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Provider training and long-term client outcomes: The CSI experience

Social Planning, Analysis & Administration Consultants (SPAAC)

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Provider Training and Long-Term Client Outcomes: The CSI Experience

Final Report

Social Planning, Analysis & Administration
Consultants (SPAAC)

The Population Council
Asia & Near East Operations Research and Technical
Assistance Project

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Cairo, April, 1994

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PCS/JHU provided the baseline data sets from the evaluation that was conducted in February/March 1992. These data sets were instrumental in selecting the sample and in conducting all analysis procedures for the present study.

The study was supported by The Population Council's Asia and Near East Operations Research and Technical Assistance Project (ANE OR/TA) with funding from the United States Agency for International Development. Technical assistance was provided by Dr. Laila Nawar and more recently Dr. Dale Huntington provided constant feedback about the progress of the study. Former Deputy Director, William Darity helped in initiating the study.

SPAAC was responsible for designing the study as well as all data collection, analysis and writing procedures.

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The Clinical Services Improvement Project management has shown great interest in the study. Also, CSI clinic staff were consulted to verify the addresses of some clients.

Last but not least, this work would not have been accomplished without the cooperation of CSI clients who participated in the home-interviews. It is our hope that the findings of this study will be used to improve quality of services for all family planning clients in Egypt.

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PROVIDER TRAINING AND LONG-TERM CLIENT OUTCOMES: THE CSI EXPERIENCE

Executive Summary

The present study examined the impact of the Clinical Services Improvement Project's provider training program on clients' long term satisfaction and method use. A sample of 154 clients who received a family planning method in one of 30 CSI clinics were followed-up over a period of 19 months through a series of home interviews. The interviews monitored clients' use of the family planning method they received at the clinic as well as their satisfaction with that method and the services at CSI.

Results of the present study show that provider training on counseling and interpersonal communication has a positive impact on clients. Provider training is associated with correct use of family planning methods, greater client satisfaction with those methods and greater satisfaction with services. Provider training was shown to have an indirect influence on method continuation, through improving client comprehension and satisfaction and by reducing their anxiety over method side-effects.

The study also highlighted a number of issues that need to be addressed by CSI in order to improve its quality of services and to achieve more positive client outcomes. These issues include:

- Users of hormonal and local methods are not receiving the same quality of care that is given to IUD users. CSI providers need additional training on delivering these methods of contraception to clients.
- The great majority of clients discontinue or switch family planning methods because of method side-effects. CSI need to put more effort in preparing clients to deal with potential method side-effects.
- CSI clients are not making enough benefit of the free follow-up visit. CSI providers need to emphasize the importance of this visit to all clients regardless of the family planning method they receive at the clinic.

- Rates of method discontinuation/switching are highest in Upper Egypt and among clients with fewer children. Better counseling services are needed to encourage these clients to continue using family planning.
- Rapid physician turnover at CSI is a loss of trained resources. Mechanisms to encourage physicians to stay at CSI are needed.

I. Introduction

In recent years several family planning projects in Egypt and other developing countries have offered training courses on counseling and interpersonal communication to their service providers staff. In these courses service providers learn how to explain family planning methods to clients, to listen to clients' concerns and to help clients choose appropriate contraceptive methods. So far evaluation of these courses has been limited to measuring the impact of training on providers' knowledge, attitudes and/or performance. Very little is known about the impact of service provider training on clients' subsequent attitudes or behaviors towards contraception or family planning services. This information is essential for designing interventions to enhance more effective and sustained use of contraceptives in the developing world.

The present study examines the impact of the Clinical Services Improvement Project's (CSI) provider training program on clients' long-term satisfaction and method use. The study was conducted by Social Planning, Analysis & Administration Consultants (SPAAC) with technical assistance from the ANE OR/TA project in Cairo. The study builds on a previous evaluation that was conducted by Johns Hopkins University Population Communication Services and which measured the impact of CSI provider training on both providers' attitudes and behaviors and clients' immediate comprehension and satisfaction.

II. Study Background

A. THE CLINICAL SERVICES IMPROVEMENT PROJECT

In late 1988 the Egyptian Family Planning Association established the Clinical Services Improvement project with support from the U.S. Agency for International Development and technical assistance from Johns Hopkins University Population Communication Services. The aim of the Project has been to fill the quality/cost gap in family planning service delivery. CSI clinics provide better quality services at a reasonable fee. Today, there is a total of 112 CSI clinics in 18 of Egypt's governorates.

CSI staff that has direct contact with clients includes counselors, physicians, nurses and receptionists. The main part of provider-client interaction, however, occurs with the counselor and the physician. The counselor conducts an intake interview with the client in which she learns about the client's socio-demographic conditions and family planning needs. The counselor also discusses with the client available family planning methods and gives her a follow-up appointment. The doctor conducts a physical exam and helps the client choose a family planning method that suits her physical, social and psychological needs.

All CSI providers who have regular face-to-face contact with clients receive pre-service training which involves both a technical and an interpersonal communication component. Training courses were held in 1989, 1990 and 1991 and were attended by more than 900 service providers. The training curriculum was developed by a team of local experts from CSI, the Institute for training and Research in Family Planning and the Center for Development Communication with technical assistance from Johns Hopkins University Population Communication Services. The course duration was four days for counselors and three days for physicians. The training design was largely experiential with extensive use of role-plays, case studies and group exercises.

The core course that was taught to all provider groups covered the following topics: (a) role of IE&C in CSI, (b) perception and values clarification, (c) verbal and nonverbal communication, (d) listening and response skills, (e) effective use of visual aids (f) rumors and misinformation, and (g) counseling family planning clients. In addition, providers were trained on how to run a session in family planning counseling using the elements of GATHER (Greet clients, Ask them about themselves, Tell clients about family planning and clinic procedures, Explain to clients how to use the method; Return for follow-up).

B. PCS/JHU EVALUATION OF CSI TRAINING

In February/March 1992 PCS/JHU conducted an evaluation of the CSI counseling training program. The study used a post-test only design with non-equivalent groups. The two study groups were service providers who attended CSI training and those who did not. The latter are providers who joined the project after the last training course, i.e. after 1991. The study measured the impact of training on the attitudes and behaviors of CSI physicians and counselors. Also, the study compared immediate comprehension and satisfaction levels among clients seen by trained and untrained providers.

The evaluation was conducted in 30 CSI clinics located in the governorates of Gharbeya, Menoufia, Sharkiya, Minya, Assiut and Sohag. The provider sample included 39 physicians and 30 counselors. Forty-one (41) percent of the study physicians and 80 percent of the study counselors received CSI training. This difference is due to the high physician turn-over at CSI Project.

The client sample included 593 women who visited the above CSI clinics during the two weeks of data collection. This sample includes women who visited the clinics in order to receive a new family planning method as well as women who came for method follow-up.

A self-administered questionnaire was used to measure providers' attitudes towards family planning counseling. Consultations between CSI service providers and clients were both audio-taped and observed in order to assess providers verbal and nonverbal behaviors. Clients' immediate comprehension and satisfaction with the consultation were measured by means of an interviewer administered exit interview.

The study showed that CSI training had a positive impact on several aspects of providers' attitudes and performance. Also, provider training was shown to have an immediate impact on clients. Clients who were seen by trained providers expressed greater satisfaction with CSI services compared with clients seen by untrained providers. Also, clients who received family planning methods were better informed about how the method they received worked to prevent pregnancy, what side-effects to expect from it and how to manage these side-effects.

III. Study Objectives

The present study takes the above-mentioned PCS/JHU evaluation one step further. The study examines the impact of CSI provider training on clients long-term satisfaction and contraceptive use. The objectives of the study are to:

- (1) examine the impact of physician/counselor training on clients long-term satisfaction with both the family planning methods and the services they received at CSI;
- (2) examine impact of physician/counselor training on clients' return to the clinic for follow-up;
- (3) examine impact of physician/counselor training among switchers).

(4) examine the impact of physician/counselor training on continuation of family planning methods;

(5) to identify socio-demographic and service-related factors that are predictive of the above long-term client outcomes.

IV. Study Methodology

A. SAMPLE

As mentioned earlier the PCS/JHU study included 593 clients who received family planning methods as well as clients who returned to the clinic for method follow-up. Of the above sample a sub-sample of 154 new family planning clients was selected. The latter are all the clients who received family planning methods with the intention of long-term use and who were exit interviewed in the PCS/JHU study. Clients who received temporary methods, for example due to having a medical contra-indication or because husband was leaving shortly, were not included in the present follow-up.

Following is a breakdown of the study clients by training status of the physician and counselor they saw at the clinic.

	N	%
Both trained (P ⁺ C ⁺)	47	30.5
Physician trained, counselor not (P ⁺ C ⁻)	22	14.3
Physician untrained, counselor trained (P ⁻ C ⁺)	58	37.7
Both untrained (P ⁻ C ⁻)	27	17.5

As shown in the above breakdown, the largest group in the sample is that which saw a trained counselor and an untrained physician (37.7 percent), while the smallest group is that which saw an untrained counselor and a trained physician (14.3 percent). The above differences are due to the more rapid turnover rate among physicians than among counselors.

B. STUDY DESIGN

The present study uses a panel design. Home visits were made to 154 clients at 3, 6, 14 and 19 months to ascertain their continuation status and to monitor changes in their satisfaction levels. An interviewer administered questionnaire was used in each of the above home visits. The same questionnaire was used in all four visits with the exception of a few probing questions that were added in the third and fourth home-visits. A translated copy of the final version of the questionnaire is attached in the Appendix. Clients who reported method discontinuation or switching in any of the visits were not visited in subsequent visit(s). Continuation and satisfaction rates among clients seen by trained and untrained physicians and counselors were compared.

C. VARIABLES AND MEASURES

1. Independent Variable

1.1 Provider training:

Information regarding the training status of each physician and counselor who were seen by the study clients was obtained from PCS/JHU provider data set.

2. Dependent Variables

2.1 Satisfaction with family planning method:

In each home visit clients who reported method continuation were asked to rate on a scale from 0-10 their satisfaction with that method. A score of 0 denotes complete dissatisfaction while a score of 10 denotes complete satisfaction. In addition, clients were asked if they were experiencing any side-effects from the method.

2.2 Satisfaction with CSI services:

Two indicators were used to measure clients satisfaction with CSI services. The first indicator was clients willingness to refer a friend who is interested in family planning to CSI. The second indicator was clients rating on a scale from 0-10 their satisfaction with the last visit they made to the CSI clinic.

2.3 Client Appointment-Keeping

Clients who receive family planning methods at CSI are asked to return for method follow-up within a period of one month. This follow-up visit is presumably free-of-charge. In each of the four home visits, clients were asked if they had made a return visit to the clinic after they received the family planning method. Client return was coded as a dichotomous variable.

2.4 Correct use of FP method:

In each of the home visits clients who reported method use continuation were asked to explain to the interviewer how they used that method. Interviewers wrote down clients responses which were later assessed by the coder based on the method use instructions included in the CSI provider manual. Correct use was coded as a dichotomous variable.

2.5 Method continuation:

In each home visit clients were asked if they were still using the family planning method they received at CSI. Clients who reported method discontinuation or switching were asked about the date of method discontinuation/ switching. A duration of method use was computed for each client.

3. Intermediate Variables

These are short-term client outcomes that were measured in the PCS/JHU study immediately after the consultation. Data on short-term client outcomes were obtained from the PCS/JHU exit interview data set. These variables have been used in the regression analysis to explain the relationship between provider training and long-term client outcomes.

3.1 Client comprehension:

Every client who received a family planning method in the PCS/JHU study was asked in the exit interview to repeat to the interviewer what the provider(s) said to her about the method she received: how the method works, how it should be used, what side-effects to expect from it, how to manage side-effects, and when to return for follow-up. Each client received a total score that ranged from 0-8 on the above items.

3.2 Client immediate satisfaction with method:

In the exit interview clients were asked to rate on a scale from 0-10 their satisfaction with the family planning method they received at the clinic.

3.3 Client immediate satisfaction with service:

In the exit interview clients were asked on a scale from 0-10 their satisfaction with the quality of service they received at the clinic that day.

4. Explanatory Variables

These are variables that may confound the relationship between provider training and client outcomes. These variables include client age, education, residence and family planning characteristics such as reproductive intentions and family planning method received at CSI. Most of the data for these variables were obtained from PCS/JHU exit interview data set. These variables have been controlled for in the analysis.

V. Results

A. CLIENT CHARACTERISTICS

Ninety percent of clients who were contacted through home-visits completed the study. The remainder (n=16) either could not be located (n=6), were not available at the time of the home visit (n=8), or refused the home-interview (n=2). Clients who were lost to follow-up were not different from clients who completed the study with regard to age, education, and number of living children. A larger proportion of clients who were lost to follow-up, however, lived in urban or semi-urban areas as opposed to rural areas (56.3 vs 30.4 percent).

Interestingly, at exit from the clinic clients who were lost to follow-up expressed greater satisfaction with both CSI services and the family planning methods they received at the clinic than clients who completed the study. It is not clear whether these high scores reflect true satisfaction or simply a way to avoid actual involvement in the study.

Table (1) in the Appendix shows socio-demographic characteristics of clients seen by trained and untrained CSI providers. On average the women in this sample are under the age of 30, have less than three living children, had about five years of schooling and are most likely to be housewives (84.4 percent). The husbands of those clients are predominantly literate and they work in white collar jobs (44.2 percent). The majority of the clients live in rural areas (66.9 percent) and fairly distributed over Upper than in Lower Egypt (51.3 vs. 48.7 percent respectively). The three client groups that were seen by at least one trained provider were comparable on most of the above characteristics.

Clients who were seen by two untrained providers, however, were slightly older, they and their husbands had fewer years of schooling and they were more likely to live in rural Upper Egypt.

CSI clients are overwhelmingly IUD users. at least three out of four clients who were seen by a trained or an untrained provider received an IUD.

Table (2) shows that the majority of clients in all four groups had previous experience with family planning methods. While the majority of clients were using the current family planning method for limiting, clients in the trained physician and untrained counselor group, however, were more likely to be using this family planning method for spacing.

B. LONG-TERM CLIENT OUTCOMES

1. Client Satisfaction with FP Method

In each of the four home-visits clients who reported method continuation were asked to rate on a scale from 0-10 their satisfaction with the method they received at CSI. Also, they were asked if they were experiencing any side-effects. As shown in figure (1) clients are generally satisfied with the family planning methods they received at CSI. Higher satisfaction scores tend to be seen in the third and fourth home visits probably as a result of withdrawal (either through discontinuation or switching) of clients who in earlier visits were less satisfied with their methods.

Bivariate analysis showed that seeing a trained physician is not associated with greater satisfaction with family planning method. Seeing a trained counselor, however, tends to have a positive impact on client satisfaction with method. Figure (1) shows that at three months clients who were seen by a trained counselor were more satisfied with the method they received at CSI than clients who were seen by an untrained counselor ($p=.02$). The above association between counselor training and satisfaction with method does not hold true, however, in subsequent home visits.

Table (3) shows that in each of the four visits, clients who reported method side-effects were less likely to be satisfied with their family planning methods. It is noteworthy to mention that clients who were seen by a trained counselor were slightly less likely to report method side-effects than clients who were seen by an untrained counselor.

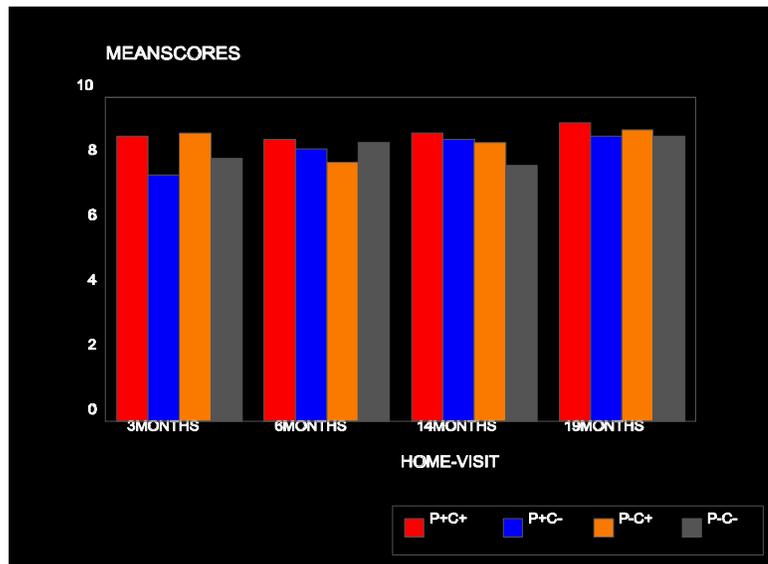


Figure 1 Mean Scores of Client Satisfaction with FP Method (by Provider Training Status)

Client satisfaction with a family planning method tends to vary by the type of method. Table (4) shows that both at baseline and at three months, pill users were significantly less satisfied with their family planning method compared with IUD and injectable users. In subsequent home visits the number of pill and injectable became very small thus it was not possible to conduct any further comparisons by type of method.

There is no correlation between client satisfaction with family planning method and client's age, number of years of schooling or geographical residence. Also, there is no correlation between client comprehension and method satisfaction measured at the clinic and subsequent satisfaction with family planning method.

Independent variables that were entered into a model of multiple regression of data analysis were counselor training, client experience of side-effects and type of family planning method used.

Analysis of data showed that experience of side-effects was most predictive of low method satisfaction at three months.

A woman who experiences side-effects tends to have a method satisfaction score that is 2.9 points lower than a woman who does not experience side-effects, with the other two variables held constant.

Counselor training was found to be a weak predictor of client satisfaction at three months. Seeing a trained counselor is associated with a 0.7 point increase in client satisfaction. Although bivariate analysis showed type of family planning method to be associated with satisfaction with a family planning method, regression analysis showed that type of family planning method does not contribute significantly to client satisfaction with a family planning method. This discrepancy is due to high correlation between type of family planning method and experience of side-effects. Thus when experience of side-effects and counselor training were held constant, the contribution of type of method to client satisfaction became insignificant.

2. Client Satisfaction with CSI Services

Figure (2) shows scores of client satisfaction with CSI services across the four client groups over the 19 month follow-up period. At three months the two client groups that were seen by trained physicians were significantly more satisfied ($p=.015$) than the two client groups that were seen by untrained physicians.

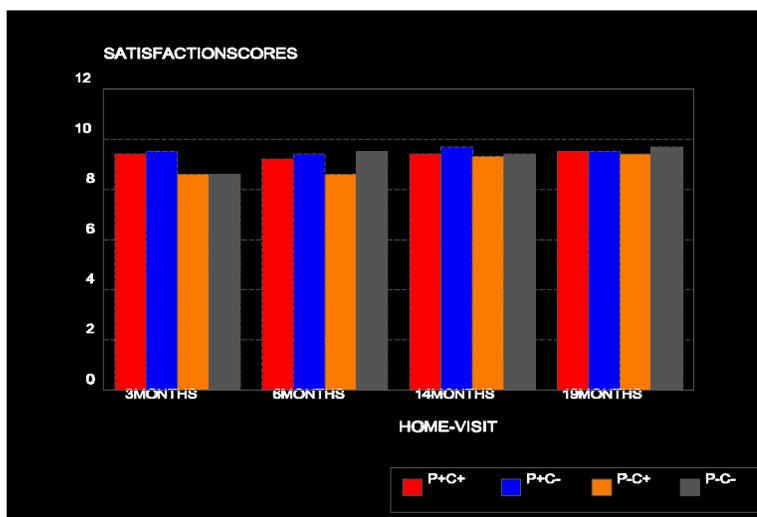


Figure 2 Scores of Client Satisfaction with CSI Services (by Provider Training Status)

A similar finding is shown in figure (3) where at three months the two client groups that were seen by trained physicians were more likely to name CSI for a place where they would refer a friend or relative who is interested in family planning.

It is interesting to note that the above differences between trained and untrained physicians

are only true at three months and tend to diminish in the second,

third and fourth home visits. This could be a result of withdrawal of clients who are less satisfied with CSI either through discontinuation or switching. The second plausible explanation is that whatever effects the consultation might have on clients are likely to fade as more time elapses after the consultation.

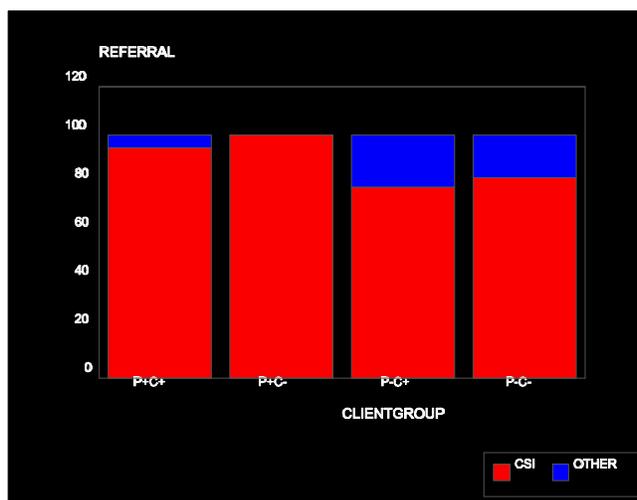


Figure 3 Clients who Would Recommend CSI to Others (by Provider Training Status)

No correlation was found between client age, number of years of schooling, geographical residence, method received at CSI and the degree of client satisfaction with services. Also, there was no correlation between client comprehension, satisfaction with method or satisfaction with service measured at the clinic and subsequent satisfaction with CSI services.

A regression analysis was conducted to measure the contribution of physician training to client satisfaction with CSI services at 3 months. The analysis showed that seeing a trained physician is associated with a 0.8 point increase in client satisfaction.

Using IUD and seeing a trained physician were found to be the strongest predictor of correct use.

3. Client Appointment-Keeping

There is an assumption that clients who keep their follow-up appointments are those clients who are satisfied with the service. Clients who are not satisfied with the service are less likely to return to the clinic for follow-up, and when they develop side-effects they are more likely to consult a different doctor.

Since the first follow-up visit at CSI is supposed to take place in the first month, this section will examine client return for follow-up only in the first three months after the consultation.

Slightly more than one-half of CSI clients (55.4 percent) returned to the clinic for follow-up in the first three months (table 5). More than one-half of clients who returned to the clinic did because of method problems (55.8 percent), the others returned for method follow-up (44.2 percent). Bivariate analysis showed no association between seeing a trained physician or counselor and appointment-keeping.

Clients who receive an IUD are most likely to make a return visit, while clients who receive oral pills are least likely to make such a visit. It is not clear if the reason is that service providers only emphasize the importance of the follow-up visit to IUD users or that the latter are more concerned about IUD side-effects and therefore are more likely to make a return visit. It should be noted, however, that the total number of clients who received pills is too small for plausible conclusions to be drawn regarding the likelihood of making a return visit in both groups.

Clients who made a return visit and those who did not were compared on a number of socio-demographic characteristics.

Clients who returned for follow-up tend to be older and have more years of schooling.

There is no correlation between client comprehension, satisfaction with family planning method or services measured at the clinic and clients' return for follow-up.

The odds of client return to the clinic for follow-up were 4 times higher among IUD users than among users of other FP methods.

A logistic regression analysis was conducted to assess the relative contribution of each of the above three variables to the probability of client return for follow-up. The analysis showed that with client age and schooling held constant the odds of client return to the clinic were 4 times higher among IUD users than among users of other family planning methods. Also, the analysis showed that an increase of five years in client age or schooling is associated with a 1.5 fold increase in the likelihood of making a follow-up visit in the first three months.

4. Correct Use of FP Method

In each home-visit, clients who reported method continuation were asked to describe to the interviewer how they used their family planning method. Clients who were using injectables were not asked that question. Although this question was asked in all four home-visits, this section will only describe findings from the first home visit since many of the women who received oral pills have discontinued or switched in later visits.

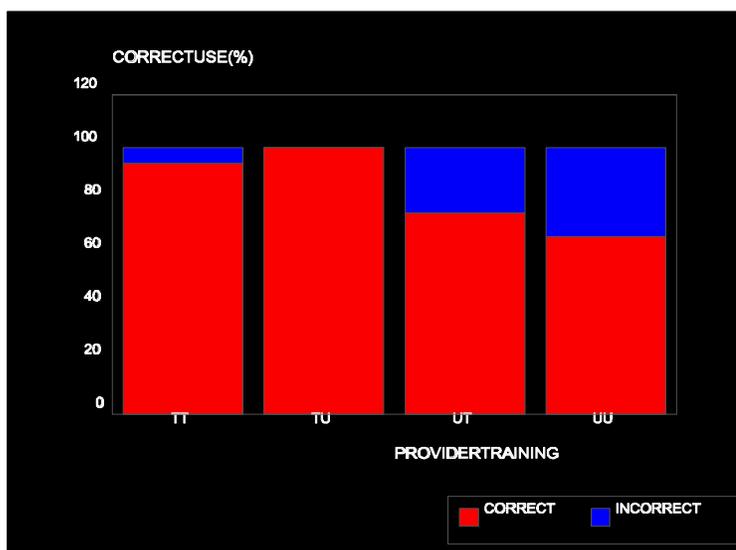


Figure 4 Provider Training and Correct Use of FP Method

At 3 months, more than four-fifths of clients (83.8 percent) who reported method continuation were using their family planning methods correctly. Figure (4) shows clients who were seen by trained physicians to have a greater chance of using their family planning method correctly than clients who were seen by untrained physicians. Counselor training does not appear to have any impact on correct use.

Table (6) shows socio-demographic and service-related characteristics of correct and incorrect method users. The two groups are quite similar in terms of age, number of living children, previous use of family planning. Interestingly, correct and incorrect users had similar comprehension scores at exit from the clinic. The only distinguishing factor appears to be number of years of schooling. Incorrect users have significantly fewer years of schooling compared with correct users.

The probability that a client will use a family planning method correctly varied tremendously by the type of family planning method received at clinic. While only one in ten pill users waited the correct number of days between pill packets, 9 out of 10 IUD users knew how to check if the IUD was in place. Checking for strings is very important for early identification of IUD expulsion or uterine perforation. Corresponding information for condom and foam tablet use is not available since none of the clients who received these two methods were still using them at 3 months.

A logistic regression analysis showed IUD use to be the strongest predictor of correct use. The odds of using a family planning method correctly are 57 times higher among IUD users than among pill users. Seeing a trained physician was also found to be a strong predictor of correct use. A client who was seen by a trained physician has a chance of correct method use that is 7.8 times higher than a client who was seen by an untrained physician, controlling for the type of family planning method. When type of family planning method and physician training were held constant client schooling did not make a significant contribution to the likelihood of correct use of family planning method.

5. Method Continuation

At 19 months, about one half of the study clients were still using the same family planning method they received at CSI, one quarter had discontinued contraception altogether and 16 percent switched to a different family planning method. One in ten clients however, were lost to follow-up (table 7).

A life-table analysis was conducted to examine probabilities of method continuation while taking into account clients who were lost to follow-up. Table (8) shows that a client who receives a family planning method at CSI has a 57 percent chance to be using the same method at 19 months.

Client experience of side-effects is the main reason why CSI clients discontinue/ switch their family planning methods. Table (9) shows that more than one-half of clients discontinued/switched because they experienced side-effects. Other reasons for

More than one in ten switchers said they switched to a new family planning method because they were afraid of side-effects.

method discontinuation/ switching include desire to get pregnant (16.2 percent) and method failure (13.5 percent among discontinuers and 8.0 percent among switchers).

The probability of method discontinuation/switching is highest in the first two months, at six months and after the first year (figure 5). Interestingly, reasons for discontinuation/switching were similar in both early and late discontinuers/switchers.

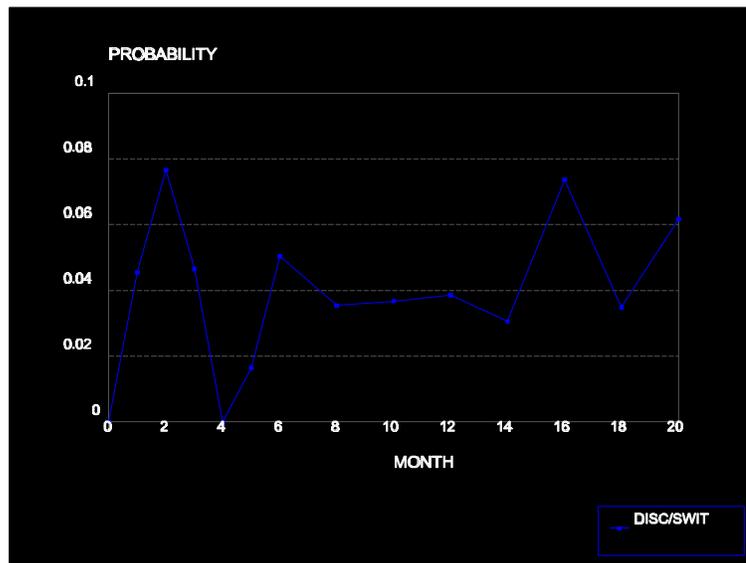


Figure 5 Method Discontinuation/Switching over a 19 Month Period (All Method)

Bivariate analysis showed method continuation to be greater in the two client groups that were seen by trained physicians than the two groups that were seen by untrained physicians (figure 6).

It is interesting to note that although counselor training was shown to be associated with client satisfaction with family planning method, it is not associated with method continuation. Continuation rates vary with the type of family planning method received at CSI. As shown in figure (7) continuation rates are highest for the IUD (66.4 percent) and lowest for local methods 0 percent). It is interesting to note that although continuation rates are equal among pill and injectables users, pill users are more likely to discontinue contraception altogether (66.7 percent) while injectable users are more likely to switch to a different family planning method (66.7 percent).

Method continuers, discontinuers and switchers were compared on a number of socio-demographic and family planning characteristics. Table (10) shows that method continuers and switchers tend to be similar with regard to age, number of living children and number of years of schooling.

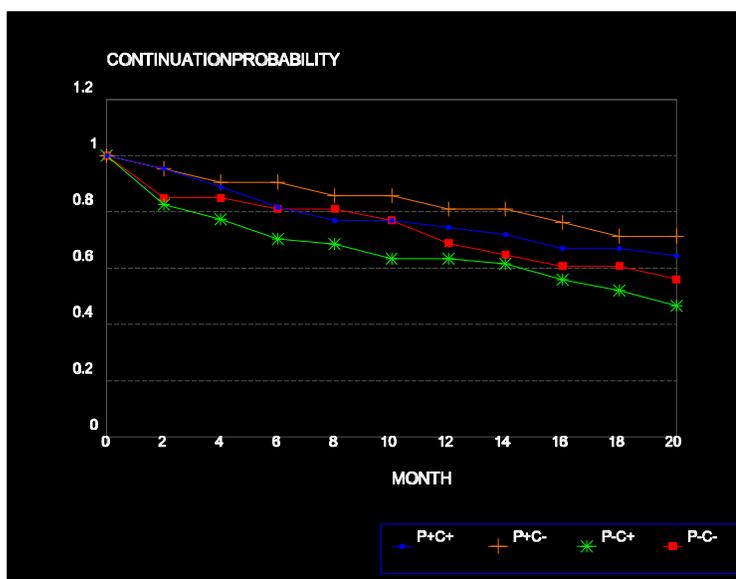


Figure 6 Method Continuation by Provider Training Status

Method discontinuers, on the other hand, are slightly younger, have fewer living children and are more likely to be using the method they received at CSI for spacing than limiting. Both discontinuers and switchers were more likely to live in Upper than in Lower Egypt.

Table (11) shows scores of client comprehension and satisfaction at exit from the clinic. The table also shows scores of client satisfaction with the family planning method and CSI services at three months. At exit from the clinic method continuers had higher comprehension scores compared to methods discontinuers and switchers ($p=.02$). It is not clear if method continuers in fact received more information or is it that continuers are clients who are more interested and hence they retained more of the information given to them by service providers.

In the exit interview method continuers, discontinuers and switchers were equally satisfied with both the family planning method and the quality of service they received at CSI. However, at three months, both method discontinuers and switchers were significantly less satisfied with CSI services compared to method continuers. Also, client satisfaction with family planning method was significantly lower among discontinuers than among the other two groups.

There are two plausible explanations for the above discrepancy between satisfaction levels measured at the clinic and those measured at three months. Although as much as was feasible exit interviews were conducted in a private place, there is always the possibility that discontinuers and switchers felt uncomfortable to express any dissatisfaction for fear of being overheard by clinic staff. The potential role of courtesy bias in clinic exit interviews has recently been discussed by a number of authors (Simmons, 1993). The second explanation to the above discrepancy would be that clients' actual experience with a family planning method and not their immediate impressions of the method or the service is what determines their degree of satisfaction with the family planning method or the service.

A logistic regression analysis was conducted to identify socio-demographic and service-related factors most predictive of method continuation. The analysis showed that use of IUD, number of living children and residence in Lower Egypt to be most predictive of method continuation at

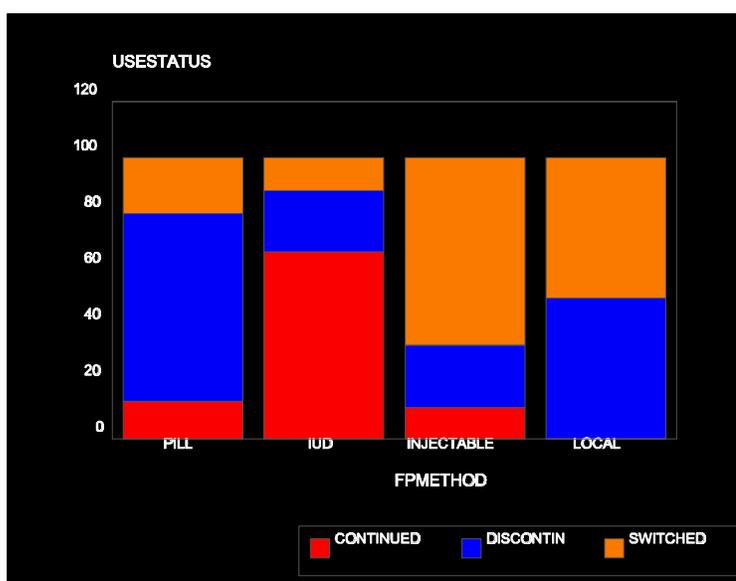


Figure 7 Contraceptive Continuation by Type of Method

19 months. With all other variables held constant, the odds of using the same family planning method for at least 19 months are 15 times higher among an IUD than among a user of any other family planning method. Also, a client who lives in Lower Egypt has a chance of method continuation that is 3.3 times higher than a client who lives in Upper Egypt. Finally, a client who has more children has a chance of method continuation that is at least 2.4 times that of a client who has fewer children.

It is not clear whether the above differences are a result of a better quality of care that is given to IUD users, women who live in Lower Egypt and women with more children or is it a result of a greater motivation to practice contraception in the

Counselor training is associated with method satisfaction while physicians training is rather associated with method continuation.

above groups. It is interesting to note that although bivariate analysis showed physician training to be positively associated with method continuation, regression analysis showed the contribution of physician training to be insignificant. This is due to a high correlation between physician training and some of the other independent variables. As mentioned in the client characteristics section, clients who were seen by trained physicians were more likely to receive IUDs. Also, clients who were seen by trained physicians were more likely to live in Lower Egypt. Thus when the effects of residence and family planning method were held constant in the analysis the contribution of physician training became insignificant.

VI. Conclusion

Results of the present study show that service provider training on counseling and interpersonal communication has a positive impact on clients long-term attitudes and behaviors. Physician and counselor training, however, tend to impact clients differently. Physician training has a significant impact on client satisfaction with CSI services and correct use of family planning method. Counselor training, on the other hand, seems to help clients cope better with method side-effects and hence influences their long-term satisfaction with a family planning method. Both physician and counselor training impact method continuation indirectly either through better comprehension regarding the family planning method that is being used and more satisfaction with the services, or through experience of fewer side-effects and long-term satisfaction with a family planning method.

The high physician turn-over at CSI is a major problem as far as physician training is concerned. CSI clinics have more counselors than physicians who are trained on counseling and interpersonal communication. The situation tends to be more serious in Upper Egypt where a client who visits a CSI clinic is more likely to see a physician and a counselor who are both untrained.

CSI clients are overwhelmingly IUD users. The study showed that positive outcomes

such as correct use, method continuation and client return to the clinic for follow-up are much more likely to occur with use of IUD than with any other family planning method. Users of hormonal methods are clearly at a disadvantage as very few of them continued using the same family planning method after the first six months.

Method discontinuation/switching is highest in the first two months and after the first year. All through the 19 months of follow-up experience of side-effects was the main reported reason for method discontinuation or switching.

Clients who live in Upper Egypt and those with fewer living children are at a higher risk for method discontinuation/switching than clients who live in Lower Egypt and those with fewer children.

CSI clients are not benefiting enough from the free follow-up visit they are entitled to in the first month of method use. Only one-half of clients made such a visit any time during the first three months of follow-up. Use of IUD is the strongest predictor of a client's making a return visit to the clinic within the first three months.

VII. Program Implications

Results of the present study suggest that service provider training could have a positive impact on clients' long-term attitudes and behaviors. These findings should encourage CSI to invest more in training physicians and counselors on counseling and interpersonal communication. However, CSI needs to address a number of issues in order to maximize the effect of training on service providers and to achieve a better level of service for its clients.

First, future training needs to emphasize the importance of offering clients a variety of family planning methods. Clients who receive a family planning method other than the IUD should be entitled the same care as far as information about how to use the method, what side-effects to expect from it and follow-up appointments. This requires additional training to service providers on other family planning methods so they would be as comfortable giving those methods as they are with the IUD.

Second, CSI providers need to be trained on how to prepare clients for potential method side-effects. Clients should be taught to distinguish between "normal" side-effects and more serious side-effects which require immediate action. It would certainly help clients

to know that they can return to the clinic any time that they need advice about the method they have. Counselors would be the best persons to work adjustment plans with clients so the latter can deal with method side-effects.

Third, CSI clients should be encouraged to make at least one follow-up visit to the clinic. This visit could be invaluable in identifying and managing early problems or concerns regarding the family planning method under use. It might be worthwhile for CSI to make any visit in the first three months free of charge since this is the period with the maximum likelihood for method discontinuation/switching. CSI needs to develop mechanisms to encourage users of oral pills or local methods to obtain their re-supplies at CSI. In the meantime, physicians and counselors should receive adequate training on the management of the follow-up visit.

Finally, CSI needs to re-examine the quality of its services in Upper Egypt. Because of the low support for family planning in Upper Egypt, these clients may need extra support and motivation from service providers. CSI should therefore send more of its trained providers to clinics in Upper Egypt. Also, CSI needs to find ways to deal with the high rate of physician turn-over which poses a tremendous drain on the Project's resources.

APPENDICES

(A) TABLES

**Table 1: Socio-Demographic Characteristics
of Clients Seen by Trained and Untrained Providers**

Characteristic	P⁺ C⁺ (N=47)	P⁺ C⁻ (N=22)	P⁻ C⁺ (N=58)	P⁻ C⁻ (N=27)	Total (N=154)
Age (mean)	29.6	27.2	27.9	31.0	28.9
Living Children (mean)	3.8	3.0	3.6	3.9	3.7
Years of Schooling (mean)	5.2	7.1	5.9	3.4	5.4
Occupation					
Housewife	85.1	81.1	84.5	85.0	84.4
Blue collar	0	4.5	5.1	0	2.6
White collar	14.9	13.6	10.3	14.8	13.0
Years Husband Schooling (mean)	8.7	7.7	7.9	5.0	7.6
Husband Occupation					
Peasant	25.5	22.7	15.5	33.3	22.8
Blue collar	21.3	36.4	41.4	22.2	31.2
White collar	51.1	40.9	41.1	40.8	44.2
Other	2.1	0	1.7	3.7	1.8
Residence					
Urban/semi-urban	40.4	40.9	31.0	18.5	33.1
Rural	59.6	59.1	69.0	81.8	66.9
Region					
Upper Egypt	46.8	31.8	48.2	81.5	51.3
Lower Egypt	53.2	68.2	51.8	18.5	48.7

**Table 2: Family Planning Characteristics of Clients
Seen by Trained and Untrained Providers**

Characteristic	P⁺ C⁺ (N=47)	P⁺ C⁻ (N=22)	P⁻ C⁺ (N=58)	P⁻ C⁻ (N=27)	Total (N=154)
FP method at CSI					
Pill	4.3	4.5	15.5	14.8	10.4
IUD	85.1	95.5	72.4	74.1	79.9
Injectable	8.5	0	8.6	7.4	7.1
Local	2.1	0	3.4	3.7	2.6
Previous Use					
Used before	63.3	76.2	57.9	66.7	63.8
FP Intentions					
Spacing	36.6	52.4	37.5	22.2	36.6
Limiting	63.4	47.6	62.5	77.8	63.4

Table 3: Client Satisfaction with FP Method, Experience of Side-Effects and Provider Training

	Side-Effects	No Side-Effects
1. Satisfaction with method (range 0-10)		
3 months (mean)	N=49 6.8	N=66 9.7
6 months (mean)	N=48 7.5	N=58 8.9
14 months (mean)	N=39 8.1	N=53 8.9
19 months (mean)	N=29 8.4	N=47 9.3
2. Provider Training		
<u>(a) 3 Months (%)</u>		
P ⁺ C ⁺ (N=35)	37.1	62.9
P ⁺ C ⁻ (N=18)	66.7	33.3
P ⁻ C ⁺ (N=43)	39.5	60.5
P ⁻ C ⁻ (N=19)	36.8	63.2
<u>(b) 6 Months</u>		
P ⁺ C ⁺ (N=31)	32.3	67.7
P ⁺ C ⁻ (N=17)	64.7	35.3
P ⁻ C ⁺ (N=38)	47.4	52.6
P ⁻ C ⁻ (N=20)	45.0	55.0
<u>(c) 14 Months</u>		
P ⁺ C ⁺ (N=28)	39.3	60.7
P ⁺ C ⁻ (N=17)	41.2	58.8
P ⁻ C ⁺ (N=32)	43.8	56.2
P ⁻ C ⁻ (N=15)	46.7	53.3
<u>(d) 19 Months</u>		
P ⁺ C ⁺ (N=25)	28.0	72.0
P ⁺ C ⁻ (N=14)	50.0	50.0
P ⁻ C ⁺ (N=25)	36.0	64.0

P C (N=12)	50.0	50.0
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**Table 4: Client Satisfaction Scores with FP Method
by Type of Method Received at Clinic (on a Scale from 0-10)**

Measurement Point	Pill	Iud	Injectable	Local
Baseline Mean score	N=16 7.9	N=123 9.0	N=11 9.4	N=4 7.2
3 months* Mean score	N=11 8.1	N=107 8.5	N=5 9.2	N=0 -

* Only clients who reported method continuation at 3 months were asked to rate their satisfaction with the method. After the third month, the number of pill and injectable became too small for any meaningful calculation of mean scores to be made.

**Table 5: Correlates of Client Return to CSI for Follow-up
in the First Three Months**

Characteristic	Returned (N=77)	Did Not (N=66)
1. Provider training		
P ⁺ C ⁺ (%)	52.5	47.5
P ⁺ C ⁻ (%)	60.0	40.0
P ⁻ C ⁺ (%)	53.6	46.4
P ⁻ C ⁻ (%)	60.9	39.1
2. Client Age		
Mean years	29.4	27.9
3. Client Schooling		
Mean years	6.7	4.1
4. Client Satisfaction		
Mean score (0-10)	9.6	9.3
5. Method Satisfaction		
Mean score (0-10)	8.8	8.8
6. Client Comprehension		
Mean (0-8)	4.2	3.8
7. FP Method		
Pill (%)	6.7	93.3
IUD (%)	61.6	38.4
Injectable (%)	62.5	37.5
Local (%)	50.0	50.0

Table 6: Socio-Demographic and Service-Related Characteristics of Correct and Incorrect Method Users*

Characteristic	Correct Users (N=93)	Incorrect Users (N=18)
1. Age Mean	28.2	29.8
2. Children Mean	3.5	3.5
3. Schooling Mean	6.8	2.4
4. Comprehension Mean	4.2	3.9
5. FP Experience Used before (%)	85.7	80.0
6. FP Method		
Pill (%)	10.0	90.0
IUD (%)	91.1	8.9

* Injectable users and clients who reported method discontinuation or switching were not asked this question.

Table 7: Method Continuation, Discontinuation and Switching by Provider Training Status

Client Status	P⁺C⁺ (N=47)	P⁺C⁻ (N=22)	P⁻C⁺ (N=58)	P⁻C⁻ (N=27)	Total (N=154)
Continued	53.2	63.6	43.1	44.4	49.4
Discontinued	21.3	22.7	27.6	22.2	24.0
Switched	10.6	4.5	24.1	18.5	16.2
Lost to follow-up	14.9	9.1	5.2	14.8	10.4

Table 8: Life-Table of Method Continuation Over a 19-Month Period

Interval	(1)	(2)	(3)	(4)	(5)	(6)
0 < 1 m	154	0	154.0	7	.0455	.9545
1 < 2 m	147	7	143.5	11	.0767	.8814
2 < 3 m	129	0	129.0	6	.0465	.8404
3 < 4 m	123	0	123.0	0	.0000	.8404
4 < 5 m	123	2	122.0	2	.0164	.8266
5 < 6 m	119	0	119.0	6	.0504	.7849
6 < 8 m	113	0	113.0	4	.0354	.7571
8 < 10 m	109	0	109.0	4	.0367	.7294
10 < 12 m	105	3	103.5	4	.0386	.7012
12 < 14 m	98	0	98.0	3	.0306	.6797
14 < 16 m	95	0	95.0	7	.0737	.6296
16 < 18 m	88	4	86.0	3	.0349	.6077
18 < 20 m	81	0	81.0	5	.0617	.5701

(1) No. of clients entering interval

(2) No. lost to follow-up

(3) No. of clients exposed to risk

(4) No. of discontinuers/switchers

(5) Probability of discontinuation/switching

(6) Cumulative probability of continuation

Table 9: Reasons for Method Discontinuation or Switching

Reason (%)	Discontinued (N=37)	Switched (N=25)
Side-effects	56.8	60.0
Fear of side-effects	5.4	16.0
Desire for children	16.2	0
Method failure	13.5	8.0
Husband disapproval	0	12.0
Husband absence	5.4	0
Others	2.7	4.0

Table 10: Socio-Demographic and Family Planning Characteristics of Continuers, Discontinuers and Switchers

Characteristic	Continued (N=76)	Discontinued (N=37)	Switched (N=25)
1. Age Mean years	29.0	27.8	28.6
2. Living Children Mean	3.8	3.0	3.6
3. Schooling Mean years	5.1	5.9	5.6
4. Region Upper Egypt Lower Egypt	47.4 52.6	56.8 43.2	68.0 32.0
5. FP Use Used before	65.3	55.6	75.0
6. FP Intentions Spacers Limiters	35.6 64.4	52.8 47.2	21.7 78.3

**Table 11: Service-Related Characteristics of Continuers,
Discontinuers and Switchers**

Characteristic	Continued (N=76)	Discontinued (N=37)	Switched (N=25)
1. Comprehension (At clinic)			
Mean (scale 0-8)	4.4	3.6	3.4
2. Method Satisfaction <u>(a) At clinic</u>			
Mean (scale 0-10)	8.8	8.8	8.9
<u>(b) At 3 months</u>			
Mean (scale 0-10)	9.0	7.8	8.4
3. Service Satisfaction <u>(a) At clinic</u>			
Mean (scale 0-10)	9.4	9.4	9.2
<u>(b) At 3 months</u>			
Mean (scale 0-10)	9.4	9.0	9.2

(B) QUESTIONNAIRE

**THE CLINICAL SERVICES IMPROVEMENT PROJECT
CLIENT FOLLOW-UP QUESTIONNAIRE**

My name is I am continuing with you the study we started in February/ March of 1992. The purpose of my visit is to see how you are doing with the family planning method you received at the clinic and how you feel about the quality of service in those clinics. Again, I would like to assure you that under no circumstance will your responses be shown to any of the clinic personnel.

Client's name:

FP method received at CSI clinic:

Governorate:

City: **Town:** **Village:**

Interviewer's name:

Date of interview:

About (x) months ago you received this FP method (.....) at CSI clinic

1. Are you still using that method?

- 1) Using
- 2) Discontinued **GO TO Q. 12**
- 3) Switched **GO TO Q. 15**

2. Please explain to me how you have been using that method.

IUD: How do you check whether or not it is in place

.....

Pills: How often do you take the pills?

After you finish one cycle when do you start a new cycle?

.....

In the last cycle did you skip any pills because you were not feeling well, for example?

Injectables: How many injections have you taken so far?

Foam Tablets: Where do you insert them?

How long before intercourse do you put them?

How long do you wait after intercourse to wash up?

Condom: Could you explain to me how your husband uses it.

.....

3. To what extent is your husband approving of the FP method you are using?

0 1 2 3 4 5 6 7 8 9 10

Complete disapproval

Complete approval

4. Do you have any concerns about getting pregnant while you are on this family planning method?

1) Yes ()

2) No ()

3) Don't know ()

5. To what extent do you think the FP method you are using is effective?

0 1 2 3 4 5 6 7 8 9 10
Not effective at all Very effective

6. Now that you have used that FP method for (x) months, to what extent are you satisfied with it?

0 1 2 3 4 5 6 7 8 9 10
Not satisfied at all Completely satisfied

7. Is the method causing you any problems?

- 1) Yes
- 2) No **GO TO 19**

8. What is it that is bothering you most about this FP method?

.....

9. When did this problem start?

.....

10. What did you do about it?

- 1) Saw a doctor ----> Type of doctor
- 2) Other
- 3) Did nothing

11. To what extent are you concerned about that problem?

0 1 2 3 4 5 6 7 8 9 10
Not concerned at all Very concerned

12. Are you considering switching to another FP method because of this problem?

- 1) Yes ----> Method you are considering

- 2) No
- 3) Don't know

CLIENTS WHO DISCONTINUED

13. Why did you discontinue?

.....

14. When did you discontinue?

.....

15. Did anyone advise you to discontinue?

1) Yes ----> Who

2) No

CLIENTS WHO SWITCHED

16. Why did you switch?

.....

17. When did you switch?

.....

18. Did anyone advise you to switch?

1) Yes ----> Who

2) No

19. What FP method are you currently using?

.....

ALL CLIENTS

20 If you have a relative who wants to use family planning where would you advise her to go?

- 1) Private doctor ----> Why?
- 2) CSI ----> Why?
- 3) Other

21. Ever since you have received this family planning method how many times did you go back to the clinic?

- 0) Did not go back ----> Why? **SKIP TO Q. 24**
- 1) Once
- 2) Twice
- 3) Three or more times

22. When was the last time you went back?

.....

23. Why did you go back?

- 1) Routine follow-up
- 2) Problem with method
- 3) Other

24. When you went back did you see the same doctor you saw the first time?

- 1) Same doctor
- 2) Different doctor
- 3) Not sure

25. On a scale from 0 to 10 how would you rate the doctor you saw on each of the following attributes?

- 1) Informativeness
- 2) Friendliness
- 3) Competence

26. In general to what extent are you satisfied with your last visit to CSI clinic?

0 1 2 3 4 5 6 7 8 9 10

Complete dissatisfaction Complete satisfaction

**** Thank you for participating in this follow-up ****

Acknowledgment

This report is a collaborative effort between Social Planning Analysis and Administration Consultants (SPAAC), the Population Council's Asia and Near East Operations Research and Technical Assistance Project (ANE OR/TA) and the Johns Hopkins University Population Communication Services Project (PCS/JHU). It was conducted under the auspices of the National Population Council. Particular acknowledgement and thanks is given to His Excellency the Minister of State for Population and Family Welfare, Professor Dr. Maher Mahran.

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Last but not least, this work would not have been accomplished without the cooperation of CSI clients who participated in the home-interviews. It is our hope that the findings of this study will be used to improve quality of services for all family planning clients in Egypt.