsoft Access database; and data collection forms stored in a safe place with access restricted to the counselors and the technical director.

Sample

On average, CCA provides free vouchers to approximately 3,500 women during first outreach visits each quarter in Amman, Zarqa and Irbid governorates. This was the anticipated sample size for the pilot evaluation. The CCA was instructed to include up to 3,500 women who received vouchers in the *Careline* evaluation process between April 1 and June 30, 2013.

Random Assignment and Methodology

The Project trained the counselors on randomly assigning the outreach clients who were visited for the first time between April 1 and June 30, 2013. Assigning women into treatment or control groups for telephone counseling did not affect the protocol for outreach home counseling visits to these clients.

The counselors randomly assigned 3,589 clients who received vouchers for free FP services into a treatment group or control group at a roughly 50:50 ratio, with 1,838 women assigned to the treatment group and 1,751 to the control group. Counselors, who photocopied data entry cards received from the field which had been checked for quality and entered into the greater outreach database, arranged the data entry cards into two piles at each office for each of the two counselors located at that office. Each counselor then randomly assigned the other counselor's pile by simply separating the pile into two other piles (one for the treatment group and another for the control group). Since the cards were organized according to CHW, separation into two piles was systematic, thus assuring that clients visited by a CHW would be randomly assigned into the treatment and control groups.

a. For the treatment group, the counselors used a schedule and attempted to call the 1,838 women from the treatment group (who received vouchers for free FP services) to provide telephone FP counseling and follow-up on the use of the voucher:
    - One week, one month, and three months after receipt of vouchers, up to a maximum of three phone calls. Through these calls, counselors were able to

ascertain whether clients acted upon the free voucher by seeking a FP service at one of the network doctor (NWDs) or at a partnering NCO. The counselor also inquired whether the woman started to use an FP method. Women who did not use the vouchers were asked why, and in these cases, the counselor would try to provide the woman with reassurance or advice based on the client's response in order to help the client fulfill her unmet need for FP.

- Phone calls ceased if the client stated:
  - She will not follow up on the vouchers (i.e., visit a doctor).
  - She does not wish to receive follow-up phone calls.
  - She visited the physician (followed up on the voucher) and changed her mind about using a method and has no intention of using a modern FP method through the voucher.
  - She received FP services from a source outside of the pool of Ta'ziz project private network doctors.
  - She became pregnant, divorced or separated.
  - She visited the physician (followed up on the voucher) and began to use a new method.
    - These clients were shifted to Tier 2 of the evaluation and were randomly assigned into Tier 2 treatment and control groups at roughly a 50:50 ratio (see subsection Tier 2). For example, if the uptake of a modern method was reported to the counselor during the one-week follow-up phone call, the client was shifted to Tier 2 and did not receive the one-month and three-month follow-up calls for Tier 1.
    - Important note: Women who reported any condom usage during calls one and two were not shifted to Tier 2 if they were planning on getting an IUD but were unable to due to infections or other medical reasons. These women were given condoms by the doctors or by the CHW until the medical reason for the delay of IUD insertion was resolved.
  - Calls also were ceased if a counselor was unable to reach the client after a minimum of three attempts.
- Telephone counselors used the pre-written script and entered all information from the data collection form into the Microsoft Access database on a daily basis at each of the three CCA offices.
- Telephone counselors used standard FP method resources to answer clients' queries factually and consistently.

b. For the control group, the counselors attempted to call the other 1,751 women (who had also received vouchers for free FP services) three months after receiving the vouchers to FP services to determine whether they acted upon the vouchers. They also entered the information recorded in the data collection form into the Microsoft Access database.

Tier 2: New Acceptor Follow-up

The Project used an experimental evaluation design to measure the effectiveness of the *Careline* follow-up call intervention in increasing continuation rates among new adopters of modern FP among outreach clients during a three-month time period. The data collection forms were

stored in a safe place, and no one except the counselors and the technical director had access to them.

Sample

The pool for Tier 2 was composed of all women who had been randomly assigned into Tier 1 treatment group and who had acted upon the vouchers and started to use a modern FP method.

Random Assignment and Methodology

The Project trained the counselors on how to randomly assign women from Tier 1 treatment group women who stated that they acted upon the vouchers and adopted a modern FP method. The selection of the women for telephone counseling did not affect the protocol for outreach home counseling visits to these clients.

The counselors randomly assigned women, whom had been shifted from Tier 1 treatment group into Tier 2 sample, into Tier 2 control and treatment groups, using the same methodology described above for Tier 1.

a. For the treatment group, the counselor used a schedule and called the women to provide telephone counseling using the new acceptor follow-up script:
    - One week, one month and three months after the counselor became aware that client began using a new modern FP method. During these calls, counselors inquired about any concerns or side effects that woman might have with relation to her method of choice and provided her with the appropriate counseling according to international medical standards. If the woman had discontinued use of the method, the counselor asked the woman why and when she discontinued use, and would advise the woman on alternative FP methods should the woman still have an unmet need for FP.
    - Phone calls ceased if the client stated:
        - She discontinued the modern FP method and shifted to a traditional method.
        - She did not wish to receive follow-up phone calls
        - She became pregnant, divorced or separated.
    - Calls also were ceased if counselors were unable to reach the client after a minimum of three attempts.
    - Telephone counselors used the pre-written script and entered the information from the data collection form into the Microsoft Access database on daily basis at each of the three CCA offices.
    - Telephone counselors used standard FP method resources to answer clients' queries factually and consistently.

b. For the control group, the counselors called the assigned women only three months after becoming aware that the women had begun using a new modern FP. During the calls, the counselors asked the women whether they were still adopting a modern FP method. The counselors also entered the information recorded in the data collection form into the Microsoft Access database on daily basis at each of the three CCA offices.

Data Entry and Analysis

A Microsoft Access database was developed to gather the recorded data to minimize data entry errors and allow for the extraction of the data for analysis. Data was transferred from the Microsoft Access Database to Stata 12. Chi squared tests were conducted to test for statistical significance in differences in proportions and Student's T Test was used to test for differences in means.

Institutional Review Board Review

Institutional Review Board review was not sought for this evaluation of the pilot Careline telephone follow-up calls since the calls are a programmatic extension of the larger Outreach Program, which is a public service program. The evaluation was designed to evaluate the effect of the Careline process on two key outcomes of the outreach program: Uptake and continued use of modern contraceptives. Women who accept to receive counseling visits in their households voluntarily provide community health workers with their telephone numbers knowing that they may be contacted by the community health worker's supervisor for quality assurance or that they may receive Careline calls from the counselor.

Key Findings

Implementation of the Pilot

Figure 1 illustrates how the Careline pilot was implemented. Tier 1 evaluated the effect of Careline calls on free voucher use and modern FP method adoption. Those who adopted a modern method in Tier 1 were shifted to Tier 2, which was designed to evaluate whether the calls effected women's continuation of method use.

Figure 1: *Careline* pilot implementation

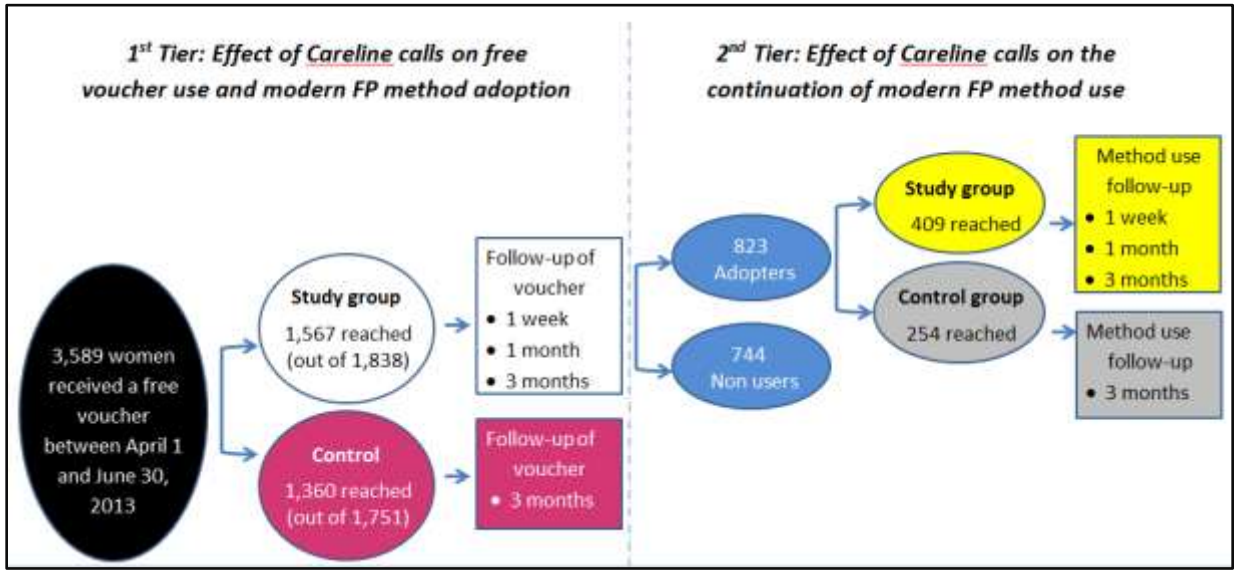


Table 1: Number of calls made				
# of calls made	Tier 1: Calls after receiving a free voucher		Tier 2: Calls after learning that the woman accepted a modern FP method	
	Treatment (%) n=1,567	Control (%) n=1,360	Treatment (%) n=409	Control (%) n=254
1 call only	297	1,360	17	254
2 calls only	606	N/A	129	N/A
3 calls	664	N/A	263	N/A

Notes: N/A: not applicable
For treatment groups, receiving only one call indicates receiving only the one-week follow-up call. Receiving two calls indicates receiving both the one-week and one-month follow-up calls, and receiving three calls indicates receiving all treatment calls. For the control groups, receiving one call indicates receiving the three-month follow-up call.
A woman in the treatment group is shifted from Tier 1 to Tier 2 after the counselor learns that the started to use a modern FP method, therefore not all women in the treatment group will receive three calls during Tier 1.

Number of Calls

As shown in Table 1, the counselors were able to successfully contact 1,567 women and 1,360 women in the treatment and control groups of Tier 1, respectively. They successfully contacted 409 and 254 women in the treatment and control groups of Tier 2, respectively.

Table 2: Demographics						
	Tier 1			Tier 2		
	Treatment n=1,567	Control n=1,360	Total n=2,927	Treatment n=409	Control n=254	Total n=663
Region (%)						
Amman	37.5	39.1	38.2	38.9	35.0	37.4
Irbid	30.1	28.5	29.3	24.5	25.2	24.7
Zarqa	32.5	32.4	32.5	36.7	39.8	37.9
Age (%)						
<18	0.3	0.3	0.3	0.2	0.8	0.5
18-24	17.1	13.8	15.5	18.3	23.6	20.4
25-34	47.3	50.7	48.9	46.2	46.5	46.3
35-44	32.9	33.4	33.1	33.3	28.0	31.2
45-49	2.4	1.8	2.1	2.0	1.2	1.7
Parity (%)						
No children	0.1	0.2	0.1	0.0	0.0	0.0
1 child	6.2	5.2	5.7	4.2	5.5	4.7
2 children	19.2	19.8	19.5	21.8	20.1	21.1
3 children	22.6	22.6	22.6	20.1	24.4	21.7
4 children	22.0	21.9	22.0	21.3	25.6	22.9
5 children	14.4	15.7	15.0	15.2	11.8	13.9
6 or more	15.5	14.6	15.1	17.6	12.6	15.7

Sample Demographics

The randomized controlled approach of this evaluation was used to generate treatment and control participant groups with comparable demographics. No significant differences were noted between the two treatment groups on both tiers with regard to region, age or parity (Table 2). Generally, nearly 38 percent of the participants resided in Amman, 29 percent resided in Irbid, and 33 percent resided in Zarqa. As shown in Table 2, all respondents were of reproductive age (14-49 years old). Nearly 30 percent of respondents had five children or more, 45 percent had three or four children, 20 percent had two children, and only six percent had one child or none.

Tier 1 Findings: Voucher Use and Modern FP Method Uptake

The purpose of the first tier of the pilot was to test the hypothesis that the *Careline* treatment (receiving counseling calls one week, one month, and three months after receiving a voucher) will result in increased use of the voucher and increase acceptance of a modern FP method as compared to the control group called after three months.

Acting upon the Voucher

As shown in Table 3, receiving *Careline* follow-up telephone calls is statistically significantly associated with use of the free voucher, with 59 percent of those who received calls acting upon the voucher as compared to 52 percent of those in the control group.

The *Careline* played an important role in women's use of a modern method: 53 percent of those who received the vouchers started using a modern method after visiting the physician as compared to 46 percent of those in the control group, which represents an important difference of seven percent. Some respondents took up a modern FP method without use of the voucher and went to a pharmacy or other service provider such as Ministry of Health centers or the UNRWA.

Table 3: Acting upon the voucher and uptake of a modern FP method

	Treatment (%) n=1,567	Control (%) n=1,360	Total (%) n=2,927
Used the voucher	57.8*	52.0	55.1
Used the voucher and using a modern method from NWDs[1] at the time of interview	52.5*	46.3	49.6
Started to use modern method regardless of voucher	63.3*	55.4	59.6

Note: Some women did not use the voucher but started to use a modern method from other sources such as the MOH, pharmacies, and the UNRWA.
[1] NWD: Network doctors
* Statistically significant ($p<0.05$) difference in proportion between the treatment and control groups.

Finally, Careline calls positively impacted women's use of modern methods irrespectively of the voucher, for 63 percent of women who received the calls started to use a modern FP method as compared to 55 percent of those in the control group.

Reasons for Inaction

Table 4: Reasons for inaction

	Treatment				Control n=653	Total n=1,314
	Call1 n=1,279	Call2 n=804	Call3 n=426	Overall n=661		
Waiting for period	61.1	35.1	3.3	64.2*	2.6	33.6
Too busy	18.1	21.9	21.1	33.3*	22.2	27.8
Husband did not allow	4.5	11.0	19.0†	17.9*	13.6	15.8
Method from other source	1.5	9.7	21.4	24.1*	18.8	21.5
Changed mind	1.8	2.4	8.5†	8.8*	14.6	11.6
She is pregnant	0.9	1.7	5.6	3.5*	8.7	6.1
Health problems	1.5	3.6	4.5	5.5	4.4	5.0
breast feeding without period	0.5	4.4	5.4†	5.6*	2.6	4.1
Postpartum	5.8	1.5	0.0	3.6*	0.0	1.8
Lost the voucher	0.2	1.1	1.6	1.2	2.5	1.8
Husband away (traveling/prison)	1.0	2.0	1.4	2.6*	1.1	1.8
Will use it after Ramadan	0.0	0.0	3.5	1.7	1.7	1.7
Fear from method	0.2	0.1	0.5	0.8	1.7	1.2
Took voucher to be polite	0.1	0.1	0.0	0.2	0.0	0.1
Forgot	0.3	0.0	0.0†	0.2*	1.1	0.6
Other family members did not allow	0.2	0.0	0.0	0.3	0.0	0.2
Doctor not within the area	0.2	0.1	0.5	0.3	0.2	0.2
Appointment issues/ knowing where to go	0.6	0.4	0.5	0.8	0.6	0.7
Hesitant	0.1	1.4	0.2	1.5*	0.2	0.8
Referral expired	0.4	0.1	0.0	0.8	0.8	0.8
Suspicious of pregnancy	0.4	1.1	0.0	1.5*	0.2	0.8

* Statistically significant ($p<0.05$) difference in proportion between the overall treatment and control groups using Pearson Chi Squared test.
† Statistically significant ($p<0.05$) difference in proportion between the 3-month treatment and control groups using Pearson Chi Squared test.
Note: Multiple reasons for not acting upon the voucher were accepted.

Women who did not act upon the free voucher were asked for the reason behind their inaction. It is important to note that follow-up calls ceased if a woman reported that she was pregnant, took a modern FP method from another non-network source, refused the use of the voucher, or reported that she became separated or divorced. For these responses, one should compare the control group to the proportion of responses at the three-month call for the treatment group.

As shown in Table 4, *Careline* clearly played a role in reducing women's failure to act upon using the vouchers because they changed their mind. Data shows that statistically significantly more women reported "changed their mind" in the control group (15%) as compared to the treatment group (9% overall and 9% at Call 3).

After three months, none of the women in either group reported that they did not act upon the voucher because they were postpartum. This is expected since CHWs do not provide vouchers to women who are pregnant. Similarly, only two women site that they are waiting for their period in order to act upon the voucher at the third month time-point in both groups while at the one-week point during Call 1, 61 percent of the women site this as the reason for not acting upon the voucher. The fact that the proportion declines from 61 percent to two percent indicates that women indeed wait for their period before going to the physicians in order to receive the IUD.

It is evident that those who did not receive *Careline* follow-up calls were statistically significantly more likely to seek services at out-of-network providers as compared to those who received Call 3 of *Careline* follow-up, with 19 percent reporting so as compared to 14 percent, respectively.

It is interesting to note that women who received *Careline* calls where more likely to have reported that their husbands did not allow them to use the vouchers as compared to the control, with 18 percent as compared to 14 percent of them reporting so, respectively.

Method of Choice

Table 5: Method of choice

	Treatment				Control (%) n=707	Total (%) n=1,613
	Call1 (%) n=288	Call2 (%) n=458	Call3 (%) n=237	Overall (%) n=906		
IUD	62.2	58.3	53.6†	63.3	64.9	64.0
Condom	1.0	2.6	3.4†	2.5*	0.6	1.7
COC	5.9	10.3	15.6†	11.2	9.5	10.4
POP	3.5	4.4	5.1	4.6	3.5	4.2
Injections	1.4	2.2	2.5	2.2	2.4	2.3
Implants	6.6	5.7	8.0	7.1	8.2	7.6

* Statistically significant ($p<0.05$) difference in proportion between the overall treatment and control groups using Pearson Chi Squared test.
† Statistically significant ($p<0.05$) difference in proportion after the 3-month call treatment and control groups using Pearson Chi Squared test.
Note: Women not accounted for in this table acted upon the voucher but chose to continue the use of a traditional method or did not take up a modern method.

Those who acted upon the vouchers were asked about the method they started to use. The IUD is the most sought after method (64%), followed by combined oral contraceptives (COC) (10%), implants (8%), progestin only pills (POP) (4%), injections (2%) and condoms (2%), as shown in Table 5. The remaining 10 percent did not start a new method or visited the doctor but decided to continue the use of traditional methods.

It is interesting to note that the prevalence of IUD use among those in the control group was statistically significantly higher than its prevalence among those in the treatment group three months after initiating the use of any modern FP method.

Tier 2 Findings: New Acceptor Follow-up

New acceptors of modern FP methods who were randomly assigned into the treatment group of Tier 2 received follow-up phone calls at one week, one month, and three months (Call 1, Call 2, and Call 3 respectively) after the counselor learned that the woman adopted a modern FP method. Women who were contacted were given the opportunity to ask questions about the method of their choice, to which the counselors responded by using the World Health Organization's *Family Planning: A Global Handbook for Providers*.

New acceptors of modern FP methods who were randomly assigned into the control group of Tier 2 only received one call three months after the counselor learned that the woman adopted a modern FP method.

Inquiries among Users

As shown in Table 6 the majority of new acceptors had inquiries about the modern FP method of their choice.

Inquiries about side effects in the treatment group decline over time from 45 percent at Call 1 to 28 percent at Call 2. *Careline* appears to play a major role in this decline since 40 percent of those in the control group had inquiries about side effects at the three-month mark; nearly the same as the proportion of inquiries among Call 1 *Careline* group participants. At Call 1 for the treatment group one week after the receipt of the voucher, the questions were primarily about side effects (45%). Three months after having received the voucher, 40 percent of those in the control group had questions about side effects; a comparable proportion to those one week after having received the voucher among the treatment group.

It is possible to see a similar trend when considering other inquiries, such as those about follow-up appointments and adherence to pills, where the proportions of those inquiring among the control were statistically significantly higher than those who received the three phone calls among the treatment group.

Table 6: Inquiries among modern FP users						
	Treatment				Control n=220	Total n=624
	Call1 n=403	Call2 n=379	Call3 n=246	Overall n=404		
Side effects	45.4	38.0	28.1†	66.1*	40.0	56.9
Follow-ups	5.5	3.2	0.4†	8.4*	3.6	6.7
Myths	2.7	1.9	1.2	5.0	4.1	4.7
Physical concerns (infection / excretions / weight)	2.2	1.6	6.9	3.7	4.6	4.0
Adherence to pill	2.5	0.8	0.0†	3.0	2.7	2.9
Efficacy of method	2.5	1.6	0.0	4.0*	0.9	2.9
Questions on use of method	1.2	1.3	0.0	2.5	1.4	2.1
Contraindications	2.0	0.3	0.0	2.2*	0.0	1.4
Cost of method	0.5	0.5	0.4	1.0	1.4	1.1
She/husband feel IUD strings	0.7	0.0	0.0	0.7	0.9	0.8
Adjustment period	0.0	0.8	0.0	0.7	0.0	0.5
Source of method	0.0	1.1	2.0†	1.0	0.0	0.6
Effect on fertility	0.0	0.3	0.0	0.3	0.0	0.2
Other	0.5	1.6	2.0	2.0	2.7	2.2
* Statistically significant (p<0.05) difference in proportion between the overall treatment and control groups using Pearson Chi Squared test. † Statistically significant (p<0.05) difference in proportion between the 3-month treatment and control groups using Pearson Chi Squared test.						

Three Month Continuation

The second tier of the pilot aimed to test the hypothesis that *Careline* treatment (receiving counseling calls one week, one month, and three months after learning that the woman accepted a modern FP method) will reduce three-month discontinuation among new acceptors of modern FP methods when compared to a control group. Women who became modern FP method acceptors in Tier 1 were randomly assigned into Tier 2 treatment and control groups.

Table 7: Three month discontinuation			
	Treatment n=264	Control n=254	Total n=518
Discontinued method after three months of use (%)	6.8*	13.4	10.0
Note: Treatment group only includes those who received all three calls. * Statistically significant (p<0.05) difference in proportion between the treatment and control groups using Pearson Chi2 test.			

As shown in Table 7, the discontinuation of the method at the three-month follow-up call was statistically significantly smaller among women in the treatment group (7%) as compared to those in the control group (13%). This is likely associated by the fact that the women's fears and concerns were addressed through Tier 2 *Careline* follow-up phone calls.

Limitations

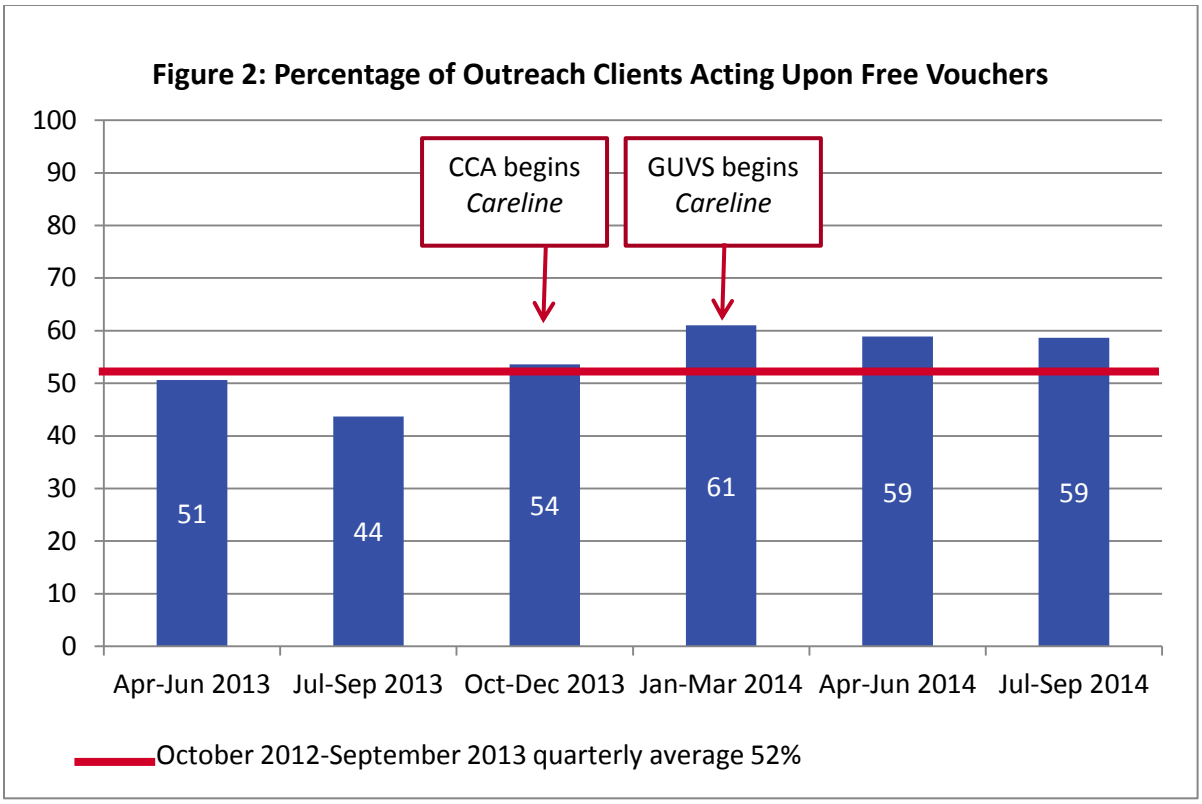
Non-response Rate

A total of 1,838 women were randomly assigned into the treatment group and 1,751 into the control group at the three CCA offices. The counselors were able to reach 1,567 women (85%) of the treatment group at the one week follow-up call and 1,360 (78%) of those in the control group at the three month follow-up call for Tier 1. The main reasons for not being able to successfully contact women in the treatment group of Tier 1 were no answer (23%), turned off phones (21%), disconnected numbers (14%), and wrong numbers (13%).There were only three refusals (1%). The main reasons for not being able to successfully contact women in the control group of Tier 1 were turned off phones (39%), disconnected or unused numbers (34%), wrong numbers (16%), and no answer (11%). There were no refusals.

For Tier 2, counselors were unable to reach 26 women in the treatment group and 47 women in the control group. The main reasons for failed attempts for the treatment group were turned off phones (46%), disconnected numbers (35%) and no answer (19%). The main reasons why attempts were unsuccessful for the control group were turned off phones (45%), disconnected or unused numbers (45%) and no answer (11%).

Programmatic Implementation

These findings demonstrate that *Careline* follow-up calls, which complement the outreach program, successfully help increase free-voucher redemption rates among outreach clients. For this reason, Ta'ziz decided to include *Careline* follow-up calls as a permanent complement of the Outreach Program implemented by both partners (CCA and GUVS). In November, 2013, counselors who implemented the *Careline* pilot in CCA participated in the training of counselors from GUVS on telephone follow-up procedures and monitoring processes. A simple database to track the number of telephone follow-ups was design using Microsoft Access so that both implementing partners may track their progress and meet their targets.



CCA and GUVS were both conducting *Careline* follow-up phone calls to all women receiving free vouchers starting from January 2014, after the completion of the pilot phase of *Careline*. Outreach data that is collected by community health workers in the field reveals that the proportion of clients acting upon the vouchers increased with the introduction of *Careline* (Figure 2). The quarterly average redemption rate of free vouchers during the year prior to any *Careline* follow-up calls was 52 percent. There was an increase in the redemption rate to 54 percent starting from the introduction of *Careline* follow-up calls through CCA during the quarter of October through December 2013. Moreover, the redemption rate increased to 61 percent and was maintained at 59 percent after introducing the *Careline* at GUVS the following two quarters.

Conclusions and Discussion

The *Careline* follow-up calls intervention produced the expected and desired outcomes.

Tier 1: Voucher uptake and FP method use

The *Careline* follow-up telephone calls appear to be effective at increasing the uptake of free FP vouchers among outreach clients. Results demonstrate that statistically significantly more women in the treatment group who received at least one follow-up call after receiving the voucher acted upon the vouchers as compared to women from the control group who did not receive those counseling phone calls (58% and 52%, respectively). In addition, the treatment is

associated with higher uptake of a modern FP method among those who acted upon the voucher, for statistically significantly more women in the treatment group reported initiating use of a modern FP method as compared to the control group (52% and 46%, respectively). We conclude that the *Careline* follow-up calls positively and statistically significantly affect the uptake of a modern FP method regardless of whether the women acted upon the vouchers by obtaining the FP method from alternative sources (public sector, pharmacy, etc.), suggesting that the calls are one of the key driving factors in shifting women from the contemplation to the action stage of behavior. This is demonstrated by the noted observation that 63 percent of those in the treatment group took up a modern FP method irrespective of whether or not they acted upon the vouchers as compared to 55 percent among the control group.

Reasons for not acting upon the voucher varied between women in the treatment and control groups. After three months, women in the treatment group were statistically significantly less likely to change their minds about using the voucher, to forget about the voucher or to report that they were relying on breast feeding and waiting for their menstrual cycle as compared to the control group. This indicates that the *Careline* follow-up calls reduce missed opportunities for modern FP use among women who had expressed their intention to use a modern FP method.

Those who acted on the vouchers and took up a method were most likely to choose the IUD (64%), followed by COCs (10%), implants (8%), POPs (4%), injections (2%) and condoms (2%). The remaining 10 percent did not start a new method or visited the doctor but decided to continue the use of traditional methods. No significant differences were noted when comparing the treatment and control groups with regard to all methods, except for the condom, suggesting that the follow-up calls do not sway women's preferences for method types. It is important to recall that women in the treatment group who report any use of condoms during calls 1 and 2 were not shifted to 2nd Tier if they were planning on getting an IUD but were unable due to infections or other medical reasons. These women are usually given a condom by the doctors until they become eligible for IUD insertion. This is why overall condom use among the treatment group was statistically significantly higher than those in the control group, who might have used the condom before the three-month follow-up call.

Tier 2: New acceptor follow-up

The majority of women had questions about the modern FP method of their choice. Questions mostly pertained to the side effects of the method of choice. When considering the treatment group alone, the proportion of women with questions decreased as the number of calls increased, suggesting that their concerns were addressed by the counselors.

Importantly, women in the treatment group had statistically significantly fewer concerns or questions at the three-month follow-up call compared to those in the control group, especially regarding side effects. This indicates that new acceptors of modern FP methods among outreach

clients have a need for follow-up phone calls to address their concerns during the time interval between the CHW's follow-up home visits.

The discontinuation of the method at the three-month follow-up call was statistically significantly higher among women in the control group (13%) as compared to those in the treatment group (7%). This finding supports the hypothesis that follow-up phone calls to new acceptors increase a woman's continuation of method use during the first three months of use. It is interesting to note that this difference in discontinuation between the control group and the treatment group at the three-month mark exists even though the prevalence of IUD use among those in the control group was statistically significantly higher than its prevalence among those in the treatment group three months after initiating the use of any modern FP method. The IUD has the lowest discontinuation rate, and one would therefore anticipate that the discontinuation rate would be lower among the control group. This is yet another suggestion that *Careline* played a key role in providing women with the required support to both adopt a modern FP method and continue its use.

Programmatic Implementation

The full implementation of *Careline* follow-up phone calls as a complementary arm of the Outreach Program might be associated with a noted increase in the redemption rate of free vouchers among outreach clients. The counselors' follow-up phone calls might have helped the women overcome barriers to seeking the doctor and accepting a modern FP method.

Recommendations

Careline follow-up calls are a good complement to the Outreach Program and should be continued to help in increasing the demand for modern FP methods.

The findings of this report should be used to improve the outcomes of the Outreach Program by informing the CHWs of the obstacles faced by clients attempting to act upon the vouchers, and the main concerns among acceptors of modern FP methods.

While the three-month discontinuation prevalence findings suggest that *Careline* follow-up phone calls play a role in reducing discontinuation, to provide a more conclusive answer, further research should evaluate the 12-month discontinuation rate with equal follow-up instances between the control and treatment groups.