



# Strengthening Family Planning Project

تعزيز تنظيم الأسرة

# Assessment of Training Approaches through Mystery Client Surveys of Pharmacists and Doctors

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### September 2015

Strengthening Health Outcomes through the Private Sector (SHOPS)

Associate Cooperative Agreement No. 278-A-00-10-00434-00

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# **Acronyms**

CAT Critically Appraised Topic

CHW Community health worker

COC Combined oral contraceptive

DOS Department of Statistics

DMPA Depot medroxyprogesterone acetate

EBM Evidence Based Medicine

FP Family Planning

IRB Institutional Review Board

IUCD Intrauterine contraceptive device

JAFPP Jordanian Association for Family Planning and Protection

JPFHS Jordan Population and Family Health Survey

MOH Ministry of Health

OCP Oral contraceptive pills

POP Progestin only pill

SHOPS Strengthening Health Outcomes through the Private Sector

STI Sexually transmitted infections

UNRWA United Nations Relief and Works Agency

USAID United States Agency for International Development

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# **Executive Summary**

# Introduction

The use of modern family planning (FP) methods in Jordan continues to be constrained by several factors, including women's fear of side effects and provider biases. To address these obstacles, the United States Agency for International Development (USAID) awarded the Strengthening Family Planning (Ta'ziz) project to improve the quality of and access to FP services in the private sector, which provides 56 percent of FP services in Jordan. This report assesses the contribution of the Ta'ziz project in improving provider FP services.

A major focus of the Ta'ziz project was training for doctors and pharmacists. This effort included:

- Medical training to doctors (both clinical and theoretical)
- Evidence-based medicine (EBM) seminars for doctors and pharmacists, discussing critically appraised topics (CATs) specific to each modern FP method
- Detailing visits to clinics and pharmacies to share CAT summaries and discuss findings

This assessment is limited to (1) doctors who are part of Ta'ziz's private network of doctors and (2) pharmacists who receive detailing visits from project staff. All network doctors and 300 pharmacies receive detailing visits covering FP methods, on a quarterly basis. These detailing visits follow the cycle of EBM seminars.

The EBM approach addresses provider biases against FP methods by providing access to the best research evidence on clinical topics, while also giving credit to providers' clinical experience with patients. Importantly, the EBM approach does not treat the research as definitive: providers are encouraged to inquire about and consider their clients' values, and to make decisions and recommendations for clients based on their individual situations. Moreover, the project's EBM approach was tailored to participants. EBM content was created by a group of Jordanian doctors after conducting literature reviews and research on specific modern FP methods. The key findings were then summarized into CATs relating to each modern FP method that is available in the Jordanian market.

This assessment was designed to evaluate whether the Ta'ziz multi-channel training approach results in improved service delivery outputs in relation to FP counseling. The findings from the assessment will help to shape future projects in the design of training programs, especially with regard to content and frequency of trainings.

This assessment addresses the following research questions:

- 1. What is the quality of counseling received by FP clients at network doctors and pharmacists?
- 2. Is there an association between the dose of training and detailing received by network doctors and the quality of their counseling regarding long-term contraceptive methods, such as

- Implanon and intrauterine contraceptive devices (IUCDs), and short-term methods, such as oral contraceptive pills (OCPs)?
- 3. Is there an association between the dose of training and detailing received by pharmacists and the quality of health information disseminated about short-term contraceptive methods (OCPs)?
- 4. Does network doctors' counseling of women differ depending on whether the woman comes with a free voucher through the Outreach Program or comes as a regular paying client?

# **Methods**

This assessment was done using a mystery client survey approach, utilizing checklists completed by the mystery clients immediately upon exiting the clinics and pharmacies.

### **Ethical Issues**

This study was deemed exempt from Abt Associates' Institutional Review Board (IRB) review. Informed and signed consent was obtained in person from pharmacists and doctors during January 2015, four months prior to the implementation of the survey.

# **Mystery clients**

The project recruited Jordanian women of reproductive age to play the role of mystery clients. These women did not have any medical background relating to FP and they were not community health workers.

The mystery clients for network doctor visits were each assigned to one of three scenarios; for pharmacist visits, all mystery clients were trained on the same scenario. Clients assigned to visit doctors portrayed a prospective user of a specific FP method: the intrauterine contraceptive device (IUCD), Implanon, or combined oral contraceptive pills (COCs). Clients assigned to visit pharmacists portrayed a prospective user of COCs.

# **Sample: Network doctors**

In January 2015, Ta'ziz contacted 68 network doctors in the central region of Jordan who received detailing visits to ask them to participate in the mystery client survey. Of that group, 61 (90 percent) provided informed consent to participate in a future mystery client survey, and in May 2015 a total of 55 of these 61 network doctors (90 percent) received three mystery clients each. Thirty-six (65 percent) of these were general practitioners and 19 (35 percent) were obstetrics and gynecology specialists. Twelve doctors (22 percent) were considered "advocates" in the project's network, while the other 43 (78 percent) served as "referral points." *Referral points* are doctors who agree to receive clients referred through the project's outreach program, paying for services with free-service vouchers that the doctor later submits for reimbursement. Doctors who serve only as *advocates* are invited to attend all trainings, even though they do not accept the free-service vouchers from the outreach program.

# Sample: Pharmacists

During the month of January 2015, Ta'ziz visited 123 pharmacies in the Central Region. During these visits, the detailer informed the pharmacists about the mystery client survey and obtained consent from all 123 pharmacists. Mystery client visits were successfully implemented with 104 pharmacists.

#### Instruments

The project collected quantitative data for all participating network doctors through three mystery client visits, using checklists specifically designed for each scenario. Checklists tested for four of the five key determinants of client care quality:

- interpersonal relations (client-provider interaction)
- presentation of different method options
- information provision to client about the chosen method (use, benefits, and side effects)
- technical competence in assessing client's eligibility for the selected method

The fifth determinant, equity, was assessed when selected mystery clients presented a free-service voucher (like those provided to women in poverty pockets through Ta'ziz's outreach program).

For each item in the checklists, a score of 0 indicates that the task was not performed; 1 indicates that the task was partially performed; and a score of 2 indicates that it was performed completely. The mystery clients completed the checklists at the end of their encounter with each doctor or pharmacist.

#### **Data Entry and Analysis**

Data entry was conducted using CSPro 4.0. Entered and validated data were transferred to Stata version 12 (StataCorp 2011). Chi-squared tests, Student's T-tests, and multiple variable regressions were used in order to detect an association between the dosage of exposure to trainings and the quality of counseling.

# **Key findings**

# **Network doctors**

*Duration of visit:* On average, clients spent 81 minutes in the clinics; 18% of that time was spent in consultation with the doctor.

Checklist findings:

Overall, doctors were found not to meet international standards of counseling.

• The doctors performed best in the category of interpersonal relations, scoring 81 percent, 78 percent, and 79 percent of possible points in the Implanon, IUCD, and COC scenarios, respectively.

- Specifically, doctors excelled by treating the client with respect, practicing effective communication skills, showing mutual understanding and assuring confidentiality to most clients under all three scenarios (>90 percent adherence).
- Doctors' performance in the client-provider interaction subsection was weakened by the infrequent use of visual aids when discussing the range of FP methods available to the client.
- Doctors' performance scores were negatively affected by how the receptionist greeted the client.
- Network doctors only attained 49 percent of the points testing for the doctor's efforts to attain the clients' FP preferences and demographics under the COC scenario, 65 percent under the Implanon scenario, and 70 percent under the IUCD scenario.
- As for effective counseling techniques, which include the discussion of different modern FP method
  options and assisting the client to make an informed choice, network doctors once again performed
  poorest with the COC scenario, 64 percent with the IUCD scenario, and 73 percent with the
  Implanon scenario.
- Checklists for Implanon and COC s include method-specific items relating to general information about the benefits from these methods and how to use them. Network doctors attained 48 percent of the possible points for Implanon and 46 percent for COCs. in discussing the chosen method's side effects, doctors scored 34 percent for Implanon, 52 percent for COCs, and 53 percent for the IUCD scenario.
- In assessing the client's medical eligibility for the chosen method, through checking for method-specific contraindications, network doctors scored 57 percent with the COC scenario, 61 percent with the Implanon scenario, and 67 percent with the IUCD scenario.

#### Visit outcomes:

- In the COC scenario, 93 percent of doctors agreed to provide the COCs as requested by the client; 87
  percent of doctors with the IUCD scenario agreed to provide the IUCD; and only 40 percent in the
  Implanon scenario agreed to provide Implanon.
- Of the doctors who did not agree to provide Implanon, more than three-quarters explained that
  they do not provide the service, and they referred the client to another provider to obtain the
  method of her choice.
- In the COC scenario, four clients were unable to obtain the COCs. One doctor stated they did not provide the service and referred the client elsewhere. Three doctors advised the clients not to use modern methods, since the client was recently married.
- In the COC scenario, only 59 percent of the doctors scheduled one-month follow-up visits for their clients, as would be expected for clients who receive COCs for the first time (since COCs, being hormonal, are associated with side effects). Because a client can discontinue use of COCs without returning to the provider, a scheduled follow-up visit is essential.
- For the three scenarios, the mean satisfaction level was between 3.6 and 3.8 out of 5.

# Associated factors — trainings, vouchers:

- No statistically significant associations were observed between the dose of training and doctors'
  overall performance scores; very weak positive associations were seen with attending EBM seminars
  and receiving detailing visits. (Note, however, that many of the EBM seminars were conducted two
  or three years previously and were not repeated, though some updates were made to the relevant
  CATs.)
- For Implanon and COC scenarios, no significant differences were observed between mystery clients based on presenting vouchers for service.
- For the IUCD scenario, however, the mean performance score was significantly lower when the client presented a voucher (42 percent compared to 58 percent). Also in the IUCD scenario, the mystery client's mean satisfaction score was significantly lower when presenting a voucher (3.2 compared to 4.0, out of a possible 5).
- Clients with the voucher waited on average 73 minutes, compared to 55 minutes without the voucher; however, this difference was not statistically significant. There was no difference in the amount of time spent with the doctor in consultation (averaging 12 minutes both with and without the voucher).
- Higher checklist scores were associated with higher client satisfaction: satisfaction increased by 0.05 points, 0.05 points, and 0.04 points with each one-point increment in the doctors' overall score for the Implanon, IUCD, and COC scenarios, respectively. (Note that the mystery clients, who were aware of the performance checklist and visited several doctors during the study, may be unusually sensitized to assessing a doctor's performance.)

# **Pharmacists**

### Checklist findings:

- The majority of pharmacists scored well on client-provider interaction (attaining 77 percent of possible points).
- In assessing clients' FP preferences and demographic background, pharmacists scored only 54 percent on average.
- In explaining COCs' benefits and use, pharmacists scored 50 percent on average.
- In discussing COCs' side effects, pharmacists scored only 35 percent on average.
- In assessing the client's medical eligibility for COCs, pharmacists attained a score of just 19 percent.

#### Visit outcomes:

- 84 percent of the pharmacists agreed to provide the COC. The most commonly recommended method was Yasmin (61 percent), followed by Microgynon 30 (23 percent) and Marvelon (9 percent).
- Of the 17 clients who reported that the pharmacists did not agree to provide the COC, 10 (59 percent) said that that the pharmacist insisted that the client have a prescription; two clients (12

percent) said that the pharmacist insisted on another FP method; and two others said it related to the client's health status (the mystery client's scripted discussion of small varicose veins in her legs).

• The mean satisfaction score was 3.2 out of 5.

# Associated factors – trainings:

- No significant associations were noted between the pharmacists' performance scores and their training dose (total number of detailing visits about COCs, with or without EBM seminars).
- Very few pharmacists who received detailing visits also attended EBM seminars. This indicates a missed opportunity in building synergy from the two activities.
- On average, the clients' level of satisfaction increased by 0.06 points with each one-point increment in the pharmacists' overall score on the checklist.

# **Conclusions and Recommendations**

#### **Network doctors**

- Doctors scored best in client-provider interaction; this performance would be improved by greater use of visual aids during consultations and by better training for secretaries in welcoming clients.
  - Recommendation: Present doctors with evidence demonstrating how clients benefit from the use of visual aids in the context of FP counseling; ask network doctors for their opinions of visual aids and why they do or do not use them. Educate doctors on the importance of welcoming clients, to provide a foundation for positive client/provider interaction.
- Doctors' overall performance shows room for improvement, especially with regard to discussion of the chosen FP method (benefits, use, and side effects). They also scored poorly in assessing clients' eligibility for their chosen method.
  - Recommendation: Provide additional or refresher trainings, ideally with a certification program with mandated doctor trainings and performance assessment through regular observation. Perform additional, in-depth analysis (including analyzing the characteristics of better-performing doctors) to design new interventions.
- Clients who sought COCs for the first time experienced a lower level of service quality than those
  who sought Implanon or IUCDs: doctors were less likely to ask about clients' demographics and
  reproductive preferences or to help the client make an informed decision; they were less likely to
  discuss the method's benefits and side effects or inquire about contraindications, and significantly
  less likely to schedule a follow-up visit for COC clients as compared to other long-term contraceptive
  methods.

Recommendation: Work with doctors to ensure they understand these important components of the counseling procedure (especially for clients seeking COCs). Interview those doctors whose performance was weaker for COC clients, to inform new training approaches and techniques.

The COC scenario was designed to test whether doctors would provide a modern contraceptive
method to a childless, recently-married woman. Three of the 55 doctors refused to provide the
mystery client with COCs and explicitly stated it was because she was newly married.

Recommendation: Interview doctors to learn the reasons for their refusal (physiological, medical, or social concerns). Employ the EBM approach to address these biases, incorporating scientific and clinical research about the socio-economic benefits of delaying pregnancy after marriage.

• Client satisfaction was positively associated with the doctor's overall performance score.

Recommendation: Inform clients of what they should expect during doctor FP counseling visits to assure that clients help to drive quality improvement in the private sector. While community health workers may continue to play a key role in informing clients of what to expect, new approaches are needed as well, to inform all sectors of society.

• No statistically significant associations were detected between doctors' performance and either attendance at EBM seminars or participation in detailing visits, possibly reflecting the small sample size, as well as the long interval of two to three years since the early seminars.

Recommendation: Conduct a more rigorous assessment of clinical training, EBM seminars, detailing visits, and other training activities to identify which methods are most effective for this population of doctors and to better focus future interventions.

• For the IUCD scenario, the mean checklist performance score was significantly lower for mystery clients presenting with a voucher as compared to those presenting without a voucher.

Recommendation: Additional investigation is needed, since the IUCD is the most preferred FP method among outreach clients (and Jordanian women generally).

• The amount of time in consultation with the doctor did not vary based on voucher status; however, clients with the free voucher had a longer waiting time by nearly 18 minutes as compared to those without the voucher, though this difference did not reach statistical significance.

Recommendation: This finding ought to be shared and discussed with network doctors to identify possible reasons for delays and strategies to reduce those delays, including direct interventions with the doctors' secretaries if needed.

#### **Pharmacists**

Except for the area of client-provider interaction, where they averaged 77 percent scores, pharmacists scored at most 54 percent on all other measures (e.g., demographic check, health check, discussion of side effects); only 19 percent performed adequately on performing a health

check before prescribing COCs. Note that very few pharmacists who received detailing visits also attended EBM seminars.

Recommendation: Future detailing visits should not be considered as a stand-alone activity; rather, they ought to be directly linked to training activities and considered as a complement to EBM seminars. Pharmacy university students are an ideal target group for training plus later detailing visits; a longitudinal assessment, possibly with a randomized design, could be used to evaluate the effectiveness of EBM seminars alone or with detailing visits.

Counter to official policy guidelines, more than 90 percent of the pharmacists agreed to provide
 COCs even though the client did not have a doctor's prescription.

Recommendation: A mechanism is needed to assure that pharmacists conduct the required physical checks and ask about clients' medical history prior to dispensing contraceptives, when the client does not present a prescription for the method.

• There was no association between pharmacists' scores and their dose of training (mainly detailing visits).

Recommendation: Detailing visits should not be delivered as stand-alone trainings, but rather as reinforcement follow-ups to EBM seminars.

• Client satisfaction was positively associated with pharmacists' checklist scores.

Recommendation: Sensitize and inform clients regarding positive standards of pharmacists' performance, to give them a basis for evaluating their experience (similar to that of the mystery clients).

# Introduction

There is clear demand and need for modern contraception in Jordan. In the 2012 Jordan Population and Family Health Survey (JPFHS), 12 percent of married women of reproductive age said they wanted either to have no more children or to space their next birth, yet were not using any method of contraception (DOS Jordan and ICF International 2013). Moreover, 25 percent said that over the previous five years, they had a childbirth that was either unwanted or mistimed, again pointing to unmet need for contraception (DOS Jordan and ICF International 2013).

Two trends contribute to this unmet need. First, the 2012 JPFHS and preceding studies show that a primary obstacle to adoption or continued use of modern family planning (FP) methods is that many Jordanians fear contraceptive side effects or believe they could harm their health. A reportedly pronounced fear among Jordanian women is that contraceptives could impair their ability to bear children in the future, which could be a factor driving the increased use of unreliable traditional contraceptive methods (mainly withdrawal). The use of traditional methods has increased from 17 percent to 19 percent from 2008 to 2011, according to the JPFHSs of 2009 and 2012, while modern contraceptive use remained stagnant at 42 percent (DOS Jordan and ICF Macro 2010; DOS Jordan and ICF International 2013).

Second, among the Jordanian medical community, there are equally profound barriers to prescribing a modern contraceptive method. These barriers include a continued provider bias toward "checking for fertility," especially for newly married women, as well as a knowledge deficit. Providers hold a range of misconceptions that are most pronounced for hormonal contraceptive methods: oral contraceptive pills (OCPs) including the combined oral contraceptive pills (COCs) and the progestin-only pills (POPs); implants; and injectables (Bitar and Shahrouri 2008; Bagaeen et al. 2000; Abdelnour 2002; Halassa 2008).

In Jordan, 56 percent of women receive FP services through the private sector, so addressing these trends through this sector essential. The private sector comprises independent clinics, pharmacies, private hospitals, non-governmental organizations such as the United Nations Relief and Works Agency (UNRWA), and the Jordanian Association for Family Planning and Protection (JAFPP). In order to facilitate interventions through this sector, the United States Agency for International Development (USAID) created the Strengthening Family Planning Project (Ta'ziz), which falls under the global Strengthening Health Outcomes through the Private Sector (SHOPS) initiative led by Abt Associates.

# Overview of the Ta'ziz provider training program

The goal of the USAID-funded Strengthening Family Planning Project (Ta'ziz) (managed by Abt Associates) is to expand the access, quality, and utilization of FP services in Jordan. 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 FP services

The provision of services of high quality is integral to the realization of both of these outcomes. Ta'ziz works with many partners to realize this objective, including private doctors, NGOs, and the Jordan Pharmaceutical Association, as discussed below.

# **Project partners**

- 1. Ta'ziz works with a **network of doctors in the private sector,** including general practitioners as well as specialists in obstetrics and gynecology. Doctors sign a memorandum of understanding (MOU) with the project in order to become part of the network, receive trainings, medical equipment and other support. Doctors may also agree to participate as referral points by serving FP clients referred to them through a national outreach effort. Doctors who are referral points provide FP services (including both long- and short-acting FP methods) free of charge, to clients who come with free-referral vouchers. Doctors, in-turn, receive compensation from the project for the provision of these services. All dispensed FP methods are provided by the Ministry of Health. The project monitors the quality of services provided by network doctors through:
  - Telephone interviews with clients who redeemed vouchers
  - Focus group discussions and ongoing feedback from the community health workers (CHWs) who refer women to the network doctors
  - The doctor's self-assessment, completed on the back of the outreach client's free-service voucher
- 2. **Selected non-governmental organizations** participate in a performance-based sub-grant program. These organizations also receive clients referred from the outreach program, and all dispensed FP methods are provided by the Ministry of Health. Ta'ziz has systemized a process of quality assurance through supportive supervisory visits, conducted by designated specially trained quality assurance personnel from within the organizations.
- 3. The **Jordan Pharmaceutical Association** plays a key role in facilitating the project's pharmaceutical training program.

# **Project interventions and monitoring**

The project's interventions, implemented with these partners, include the following:

- Medical training to doctors (both clinical and theoretical) on the following topics:
  - General principles of FP counseling
  - Counseling for specific FP methods, such as the intrauterine contraceptive device (IUCD), Implanon, and oral contraceptive pills (OCPs)
  - Practical training on the provision of Implanon and IUCDs, which in the private sector can be provided only by doctors
- Evidence-based medicine (EBM) seminars to discuss critically appraised topics (CATs) specific to each modern FP method (as discussed in more detail below).

Detailing visits to clinics and pharmacies to share CAT summaries and discuss their findings. All
network doctors as well as 300 pharmacies receive detailing visits on a quarterly basis,
coordinated with the cycle of EBM seminars. For pharmacists, detailing visits were limited to
short-term contraceptive methods that pharmacists can provide to clients with a doctor's
prescription (OCPs and the vaginal ring).

The EBM approach addresses provider biases regarding FP methods by providing doctors and pharmacists with access to the best research evidence on clinical topics, while also giving credit to providers' clinical experience with patients. Participants are encouraged to inquire about and consider the client's values when making recommendations.

The EBM content was created by a group of doctors who conducted literature reviews and research on specific modern FP methods. The key findings were then summarized into CATs relating to each modern FP method available in the Jordanian market. EBM seminars for doctors were presented in cycles, focusing on a single method. During the seminars, doctors were presented with the evidence and then divided into groups to discuss CATs in more detail. Dialogue was open; doctors were invited to share their clinical experience and express whether they found the research convincing.

For pharmacists, three EBM seminar cycles were conducted about aspects of OCPs. The first was about client-provider interaction specific to OCPs, the second was about the management of OCP side effects, and the last was about the physiological mechanism of OCPs. Invitations to all pharmacists in Jordan were sent by the Jordan Pharmaceutical Association, through emails and the Association's website. Ta'ziz sponsored quizzes and prizes through the association's website to increase awareness of the EBM seminars.

Ta'ziz monitored the quality of the clinical trainings through pre- and post-training assessments; the project also gathered feedback from participants following the EBM seminars and detailing visits. Additionally, Ta'ziz routinely conducted telephone interviews with clients who had been referred to network doctors from the outreach program, in order to assess client satisfaction with the voucher program and the quality of FP services provided at referral points in the network. Also, focus group discussions were conducted on a quarterly basis with the CHWs who had referred clients to network doctors, to gather any comments they received from clients. Ta'ziz then provided network doctors with feedback from these findings during semi-annual meetings; when necessary, Ta'ziz staff communicated concerns or complaints to network doctors directly.

These monitoring processes were limited to the network doctors who served as referral points in the network (i.e., who had agreed to accept vouchers), excluding those who served only as advocate doctors. Moreover, the information gathered through clients and CHWs was likely affected by recall bias and was difficult to quantify. Another challenge was assessing the quality of FP information provided by pharmacists. Accordingly, Ta'ziz decided to assess the quality of services through direct observation, during the first quarter of the project's concluding year.

# **Objective**

This assessment aimed to evaluate whether the multi-channel training approach resulted in improved service delivery outputs regarding FP counseling. The findings from this assessment will be useful in designing future training programs, especially with regard to content and frequency.

# **Research questions**

This assessment answers the following research questions:

- 1. What is the quality of counseling received by FP clients at network doctors and pharmacists?
- 2. Is there an association between the dose of training plus detailing received by network doctors and the quality of counseling about long term contraceptive methods (Implanon and IUCDs) and short term methods (OCPs)?
- 3. Is there an association between the dose of training plus detailing received by pharmacists and the quality of health information disseminated about short term contraceptive methods (OCPs)?
- 4. Does network doctors' FP counseling vary depending on whether the client presents a free voucher obtained through the Outreach Program?

# Methods

This assessment was done using a mystery client survey approach. Each network doctor received three visits by different mystery clients and each pharmacist received one mystery client visit. Performance checklists were completed by the mystery clients immediately after exiting the point of service (clinic or pharmacy).

### **Ethical Issues**

### **Institutional Review Board**

The study protocol was submitted to the Abt Associates, Inc. Institutional Review Board (IRB), which determined that the study was exempt from IRB review.

#### **Informed consent**

During detailing visits conducted with network doctors and pharmacists during January 2015, Taz'iz representatives discussed plans to use mystery client visits to help identify areas of the training program that may require strengthening. After representatives explained the mystery client approach, each FP provider (network doctor or pharmacist) was asked to give written, informed consent if he or she agreed to receive mystery client visits in the future. The consent form stated that participation was voluntary and that the results of the mystery client visits would be shared with the provider after completion of the activity. Only providers who gave informed written consent were eligible to be included in this study.

# **Mystery clients**

The project recruited Jordanian women of reproductive age to play the role of mystery clients. These women did not have any medical background relating to FP and they were not community health workers, so the mystery client would not tend to lead the interaction with the doctors and pharmacists.

Mystery clients were assigned to one of three scenarios for network doctor visits; mystery clients were trained on a single, common scenario for pharmacists. All mystery clients were trained to follow their assigned scripts, from which they did not diverge. For doctor visits, the client presented herself as a prospective user of a particular FP method: the IUCD; Implanon; or combined oral contraceptive pills (COCs), one of the two types of OCPs. For pharmacist visits, the client presented herself as a prospective user of COCs. See the discussion of scenarios below for more details.

The project also sought to learn whether the network doctors' counseling of clients was influenced (positively or negatively) if the client presented a free voucher obtained from the outreach program, in distinction to a paying customer. Accordingly, for all referral point providers (i.e., those who had agreed to accept the vouchers), one of the three mystery clients would present a free-service voucher, in a randomly assigned scenario. For instance, one doctor's clients would include two clients for Implanon and COCs and one (with a free-service voucher) for the IUCD; another doctor would receive two clients for COCs and IUCD and one client with a free service voucher for Implanon. Approximately equal numbers of free-voucher visits were randomly generated for the three scenarios. Those network doctors who are advocates (i.e., who do not accept vouchers) received three paying customers.

# Sample

#### **Network doctors**

Out of the total of 300 network doctors in the country, the sample was limited to the 230 network doctors whose clinics are located in the central region of Jordan. Of these, 68 were informed about the study, in the course of a regular detailing visit during January 2015. Seven network doctors refused to participate in mystery client visits (a 10 percent rate of refusal).

The mystery client surveys were conducted during May 2015. Of the 61 network doctors who had provided informed consent, six were not available: four had moved to distant clinics or hospitals, one was on vacation, and one could not be located. A total of 55 network doctors received mystery client visits. Thirty-six (65 percent) of these were general practitioners and 19 (35 percent) were obstetrics and gynecology specialists. Twelve (22 percent) were advocates in the project's network; 43 (78 percent) were referral points. Advocates are invited to attend all trainings, although they do not accept clients who are referred with free-service vouchers from the outreach program. Referral points are doctors who agree to accept clients with the free-service vouchers.

The project collected quantitative data for all participating network doctors through three mystery client visits to each doctor, in the form of checklists designed for three different method scenarios. Checklists were completed by the mystery client immediately after she exited the clinic. More information about the checklists is provided below.

### **Pharmacists**

During January 2015, Ta'ziz detailers visited 123 pharmacies in the central region. During these visits, detailers informed the pharmacists about the upcoming mystery client survey and obtained consent from all 123 pharmacists. The detailer recorded the name and telephone number of the pharmacist (not

the pharmacy), to assure that the particular pharmacist who received the detailing visit and consented to the study was accessible during the study.

Sampling of pharmacists was challenging because pharmacists often change shifts and even pharmacies. The mystery client had to call in advance to ascertain that the pharmacist who consented to the mystery client survey was present four months later to receive the mystery client visit. If the pharmacist was not reachable by phone, the field supervisor visited the pharmacy first, presenting as a surveyor assessing training needs of pharmacists. The supervisor had a form to record the names and work schedule of all pharmacists in that pharmacy.

Mystery client visits were successfully implemented with 104 of the 123 pharmacists. Five pharmacists were on extended vacations, two pharmacists no longer practiced the profession, two pharmacists had moved to distant pharmacies, and two pharmacists worked the night shift. Eight other pharmacists could not be contacted: at one pharmacy, the manager said that the person of interest had never worked there; one pharmacist was the owner and did not actually receive clients; two of the pharmacies could not be located; and four were temporarily closed.

# **Instruments**

Each scenario required a customized script, developed by the project's Service Delivery Program Manager. For network doctors, the following three scenarios were developed for mystery client visits:

- 1. Non-user seeking to use Implanon for the first time
- 2. Non-user seeking to use the IUCD for the first time
- 3. Non-user seeking to use OCPs for the first time

Only the third scenario was used for mystery client visits at the pharmacies.

The mystery client had a checklist to be completed directly after each visit. The checklists were designed to measure the following FP quality determinants:

- 1. Interpersonal relations: client-provider interaction
- Method choice: offering more than one option and informing the client about other available methods
- 3. Information provision to clients: disclosing complete information about the chosen method, including manner of use, benefits, and side effects
- 4. Technical competence: provider's assessment of client's medical eligibility and exploration of the client's medical history
- 5. Equity: any observed discrimination based on social, economic, or ethnic characteristics. (Note: this determinant was assessed by providing some of the mystery clients with a free-service voucher, which are provided to women in poverty pockets through Ta'ziz's outreach program.)

The checklists were adapted from the USAID MEASURE Quick Investigation of Quality tools for doctors<sup>1</sup> and were customized to fit each of the three scenarios, with sub-sections designed to measure performance against the five quality determinants. The checklists included the doctor or pharmacist's name, clinic or pharmacy address, and the date of visit, as well as the client's notations for time of entering the clinic and entering and exiting the doctor's office. The remaining checklist items listed FP counseling questions that the provider should ask. Some items on the checklists were common to all three mystery client scenarios, relating to general principals of FP counseling. Other items were specific to the particular FP method. For instance, for hormonal methods, the checklist noted whether the provider had inquired about and measured the woman's blood pressure before prescribing the method.

# **Scenarios**

All three scenarios specified a married woman of reproductive age visiting the doctor's office to obtain a particular modern FP method for the first time. The scenarios were designed to allow the doctor to advise whether Implanon, the IUCD, or COCs were appropriate for the client. (See Appendix for the three scenarios.)

The COC scenario was also used for all pharmacy mystery client visits, in simplified form. The Implanon and IUCD scenarios were used only for visits to network doctors; they specified that the client was not eligible for immediate insertion of the IUCD or the Implanon, and thus the consultation would not include any medical examination or procedure.

# Logistics and quality assurance

Two teams of mystery clients were assembled. Each team was composed of three mystery clients plus a supervisor who was responsible for ensuring that each network doctor received three mystery client visits. Mystery clients took turns visiting pharmacists, depending on daily logistics.

Mystery clients paid the doctor's consultation fee, if they were taking the role of paying customer. Clients taking the role of a referral through the Outreach Program used a free voucher with a distinguishing mark on it, to allow Ta'ziz to identify these vouchers when submitted for reimbursement. The mystery clients used only seven of the free vouchers, since most did not receive a FP method during the visits. Mystery clients visiting network doctors provided invoices from the doctor's office in order to demonstrate that the visit took place as reported.

Mystery clients who went to pharmacies did not purchase any contraceptives. They were instructed to inform the pharmacist that they would return after they made a decision.

Supervisors organized visits by first mapping out clinic and pharmacy locations and identifying the doctors who required an appointment. Appointments were made as necessary, and the other visits were organized around these appointments.

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<sup>&</sup>lt;sup>1</sup> http://www.cpc.unc.edu/measure/publications/ms-01-02

# Data entry and analysis

Data entry was conducted using CSPro 4.0. Entered and validated data were transferred to Stata version 12 (StataCorp 2011). Chi-squared tests, Student's T-tests, and multiple variable regressions were used in order to detect any associations between the dosage of exposure to trainings (independent variables) and the quality of counseling (dependent variable). For network doctors, data from the three mystery client visits were linked with a study identification number. For items in the checklists that were common for all three scenarios, we calculated the mean scores for each individual item and the mean of the subtotals across all three visits. The mean subtotals from the three visits were then used in the analysis used to assess whether there were associations between the dose of training and each doctor's performance.

# **Security and privacy**

The informed consent for network doctors and pharmacists included their consent to have the mystery client data linked with their identity, so they could receive feedback after the study. Collected data (completed checklists, audio-recordings, field notes) were kept in a locked cabinet in the researchers' offices, accessible only to a limited number of Ta'ziz research and medical quality assurance staff.

# Limitations

Because informed consent had to be obtained during a month of detailing visits (in January 2015), that involved a relatively small number of network doctors, the findings from this study may not be generalizable to all network doctors. Moreover, the detailers were not always able to discuss the study, because of the limited time they had with the doctors: detailers have to negotiate an opportunity to see the doctor and must compete for time with pharmaceutical representatives as well as clients. Thus, only 61 consents were obtained from doctors that month, as compared to 104 consents from pharmacists. In addition, some of the detailing visits that month were conducted in governorates in the northern region, whereas the study chose to focus on the central governorates as representing more than 75 percent of network doctors.

Another limitation is related to the second research question, exploring an association between the dose of training received and the network doctors' performance. The Ta'ziz training database showed that the attendance at both classroom and practical trainings was significantly lower than anticipated. This is due to the fact that most of the doctors would have received clinical training through the previous Ta'ziz project or from another governmental or non-governmental organization. Therefore, the researchers were unable to accurately quantify the dose of clinical trainings received by the doctors. For this reason, associations focused on attendance at EBM seminars, participation in detailing visits, and a composite measure that included clinical trainings provided by Ta'ziz.

# **Dose of Training**

# **Network doctors**

The project had an extensive database for monitoring clinical trainings and EBM seminars that allowed measurement of the dose of training for each study participant. Similarly, a database summarizing

detailing visits for both network doctors and pharmacists specified the specific topics covered for each study participant.

Most of the doctors who join the Ta'ziz network are already trained on the provision of modern contraceptive methods. When doctors join the network, they provide Ta'ziz with certifications from previous trainings they have attended. Doctors who do not have trainings on IUCD insertion and general FP counseling procedures are first listed as advocates; if they choose to become referral points for the outreach program, they must first complete a set number of required training sessions. Any doctor who requires refresher trainings must attend trainings provided by the project in order to receive a supply of MOH contraceptives, if he or she chooses to be a referral point for the project's outreach program.

As shown in Table 1, based on the Ta'ziz training database, up to a quarter of the 55 network doctors who received mystery client visits had attended some training: 24 percent had attended practical Implanon insertion training and reproductive tract infection trainings; 22 percent had attended the management of contraceptive side effects training; and 20 percent had attended trainings on postpartum care and contraception. A smaller percentage had attended trainings on counseling: only 15 percent attended the training on the general principles of FP counseling; 15 percent attended counseling training for Implanon users; and only 2 percent attended training on IUCD counseling.

Table 1. Network doctors' attendance at clinical trainings (%)

| Clinical trainings (n=55)                        | Percent who attended |
|--|----------------------|
|  | training             |
| Practical Implanon insertion                     | 23.6                 |
| Reproductive tract infections                    | 23.6                 |
| Management of contraceptive side effects         | 21.8                 |
| Postpartum care and contraception                | 20.0                 |
| General principles of FP counseling              | 14.6                 |
| Counseling on Implanon                           | 28.2                 |
| Acute obstetric complications counseling         | 7.3                  |
| Oral contraceptive pills (COC and POP)           | 5.5                  |
| Practical IUCD insertion                         | 3.6                  |
| Ultrasound use                                   | 3.6                  |
| Counseling on the IUCD                           | 1.8                  |
| Infection control                                | 1.8                  |
| Clinical breast examination and hormonal methods | 0.0                  |

Table 2 shows network doctors' participation in EBM seminars. Several EBM seminars are presented on each method, giving the same content; doctors are invited to participate in one of them. In rare occasions, a doctor may attend a second seminar on the same topic, accompanying a colleague, spouse, or friend. The seminar topics are listed in chronological order: Depot medroxyprogesterone acetate (DMPA) (March – June 2012); IUCD (November 2012–September 2013); birth spacing (November 2013–March 2014); Implanon (April–December 2014); and the vaginal ring (January–March 2015). Seminar attendance varied between 24 percent and 40 percent of doctors: 24 percent of the doctors attended at least one EBM seminar on DMPA; 40 percent attended one EMB seminar on IUCDs; 27 percent attended

a seminar about birth spacing; 38 attended at least one seminar on Implanon; and 29 percent attended a seminar on the vaginal ring.

Table 2. Network doctors attending EBM seminars, by topic and number of seminars (%)

| Number of         | EBM seminar topics (chronological order) |        |               |          |             |  |  |  |  |
|-------------------|--|--------|---------------|----------|-------------|--|--|--|--|
| seminars attended | DMPA                                     | IUCD   | Birth spacing | Implanon | Vaginal     |  |  |  |  |
|                   | (n=55)                                   | (n=55) | (n=55)        | (n=55)   | ring (n=55) |  |  |  |  |
| 0                 | 76.4                                     | 60.0   | 72.7          | 61.8     | 70.9        |  |  |  |  |
| 1                 | 20.0                                     | 40.0   | 27.3          | 36.4     | 29.1        |  |  |  |  |
| 2                 | 3.6                                      | 0.0    | 0.0           | 1.8      | 0.0         |  |  |  |  |

Table 3 shows the number of detailing visits received by the network doctors, stratified by topic. The detailing visits occurred in cycles corresponding to the EBM seminar topics. On average, the doctors received nearly three detailing visits about the IUCD, two about Implanon, two about COCs, and one each about DMPA, POPs, and the vaginal ring.

Reception of detailing visits about DMPA was lowest: 53 percent of doctors did not receive any detailing visits about this topic, which was the first topic covered. One-quarter of participants did not receive visits about the IUCD, 22 percent did not receive visits about POPs, 18 percent did not receive visits about COCs or the vaginal ring, and 16 percent did not receive visits about Implanon.

Table 3. Network doctors' participation in detailing visits (%)

| Table 5. Network doctors participation in detailing visits (70) |                            |      |      |      |          |              |  |  |
|---|----------------------------|------|------|------|----------|--------------|--|--|
| Number of   | Modern FP method discussed |      |      |      |          |              |  |  |
| detailing visits  | DMPA                       | POP  | COC  | IUCD | Implanon | Vaginal ring |  |  |
| 0   | 52.7                       | 21.8 | 18.2 | 25.5 | 16.4     | 18.2         |  |  |
| 1   | 23.6                       | 78.2 | 29.1 | 1.8  | 3.6      | 81.8         |  |  |
| 2   | 23.6                       | 0.0  | 23.6 | 0.0  | 21.8     | 0.0          |  |  |
| 3   | 0.0                        | 0.0  | 29.1 | 21.8 | 58.2     | 0.0          |  |  |
| 4   | 0.0                        | 0.0  | 0.0  | 50.9 | 0.0      | 0.0          |  |  |
| Mean number of  |                            |      |      |      |          |              |  |  |
| visits for each   | 0.8                        | 0.8  | 1.6  | 2.7  | 2.2      | 0.8          |  |  |
| topic   |                            |      |      |      |          |              |  |  |

Table 4 demonstrates a summary of all trainings by their type. On average, participating doctors had received nearly 9 detailing visits, attended 1.2 clinical trainings, and attended 1.6 EBM seminars. About half (49 percent) of the network doctors had not attended any clinical trainings, but 29 percent had attended two or more clinical trainings. As for EBM seminars, 27 percent of the network doctors did not attend any seminars, 26 percent attended one seminar, 18 percent attended 2 seminars, and 29 percent attended 3 or more seminars. All network doctors received at least three detailing visits.

Table 4. Composite summary of the dose of exposure by training type

| Number of attendances  | Clinical trainings | EBM seminars | Detailing visits |
|------------------------|--------------------|--------------|------------------|
| 0                      | 49.1               | 27.3         | 0.0              |
| 1                      | 21.8               | 25.5         | 0.0              |
| 2                      | 10.9               | 18.2         | 0.0              |
| 3 or more              | 18.2               | 29.1         | 100.0            |
| Mean number of         | 1.2 trainings      | 1.6 seminars | 8.9 visits       |
| attendances per doctor |                    |              |                  |

# **Pharmacists**

Pharmacists were invited to attend three sets of EBM seminars about oral contraceptives (COCs). The first set, or cycle, of seminars focused on the client-centered interaction, the second was about the side effects associated with hormonal methods, and the third discussed the physiological mechanism of action of these hormonal methods. Pharmacists could attend any of the three seminars more than once, though this was quite uncommon. Overall, just 11 percent of the participating pharmacists attended at least one EBM seminar. Only 6 percent attended the first set, on client-centered interaction; 9 percent attended the second set, on contraceptive side effects; and 1 percent attended the third set, on the mechanism of action.

As shown in Table 5, pharmacists' exposure to academic detailing visits was significantly more common than their attendance at EBM seminars. On average, the pharmacists received a total of 2.6 detailing visits (1.6 related to COCs and 1 related to the vaginal ring). Almost all (99 percent) received one detailing visit about the vaginal ring, while about three-quarters received at least one visit about COCs.

Table 5. Detailing visits received by pharmacists

| Number of detailing visits | Detailing visits about COCs | Detailing visits about the vaginal ring | Total number of detailing visits |
|----------------------------|-----------------------------|---|----------------------------------|
| 0                          | 25.0                        | 1.0                                     | 1.0                              |
| 1                          | 26.0                        | 99.0                                    | 24.0                             |
| 2                          | 17.3                        | 0.0                                     | 26.0                             |
| 3-5                        | 3-5 31.7                    |   | 49.0                             |
| Mean number of visits      | 1.6 visits                  | 1.0 visits                              | 2.6 visits                       |

# **Key Findings**

### **Network doctors**

# Waiting time and consultation duration

Mystery clients were asked to record the times when they entered the clinic, entered to see the doctor, and exited the doctor's room. As shown in Table 6, the mean waiting times for the consultation were 67 minutes, 68 minutes, and 70 minutes for the Implanon, IUCD, and OCP visits respectively. Overall mean waiting time was calculated based on each doctor's three visits (last column of Table 6): only 18 percent

had waiting time of less than 15 minutes; 24 percent had a mean waiting time of 15 to 29 minutes; 9 percent had waiting time of 30 to 44 minutes; and 7 percent had waiting time of 45-59 minutes. The remaining 42 percent had a mean waiting time of 60 minutes or more.

Table 6. Time-lapse of mystery clients' visits to network doctors

| Waiting time prior | •               |                      |              | Mean time from    |  |
|--------------------|-----------------|----------------------|--------------|-------------------|--|
| to entry to the    | Implanon (n=55) | IUCD (n=55)          | COC (n=55)   | the three visits  |  |
| doctor             |                 |                      |              | (n=55)            |  |
| Less than 15       | 23.6            | 20.0                 | 23.6         | 18.2              |  |
| minutes            | 23.0            | 20.0                 | 23.0         | 10.2              |  |
| 15-29 minutes      | 25.5            | 20.0                 | 12.7         | 23.6              |  |
| 30-44 minutes      | 5.5             | 16.4                 | 7.3          | 9.1               |  |
| 45-59 minutes      | 5.5             | 3.6                  | 12.7         | 7.3               |  |
| 60 minutes or      | 40.0            | 40.0                 | 43.6         | 41.8              |  |
| more               | 40.0            | 40.0                 | 45.0         | 41.0              |  |
| Mean number of     | 67.4 minutes    | 67.9 minutes         | 70.3 minutes | 68.5 minutes      |  |
| minutes            | 67.4 minutes    | 67.5 minutes         | 70.5 minutes | 66.5 minutes      |  |
|                    |                 | Time with the doctor | r            |                   |  |
| Less than 10       | 30.9            | 16.4                 | 32.7         | 18.2              |  |
| minutes            | 30.9            | 10.4                 | 32.7         |                   |  |
| 10-19 minutes      | 58.2            | 67.3                 | 54.6         | 78.2              |  |
| 20-29 minutes      | 10.9            | 16.4                 | 10.9         | 3.6               |  |
| 30 minutes or      | 0.0             | 0.0                  | 1.8          | 0.0               |  |
| more               | 0.0             | 0.0                  | 1.0          | 0.0               |  |
| Mean number of     | 11.7 minutes    | 13.4 minutes         | 12.0 minutes | 12.4 minutes      |  |
| minutes            |                 |                      |              | 12.4 111111111111 |  |
|                    | Sum             | mary of time in the  | clinic       | 1                 |  |
| Overall time in    | 79.1 minutes    | 81.3 minutes         | 82.2 minutes | 80.9 minutes      |  |
| the clinic         | 75.1 1111114115 | or.s illitates       | OZ.Z minutes | 00.5 minutes      |  |
| Proportion of the  |                 |                      |              |                   |  |
| time spent in      |                 |                      |              |                   |  |
| consultation with  | 14.8%           | 19.7%                | 17.1%        | 18.0%             |  |
| the doctor (on     |                 |                      |              |                   |  |
| average)           |                 |                      |              |                   |  |

Table 6 also shows the amount of time the client spent in consultation with the doctor. It appears that Implanon and OCP mystery client consultations required less time than IUCD consultations: the mean consultation time was 11.7 minutes for Implanon and 12.0 minutes for OCP, as compared to 13.4 minutes for the IUCD. Nearly one-third of the OCP and Implanon consultations lasted less than 10 minutes. Mean consultation time for each doctor was calculated based on all three mystery client visits. On average, the majority (78 percent) of consultations lasted between 10 to 19 minutes; only 4 percent lasted 20 to 29 minutes, and 18 percent lasted less than 10 minutes.

On average, clients spent a total of 79 minutes, 81 minutes, and 82 minutes for Implanon, IUCD, and COC visits respectively, including waiting time. The mean time based on all three mystery client visits

was 81 minutes. An especially important measure is the proportion of time spent with the doctor, out of the total time in the clinic. Table 6 shows that this percentage was lowest for Implanon (15 percent) followed by COCs (17 percent) and the IUCD (20 percent). On average, only 18 percent of the visit time was spent in consultation with the doctor.

# **Client-provider interaction**

All three scenario checklists had certain items in common, including a section on general provider-client interaction focusing on evidence of respect and understanding. Table 7 presents the findings from this first section for each of the three scenarios. Scores were assigned as follows: 0 if item was not completed; 1 if item was partially completed; and 2 if item was fully completed.

**Table 7. Quality of client-provider interaction** 

|   | Imp  | lanon (n | =55) | IUCD (n=55) |      |      | COC (n=55) |      |      | Mean  |
|---|------|----------|------|-------------|------|------|------------|------|------|-------|
|   | 0    | 1        | 2    | 0           | 1    | 2    | 0          | 1    | 2    | Score |
| Treats client with respect                            | 1.8  | 9.1      | 89.1 | 1.8         | 7.3  | 90.9 | 1.8        | 14.6 | 83.6 | 1.9   |
| Practices effective communication skills              | 5.5  | 7.3      | 87.3 | 5.5         | 20.0 | 74.6 | 3.6        | 10.9 | 85.5 | 1.8   |
| Shows mutual understanding                            | 7.3  | 10.9     | 81.8 | 9.1         | 12.7 | 78.2 | 1.8        | 12.7 | 85.5 | 1.8   |
| Assures confidentiality                               | 5.5  | 10.9     | 83.6 | 7.3         | 3.6  | 89.1 | 10.9       | 10.9 | 78.2 | 1.8   |
| Shows enthusiasm (verbal and nonverbal)               | 7.3  | 14.6     | 78.2 | 7.3         | 20.0 | 72.7 | 1.8        | 16.4 | 81.8 | 1.7   |
| Sees client in private                                | 5.5  | 12.7     | 81.8 | 7.3         | 7.3  | 85.5 | 14.6       | 1.8  | 83.6 | 1.7   |
| Doctor introduces her / himself to client             | 10.9 | 16.4     | 72.7 | 7.3         | 12.7 | 80.0 | 16.4       | 34.6 | 49.1 | 1.6   |
| Asks open-ended questions                             | 9.1  | 16.4     | 74.6 | 12.7        | 16.4 | 70.9 | 7.3        | 18.2 | 74.6 | 1.6   |
| Encourages client to ask questions                    | 10.9 | 16.4     | 72.7 | 18.2        | 21.8 | 60.0 | 3.6        | 25.5 | 70.9 | 1.6   |
| Asks client about her concerns with any modern method | 12.7 | 9.1      | 78.2 | 23.6        | 14.6 | 61.8 | 14.6       | 14.6 | 70.9 | 1.5   |
| Secretary introduces her / himself to client          | 21.8 | 23.6     | 54.6 | 9.1         | 12.7 | 78.2 | 27.3       | 21.8 | 50.9 | 1.4   |
| Uses visual aids                                      | 52.7 | 9.1      | 38.2 | 72.7        | 9.1  | 18.2 | 54.6       | 9.1  | 36.4 | 0.7   |

| Summary statistics       | Implanon (n=55) | IUCD (n=55)  | COC (n=55)   |                      |
|--------------------------|-----------------|--------------|--------------|----------------------|
| Mean score (% out of 24) | 19.4 (80.8%)    | 18.8 (78.3%) | 18.9 (78.8%) | 19.0^<br>(79.2%<br>) |

Score guide: 0 = Not met; 1= Partially met; 2 = Completely met

The last column of Table 7 gives the mean score for each item based on all three visits, out of a maximum 2 points. Doctors scored highest in showing clients respect (mean score 1.9), practicing effective communication skills (mean score 1.8), showing mutual understanding (mean score 1.8), and

<sup>^</sup> For each item, the mean score per doctor was calculated from the three mystery client visits. These means were then summed together to generate the composite mean score for this section

assuring confidentiality (mean score 1.8). They scored lowest on use of visual aids (mean score 0.7). An important finding is that doctors scored higher on greeting the client than did the secretary — the first person a client meets at the clinic: doctors attained a mean score of 1.6 points for introducing themselves, as compared to the secretaries' mean score of 1.4.

For each of the three scenarios (Implanon, IUCD, COC), doctors attained on average 19 out of the 24 possible points for this section, a percentage score of 81 percent. When the calculation is based on a composite mean score from all three scenarios, the mean composite score is still 19 points but the proportional score is just 79 percent.

# New client demographic and FP history and preferences check

The second section of the checklist assesses the doctor's performance with regard to ascertaining the clients' demographics, birth spacing preferences, and general reproductive health history. Note that these items are only relevant to new clients (the role the mystery clients enacted for all three scenarios). Table 8 presents the findings from this section. Only one item, the inquiry about the client's age, was completed by more than 85 percent of the doctors for all three scenarios.

Table 8. New client: demographic, FP history, and spacing preferences checks

| Topics to be discussed with   | Imp  | lanon (n: | =55) | IL   | JCD (n=5 | 5)   | C    | OC (n=55 | )    | Mean  |
|---|------|-----------|------|------|----------|------|------|----------|------|-------|
| client  | 0    | 1         | 2    | 0    | 1        | 2    | 0    | 1        | 2    | score |
| Current age   | 10.9 | 0.0       | 89.1 | 10.9 | 0.0      | 89.1 | 3.6  | 3.6      | 92.7 | 1.8   |
| Number and sex of living children   | 16.4 | 0.0       | 83.6 | 10.9 | 1.8      | 87.3 | 34.6 | 1.8      | 63.6 | 1.6   |
| Timing for next child   | 49.1 | 1.8       | 49.1 | 29.1 | 1.8      | 69.1 | 7.3  | 1.8      | 90.9 | 1.4   |
| Time and result of last pregnancy (delivery/abortion)                       | 20.0 | 0.0       | 80.0 | 36.4 | 0.0      | 63.6 | 81.8 | 1.8      | 16.4 | 1.1   |
| Desire for more children  | 43.6 | 0.0       | 56.4 | 21.8 | 0.0      | 78.2 | 70.9 | 5.5      | 23.6 | 1.1   |
| History of pregnancy complications & current pregnancy status as applicable | 58.2 | 0.0       | 41.8 | 36.4 | 5.5      | 58.2 | 81.8 | 1.8      | 16.4 | 0.8   |
| History /signs of STIs  | 43.6 | 0.0       | 56.4 | 60.0 | 3.6      | 36.4 | 72.7 | 0.0      | 27.3 | 0.8   |

| 7, 0                     |              |      |             |    |    |            | _ |                  |
|--------------------------|--------------|------|-------------|----|----|------------|---|------------------|
| Summary statistics       | Implanon (n= | =55) | IUCD (n=55) |    |    | COC (n=55) |   |                  |
| Mean score (% out of 14) | 9.1 (65.0%   | 5)   | 9.8 (70.0%  | 6) | 6. | 8 (48.6%   | ) | 8.6 ^<br>(61.4%) |

Score guide: 0 = Not met; 1 = Partially met; 2 = Completely met

On average, doctors performed best at asking clients about their age (mean score 1.8) and asking about the number and sex of living children (mean score 1.6). Doctors were less likely to ask clients about their reproductive health history or signs of sexually transmitted infections (STIs) (mean score 0.8), or their history of pregnancy complications and current pregnancy status (mean score 0.8).

<sup>^</sup> For each item, the mean score per doctor was calculated from the three mystery client visits. These means were then summed together to generate the composite mean score for this section

Out of these seven items, the mean score was highest for the IUCD scenario with 9.8, followed by the Implanon scenario with 9.1 (out of a possible total of 14). The score for the COC scenario was the lowest, at 6.8.

In the COC scenario (which represents a recently married woman with no children, seeking to delay pregnancy), doctors were likely to ask about the desired timing for the next child: 91 percent of the doctors completely performed that task, as compared to 49 percent and 69 percent for the Implanon and IUCD scenarios, respectively. However, very few doctors (only 18 percent) asked the COC client about the time and result of any previous pregnancy, even though the clients were instructed not to volunteer whether they had had any miscarriages in the past. Similarly, the (newlywed) COC mystery clients were least likely to be asked about any history of STIs. Doctors presented with the IUCD scenario were most likely to ask the client about their desire for more children and their current parity.

# **Effective counseling of new clients**

Effectively counseling new clients who seek to use a particular modern FP method for the first time is essential to ensure a well-informed decision about the method she chooses. The items that doctors should discuss with their clients are listed in Table 9; the highest possible score for each item is 2.

Table 9 shows that doctors generally recognized that there is a decision to be made and initiated a discussion about FP method (mean score 1.6, out of maximum score 2); they also asked clients about the methods they are most interested in (mean score 1.6). In all of the scenarios, the mystery client inquired about one rumor; doctors earned a mean score of 1.5 points for correcting such rumors or misconceptions. However, doctors did not perform as well in other areas: providing sufficient information about different methods (mean score 0.9); jointly evaluating options with client (mean score 1.2); and narrowing down the options based on clients' preferences and informed choices (mean score 1.2). After the method was chosen, doctors were expected to discuss the method's efficacy and duration of protection (mean score 1.6). Doctors only rarely used educational materials specific to the chosen method (mean score 0.8).

In overall percentages for effective counseling to new clients, doctors attained the highest score for the Implanon scenario (73 percent), followed by the IUCD (64 percent) and COC scenarios (63 percent). The composite mean percentage score for effective counseling was 69 percent.

# Method-specific counseling and medical eligibility checks

#### *Implanon*

Table 10 shows the items that should be discussed with a client planning to use Implanon for the first time. The majority of doctors explained that Implanon is a very effective long-term method: 75 percent did so partially or completely. However, less than one-third completely discussed the other benefits associated with Implanon use. Overall, the score for discussing the benefits of Implanon was 48 percent.

Regarding Implanon side effects, 82 percent of the doctors mentioned (partially or completely) that there are possible changes in menstrual bleeding as a consequence of Implanon use. The possibility of weight gain and headaches were discussed by about half of the doctors. Other side effects (such as

abdominal pain, dizziness, and mood changes) were less often discussed by the doctors. Overall, doctors attained a score of 34 percent for providing information about side effects.

**Table 9. Effective counseling for new clients** 

|                               | Imp       | lanon (n   | =55)      | IL        | JCD (n=5   | 5)   | С       | OC (n=55   | )    | Mean              |
|-------------------------------|-----------|------------|-----------|-----------|------------|------|---------|------------|------|-------------------|
| Score                         | 0         | 1          | 2         | 0         | 1          | 2    | 0       | 1          | 2    | score             |
| Recognizes that a decision    |           |            |           |           |            |      |         |            |      |                   |
| needs to be made (initiates   | 9.1       | 9.1        | 81.8      | 21.8      | 9.1        | 69.1 | 16.4    | 14.6       | 69.1 | 1.6               |
| discussion of method)         |           |            |           |           |            |      |         |            |      |                   |
| Asks what method interest     | 20.0      | 5.5        | 74.6      | 18.2      | 14.6       | 67.3 | 12.7    | 9.1        | 78.2 | 1.6               |
| her most                      | 20.0      | 5.5        | 74.0      | 10.2      | 14.0       | 07.3 | 12.7    | 9.1        | 70.2 | 1.0               |
| Reviews client's medical      | 16.4      | 3.6        | 0.0       | 21.8      | 10.9       | 67.3 | 23.6    | 9.1        | 67.3 | 1.5               |
| history                       | 10.4      | 3.0        | 0.0       | 21.0      | 10.5       | 07.5 | 23.0    | 5.1        | 07.5 | 1.5               |
| Personalizes information      |           |            |           |           |            |      |         |            |      |                   |
| and correct any rumors or     | 20.0      | 12.7       | 67.3      | 14.6      | 30.9       | 54.6 | 12.7    | 12.7       | 74.6 | 1.5               |
| misconceptions                |           |            |           |           |            |      |         |            |      |                   |
| Reviews client's              | 10.9      | 3.6        | 85.5      | 25.5      | 20.0       | 54.6 | 32.7    | 14.6       | 52.7 | 1.4               |
| contraceptive experience      | 10.5      | 3.0        | 65.5      | 23.3      | 20.0       | 34.0 | 32.7    | 14.0       | 32.7 | 1.7               |
| Discusses client's personal   | 16.4      | 12.7       | 70.9      | 14.6      | 27.3       | 58.2 | 36.4    | 25.5       | 38.2 | 1.3               |
| situation and preferences     | 10.4      | 12.7       | 70.5      | 14.0      | 27.5       | 30.2 | 30.4    | 23.3       | 30.2 | 1.5               |
| Jointly evaluate options      |           |            |           |           |            |      |         |            |      |                   |
| with client, based on risks,  | 20.0      | 16.4       | 63.6      | 30.9      | 23.6       | 45.5 | 41.8    | 21.8       | 36.4 | 1.2               |
| benefits, and feasibility     |           |            |           |           |            |      |         |            |      |                   |
| Narrows options according     |           |            |           |           |            |      |         |            |      |                   |
| to clients' preferences and   | 21.8      | 14.6       | 63.6      | 29.1      | 25.5       | 45.5 | 40.0    | 20.0       | 40.0 | 1.2               |
| informed choice               |           |            |           |           |            |      |         |            |      |                   |
| Offers sufficient information |           |            |           |           |            |      |         |            |      |                   |
| regarding possible options    | 18.2      | 21.8       | 60.0      | 58.2      | 16.4       | 25.5 | 61.8    | 7.3        | 30.9 | 0.9               |
| based on MEC/WHO              |           |            |           |           |            |      |         |            |      |                   |
| Provision of complete informa | ation abo | ut the ch  | osen FP n | nethods ( | general)   | T    |         | T          | T    |                   |
| Efficacy and Period of        | 16.4      | 7.3        | 76.4      | 18.2      | 3.6        | 78.2 | 21.8    | 10.9       | 67.3 | 1.6               |
| protection                    | 10.4      | 7.5        | 70.4      | 10.2      | 3.0        | 70.2 | 21.0    | 10.5       | 07.5 | 1.0               |
| Advantages and                | 23.6      | 32.7       | 43.6      | 12.7      | 18.2       | 69.1 | 12.7    | 21.8       | 65.5 | 1.4               |
| disadvantages/ side effects   |           |            |           |           |            |      |         |            |      |                   |
| Mechanism of action           | 30.9      | 21.8       | 47.3      | 30.9      | 9.1        | 60.0 | 23.6    | 9.1        | 67.3 | 1.3               |
| Teaches about the preferred   |           |            |           |           |            |      |         |            |      |                   |
| methods using IEC             | 38.2      | 29.1       | 32.7      | 60.0      | 7.3        | 32.7 | 54.6    | 12.7       | 32.7 | 0.8               |
| materials/ job aids/ method   | 30.2      | 25.1       | 32.7      | 00.0      | 7.5        | 32.7 | ] 3     | 12.7       | 32.7 | 0.0               |
| sample                        |           |            |           |           |            |      |         |            |      |                   |
| Summary statistics            | Impland   | on (n=55)  |           | IUCD (n   | =55)       |      | COC (n= | 55)        |      |                   |
| Mean score (% out of 26)      | 18        | 8.9 (72.79 | %)        | 10        | 6.7 (64.29 | %)   | 16      | 5.3 (62.7% | 6)   | 17.3 ^<br>(68.8%) |

Score guide: 0 = Not met; 1= Partially met; 2 = Completely met

<sup>^</sup> For each item, the mean score per doctor was calculated from the three mystery client visits. These means were then summed together to generate the composite mean score for this section

Regarding counter-indications, doctors were most likely to ask about the regularity of menstrual cycles, followed by menstrual bleeding duration, amount of blood loss, and any chronic or acute health problems. Nearly 55 percent of the doctors failed to ask about undiagnosed abnormal vaginal bleeding; 51 percent did not ask about specific drugs that interfere with liver enzymes; and 47 percent did not ask about history of breast cancer in the previous five years. The overall performance score for this subsection was 58 percent.

Table 10. Implanon-specific counseling and medical eligibility check

| Score   | 0           | 1          | 2    |
|---|-------------|------------|------|
| Implanon benefits (%  | 5)          |            |      |
| May help in protecting against iron-deficiency anemia                   | 85.5        | 0.0        | 14.6 |
| Do not interfere with sex   | 67.3        | 0.0        | 32.7 |
| No delay in return to fertility after removal                           | 67.3        | 3.6        | 28.1 |
| Has no further costs after insertion                                    | 65.5        | 3.6        | 30.9 |
| Does not require frequent follow up visits                              | 65.5        | 1.8        | 32.7 |
| Very effective long term method   | 25.5        | 5.5        | 69.1 |
| Mean score (% out of 12)  |             | 5.8 (48.3% | 5)   |
| Implanon side effects (   | %)          |            |      |
| Does not protect against STIs   | 90.9        | 0.0        | 9.1  |
| Brest tenderness  | 85.5        | 00         | 14.6 |
| Acne ( can improve or worsen)   | 83.6        | 0.0        | 16.4 |
| Abdominal pain  | 76.4        | 1.8        | 21.8 |
| Mood changes  | 69.6        | 9.1        | 27.3 |
| Dizziness   | 69.1        | 1.8        | 29.1 |
| Headaches   | 49.1        | 3.6        | 47.3 |
| Weight gain   | 45.5        | 1.8        | 52.7 |
| Possible changes in menstrual bleeding                                  | 18.2        | 3.6        | 78.2 |
| Mean score (% out of 18)  | 6.1 (33.9%) |            |      |
| Implanon health check   | (%)         |            |      |
| Undiagnosed abnormal vaginal bleeding                                   | 54.6        | 1.8        | 43.6 |
| Drugs that interfere with liver enzymes*                                | 50.9        | 0.0        | 49.1 |
| Current or past history of breast cancer in the past 5 years            | 47.3        | 0.0        | 52.7 |
| Chronic and/or acute health problems (contraindication to Implanon use) | 34.6        | 0.0        | 65.5 |
| Menstrual bleeding duration and amount of blood loss                    | 30.9        | 3.6        | 65.5 |
| Regularity of menstrual cycles  | 27.3        | 1.8        | 70.9 |
| Mean score (% out of 12)  |             | 7.0 (58.3% | 5)   |

Score guide: 0 = Not met; 1 = Partially met; 2 = Completely met

<sup>\*</sup> Examples of drugs that interfere with liver enzymes: rifampicin, rifabutin, griseofluvin, and certain anticonvulsants (phenytoin, carbamazepine, barbiturates, pyrimidine, topiramate, oxcarbazepine)

#### **IUCD**

The IUCD scenario included a series of checklist items specific to that method. As shown in Table 11, nearly 85 percent of the doctors informed clients that the IUCD may cause changes in their menstrual bleeding; however, 85 percent *failed* to inform clients that the IUCD does not protect against STIs. For health check items, doctors had an overall score of 55 percent out of 12 possible points. More than half of the doctors failed to ask about recurrent reproductive tract infections and history of pelvic inflammatory disease; nearly half failed to ask about chronic or acute health problems or undiagnosed abnormal vaginal bleeding. Doctors generally asked about the regularity of menstrual cycles (69 percent) and menstrual bleeding duration and the amount of blood loss (84 percent).

Table 11. IUCD-specific counseling and medical eligibility check

| Score   | 0    | 1           | 2    |  |  |  |  |
|---|------|-------------|------|--|--|--|--|
| IUCD side effects (%)   |      | !           |      |  |  |  |  |
| Does not protect against STIs                                       | 74.6 | 3.6         | 21.8 |  |  |  |  |
| Possible changes in menstrual bleeding                              | 14.6 | 12.7        | 72.7 |  |  |  |  |
| Mean score (% out of 4)   |      | 2.1 (53%)   |      |  |  |  |  |
| IUCD health check (%)   |      |             |      |  |  |  |  |
| Recurrent reproductive tract infections                             | 56.4 | 5.5         | 38.2 |  |  |  |  |
| Current or recent history of pelvic inflammatory disease            | 54.6 | 1.8         | 43.6 |  |  |  |  |
| Undiagnosed abnormal vaginal bleeding                               | 49.1 | 1.8         | 49.1 |  |  |  |  |
| Chronic and/or acute health problems (contraindication to IUCD use) | 49.1 | 3.6         | 47.3 |  |  |  |  |
| Regulatory of menstrual cycles                                      | 30.9 | 7.3         | 61.8 |  |  |  |  |
| Menstrual bleeding duration and amount of blood loss                | 16.4 | 9.1         | 74.6 |  |  |  |  |
| Mean score (% out of 12)  |      | 6.6 (55.0%) | •    |  |  |  |  |
| Score guide: 0 = Not met; 1 = Partially met; 2 = Completely met     |      |             |      |  |  |  |  |

#### COCs

COCs are associated with a number of side effects, shown in Table 12. Doctors should discuss all of these side effects with a potential COC user. Overall, doctors attained a score of 52 percent for discussion of the listed side effects. More than three-quarters of the doctors failed to mention the possibility of breast tenderness, and 40 percent failed to mention nausea as a side effect.

An important finding is that nearly 56 percent of the doctors failed to mention how to minimize common side effects or how to deal with them should they arise. Moreover, 38 percent failed to assure the client that most side effects are transient and disappear with a few months of use. The most discussed side effects were headache, weight gain, and the possibility of changes in menstrual bleeding pattern.

For health checks, also shown in Table 12, doctors attained an overall score of 42 percent. A large majority of doctors failed to ask about four key health conditions: whether the client had unexplained or

abnormal vaginal bleeding (84 percent); whether the client smoked (71 percent); about the use of anticonvulsants (67 percent); or about the client's history of breast cancer (60 percent). Doctors were most likely to ask about chronic or acute health problems that are contra-indicators to COC use and about the regularity of the client's menstrual cycle.

Table 12. COC-specific counseling and medical eligibility check

| Score  | 0             | 1           | 2    |  |
|--|---------------|-------------|------|--|
| COC side effects (%)   |               |             |      |  |
| Breast tenderness  | 76.4          | 1.8         | 21.8 |  |
| How to minimize common side effects  | 56.4          | 9.1         | 34.6 |  |
| How to deal with side effects if happened  | 56.4          | 12.7        | 30.9 |  |
| Nausea is common side effect   | 40.0          | 7.3         | 52.7 |  |
| Emphasizes that most side effects usually disappear within a few months                                      | 38.2          | 9.1         | 52.7 |  |
| Possible change in bleeding pattern: lighter, irregular, fewer days or amenorrhea                            | 36.4          | 7.3         | 56.4 |  |
| Weight gain  | 27.3          | 16.4        | 56.4 |  |
| Headache   | 20.0          | 9.1         | 70.9 |  |
| Mean score (% out of 16)   | 8.3 (51.9%)   |             |      |  |
| COCs health check (%)  |               |             |      |  |
| Unexplained and abnormal vaginal bleeding  | 83.6          | 0.0         | 16.4 |  |
| Smoking  | 70.9          | 0           | 29.1 |  |
| Currently taking any anticonvulsants, rifampin, or griseofluvin  | 67.3          | 0.0         | 32.7 |  |
| Breast: current or history of breast cancer  | 60.0          | 0.0         | 40.0 |  |
| Regulatory of menstrual cycles   | 34.6          | 0.0         | 65.5 |  |
| Chronic and/or acute health problems ( contraindications to COCs use)  | 30.9          | 1.8         | 67.3 |  |
| Mean score (% out of 12)   |               | 5.0 (41.7%) |      |  |
| COCs general information for use and   | d provision   |             |      |  |
| Dose not protect against STIs  | 85.5          | 1.8         | 12.7 |  |
| Measured and recorded blood pressure and weight  | 72.7          | 1.8         | 25.5 |  |
| Scheduled a clinical breast examination  | 65.5          | 0.0         | 34.6 |  |
| Showed the client the COC packet, described when to start, and what to do when completing one cycle (packet) | 61.8          | 1.8         | 36.4 |  |
| Advantages of the pills other than contraception*  | 54.6          | 7.3         | 38.2 |  |
| What to do in case of missed pill/pills  | 30.9          | 10.9        | 58.2 |  |
| Reemphasized counseling massages and information   | 30.9          | 20.0        | 49.1 |  |
| Must be taken every day for 21 days per cycle  | 9.1           | 7.3         | 83.6 |  |
| Mean score (% out of 16)   | 7.3 (45.6%)   |             |      |  |
| *Advantages include treatment of hirsutism, acne, iron deficience  | cy, and dysmo | enorrhea    |      |  |

As for general information about the use of COCs and medical procedures that must be done prior to providing the pills, doctors focused on informing the client that the pill must be taken every 21 days (91 percent) and what to do should a pill be missed (69 percent). However, 86 percent failed to mention that pills do not protect against STIs. Also, the majority of doctors failed to measure and record the patients' blood pressure and weight (73 percent), and failed to schedule a clinical breast exam (66 percent). Only 36 percent of the doctors showed the client the COC packet and used it to describe how to begin and what to do when a packet is completed. Doctors attained a mean score of just 7.3 out of 16 possible points (46 percent) for this sub-section.

# **Summary of checklist findings**

Table 13 gives the summary of checklist scores for each of three method scenarios. Overall, in each scenario, the client-provider interaction was assessed as positive, with scores of 78 percent or higher for each scenario. Doctors performed best overall in the IUCD scenario, attaining a mean overall score of 67 percent. The mean score for the Implanon scenario was 62 percent, and for COC it was 57 percent. For the long-term contraceptive methods, scores were lowest for the sections on side effects and health check. For the COC scenario, in more than half of the visits the doctor failed to gather the client's demographic information and FP preferences; even lower percentages included a complete health-check or explanation of the method's benefits.

Table 13. Summary of checklist scores for doctors (%)

| Checklist section                                   | Implanon                                | IUCD                         | COC                          |  |
|---|---|------------------------------|------------------------------|--|
| Checklist section                                   | (n=55)                                  | (n=55)                       | (n=55)                       |  |
| Client-provider                                     | 80.8%                                   | 78.3%                        | 78.8%                        |  |
| interaction   | (Maximum 24 points)                     | (Maximum 24 points)          | (Maximum 24 points)          |  |
| New client<br>demographics and<br>preferences check | 65.0%<br>(Maximum 14 points)            | 70.0%<br>(Maximum 14 points) | 48.6%<br>(Maximum 14 points) |  |
| Effective counseling                                | 72.7%                                   | 64.2%                        | 62.7%                        |  |
| Effective counseling                                | (Maximum 26 points) (Maximum 26 points) |                              | (Maximum 26 points)          |  |
| Method's benefits/general info mean score           | 48.3%<br>(Maximum 12 points)            |                              | 45.6%<br>(Maximum 16 points) |  |
| Method's side effects                               | 33.9%                                   | 53.0%                        | 51.9%                        |  |
| mean score  | (Maximum 18 points)                     | (Maximum 4 points)           | (Maximum 16 points)          |  |
| Health check prior to                               | 58.3%                                   | 55.0%                        | 41.7%                        |  |
| provision   | (Maximum 12 points)                     | (Maximum 12 points)          | (Maximum 12 points)          |  |
| Total score   | 61.2%                                   | 67.4%                        | 56.9%                        |  |
|   | (Maximum 106 points)                    | (Maximum 80 points)          | (Maximum 110 points)         |  |

# **Visit outcomes**

Mystery clients recorded the visit outcome by noting whether the doctor agreed to prescribe or provide the methods in accordance with the scenarios (Table 14). Nearly all doctors in the COC scenarios agreed to provide the COCs (93 percent); in the IUCD scenario, 87 percent of doctors agreed to provide the IUCD. Only 40 percent in the Implanon scenario agreed to provide Implanon, reflecting the fact that more than three-quarters of the doctors in the sample were not trained on Implanon insertion. Of the

doctors who did not agree to provide Implanon, most (75.8 percent) explained that they do not provide the service, referring the client to another provider to obtain the method of her choice; 6 percent did not refer her to another provider, and 18 percent insisted that the client use another method (the IUCD — data not shown). In the IUCD scenario, in seven cases the doctor did not agree to provide the IUCD, usually because the service was not available and the client was referred elsewhere. One doctor insisted that the client use another method (COCs), and another advised the client not to use any modern FP methods.

In the COC scenario, doctors failed to provide four clients with the COCs. One doctor stated that they did not provide the service and referred the client elsewhere. Three doctors advised the clients not to use modern methods, because the client was recently married.

Mystery clients who sought Implanon and the IUCD were instructed to inform the doctors that they would return after the start of their next menstrual cycles in order to receive the methods. Doctors scheduled follow-up visits for nearly all of the IUCD clients for whom they agreed to provide the IUCD (91 percent) and for 77 percent of clients who asked to get the implant. In the COC scenario, only 59 percent of the doctors scheduled one-month follow-up visits for their clients, as would be expected for clients who receive COCs for the first time.

Table 14. Visit outcomes (%)

| Mathad provision   | Implanon | IUCD   | сос    |
|--|----------|--------|--------|
| Method provision   | (n=55)   | (n=55) | (n=55) |
| The doctor prescribed or agreed on the method for the scenario | 40.0     | 87.3   | 92.7   |
| Peacens for not procesibing the method                         | Implanon | IUCD   | coc    |
| Reasons for not prescribing the method                         | (n=33)   | (n=7)  | (n=4)  |
| Does not provide service, referred me to another               | 75.8     | 71.4   | 25.0   |
| Does not provide service – suggested other method              | 6.1      | 0.0    | 0.0    |
| Insisted on another modern method                              | 18.2     | 14.3   | 0.0    |
| Advised the client not to use a modern method                  | 0.0      | 14.3   | 75.0   |
| Follow-up visits among clients for whom doctors agreed to      | Implanon | IUCD   | COC    |
| provide the method   | (n=22)   | (n=48) | (n=51) |
| Planned a return visit within one month                        | 77.3     | 91.7   | 58.8   |

Finally, mystery clients recorded their level of satisfaction with the visits on a scale from 1 (not satisfied at all) to 5 (very satisfied) (Table 15). The mean satisfaction level was between 3.6 and 3.8 out of 5 for the three scenarios. Client satisfaction percentages (somewhat or very satisfied) ranged from 51 to 71 percent: 64 percent for Implanon, 71 percent for IUCD, and 51 percent for the COC scenario.

Table 15. Mystery clients' level of satisfaction with the doctor's visit

| Level of satisfaction | Implanon (n=55) | IUCD (n=55) | COC (n=55) |  |  |  |
|-----------------------|-----------------|-------------|------------|--|--|--|
| Not satisfied at all  | 14.6            | 9.1         | 3.6        |  |  |  |
| Not satisfied         | 9.1             | 3.6         | 7.3        |  |  |  |
| Neutral               | 12.7            | 16.4        | 38.2       |  |  |  |
| Somewhat satisfied    | 27.3            | 41.8        | 25.5       |  |  |  |
| Very satisfied        | 36.4            | 29.1        | 25.5       |  |  |  |
| Mean (scale 1 to 5)   | 3.6             | 3.8         | 3.6        |  |  |  |
| Composite mean        | 3.7             |             |            |  |  |  |

# Doctors' performance in association with trainings

Regressions were conducted to determine whether doctors' performance was associated with the amount (or dose) of training they received from the project, focusing on performance in client-patient interaction, new client demographics and preferences checks, and effective counseling. Table 16 presents each regression (i.e., dependent and independent variables) with its results, given as the regression coefficient for the independent variable with its corresponding 95 percent confidence interval. No statistically significant associations were observed.

Table 16. Doctors' general performance for the three scenarios: regression in association with trainings

| Dependent variable  | Independent variable               | Coefficient*      |
|---|------------------------------------|-------------------|
| Client-patient interaction (mean score from the three visits) | Total number of EBM seminars       | 0.1 [-0.7, 0.9]   |
|   | Total number of detailing visits   | 0.1 [-0.2, 0.4]   |
|   | All trainings (including clinical) | -0.1 [-0.4, 0.2]  |
| New client demographics and                                   | Total number of EBM seminars       | 0.0 [-0.5, 0.6]   |
| preferences check (mean score from the three visits)          | Total number of detailing visits   | 0.1 [-0.1, 0.3]   |
|   | All trainings (including clinical) | -0.02 [-0.2, 0.2] |
|   | Total number of EBM seminars       | 0.3 [-0.7, 1.3]   |
| Effective counseling (mean score from the three visits)       | Total number of detailing visits   | 0.2 [-0.2, 0.6]   |
|   | All trainings (including clinical) | 0.0 [-0.3, 0.3]   |
| *Showing 95 percent confidence i                              |                                    | 0.0 [-0.3, 0.3]   |

Similar analyses were conducted for method-specific checklist scores. No statistically significant associations were found between the dose of training and the doctors' performance for each method-specific set of scores (data not shown).

# Doctors' performance in association with free service vouchers

One of the key research questions of this study was whether service quality is associated with the client's status, either as a community outreach client (with a free service voucher) or as a regular paying customer. For the Implanon and COC scenarios, no significant differences were observed. For the IUCD

scenario, however, the mean checklist performance score was significantly lower with a voucher as compared to without a voucher, at 52 percent and 72 percent, respectively (Table 17). Also in the IUCD scenario, the mystery client's mean satisfaction score was significantly lower in association with the voucher, with a mean score of 3.2 as compared to 4.0 without the voucher.

The composite mean satisfaction score for the three mystery client visits was slightly lower for clients presenting the voucher (3.6 points) as compared to clients without the voucher (3.9 points), but this difference did not reach statistical significance, possibly due to the small sample size.

Table 17. Doctors' performance in association with free service vouchers

|   | Impla           | anon            | IU               | CD              | сос             |                 | Mean from three visits |         |
|---|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|------------------------|---------|
|   | With            | Without         | With             | Without         | With            | Without         | With                   | Without |
|   | voucher         | voucher         | voucher          | voucher         | voucher         | voucher         | voucher                | voucher |
|   | (n=15)          | (n=40)          | (n=13)           | (n=42)          | (n=14)          | (n=41)          | (n=42)                 | (n=13)  |
| Total score<br>(% of<br>maximum<br>score for<br>method) | 66.9<br>(63.1%) | 64.2<br>(60.6%) | 41.5*<br>(51.9%) | 57.7<br>(72.1%) | 63.4<br>(57.5%) | 62.3<br>(56.6%) |                        |         |
| Mean<br>satisfaction<br>score (scale<br>1–5)            | 3.7             | 3.6             | 3.2*             | 4.0             | 3.8             | 3.7             | 3.6                    | 3.9     |

<sup>\*</sup>Statistically significant difference between clients who used a free service voucher and clients who did not use the free service voucher, through ANOVA test for means (p<0.05)

### Waiting time and doctor-interaction duration in association with free service vouchers

We also examined whether the waiting time to see the doctor or the duration of the consultation varied in association with the free voucher. As shown in Table 18, in the IUCD and Implanon scenarios, the mean waiting time with the voucher was generally longer for clients with the voucher as compared to clients without the voucher, though this was not a statistically significant difference. Conversely, for the COC scenario the waiting time was longer for clients without the voucher as compared to clients with the voucher, but again, the difference was not statistically significant.

| Table 18. Waiting time and doctor consultation duration in association with free service vouchers (minutes) |         |         |         |         |         |         |                    |         |
|---|---------|---------|---------|---------|---------|---------|--------------------|---------|
|   | Impl    | anon    | IUCD    |         | COC     |         | Mean from 3 visits |         |
|   | With    | Without | With    | Without | With    | Without | With               | Without |
|   | voucher            | voucher |
|   | (n=15)  | (n=40)  | (n=13)  | (n=42)  | (n=14)  | (n=41)  | (n=42)             | (n=13)  |
| Mean waiting time   | 70.3    | 66.3    | 82.3    | 63.5    | 52.9    | 76.2    | 72.8               | 54.6    |
| Mean time with the doctor   | 12.7    | 11.4    | 11.7    | 13.9    | 13.6    | 11.4    | 12.4               | 12.4    |

Overall, mystery clients with the voucher waited longer than those without the voucher (73 minutes vs. 55 minutes), but this difference was not statistically significant. However, there does not appear to be any difference in the amount of time spent with the doctor in consultation, averaging 12 minutes with and without the voucher.

# Client satisfaction in association with doctors' performance

The level of satisfaction reported by clients, on a scale from 1 to 5, was significantly associated with the doctors' performance, in all scenarios. On average, the level of satisfaction increased by 0.05 points, 0.05 points, and 0.04 points with each one-point increment in the doctors' overall score, for the Implanon, IUCD, and COC scenarios, respectively (data not shown).

# **Pharmacists**

# **Client-provider interaction**

A well-informed pharmacist should provide clients as far as possible with complete information regarding their health, in a positive and empathetic manner. The majority of pharmacists scored well on the client-provider interaction section of the checklists, with a mean score of 9 out of 12 (77 percent) (Table 19).

Table 19. Client-pharmacist interaction

| Score   | 0    | 1           | 2    |
|---|------|-------------|------|
| Uses visual aids                              | 63.5 | 8.7         | 27.9 |
| Encourages client to ask questions            | 14.4 | 14.4        | 71.2 |
| Pharmacist introduces her / himself to client | 6.7  | 34.6        | 58.7 |
| Shows enthusiasm (verbal and non-verbal)      | 5.8  | 15.4        | 78.9 |
| Practices effective communication skills      | 3.9  | 14.4        | 81.7 |
| Treats client with respect                    | 1.9  | 3.9         | 94.2 |
| Mean score (% out of 12)                      |      | 9.2 (76.7%) |      |

Nearly all of the 104 mystery clients reported that the pharmacists treated them with respect and practiced effective communication skills. In about 86 percent of visits, the pharmacist met at least some of the criteria relating to encouraging the client to ask questions. Slightly more than half of the mystery clients reported that the pharmacist introduced him or herself to the client in a completely satisfactory manner; another 35 percent provided a partially satisfactory introduction. The use of visual aids was limited, however: 64 percent of the clients reported that no visual aids were used.

# New client demographic check

Prior to providing a client with a FP method, a pharmacist should inquire about the client's demographics and medical history. Nearly half of the pharmacists failed to ask about the client's age or medical history. The pharmacist may also discuss the client's eligibility for different FP methods (referring to WHO standards), but half of the pharmacists did not do so. All pharmacy clients were instructed to ask about the rumor that the OCP causes weight gain. Mystery clients recorded that 22 percent of the doctors failed to address this inquiry, 26 percent addressed it partially, and 52 percent did so completely, with personalized information. Moreover, 49 percent failed to review the client's

medical history. Regarding the different types and brands of COCs, 67 percent of the clients reported that this was discussed completely. Pharmacists earned a mean of just 5.4 out of a maximum of 10 points for this subsection.

Table 20. New client demographic check

| Score   | 0    | 1    | 2    |
|---|------|------|------|
| Current age   | 52.9 | 10.6 | 36.5 |
| Offers sufficient information regarding possible options based on MEC/WHO                                 | 50.0 | 16.4 | 33.7 |
| Reviews client's medical history  | 49.0 | 10.6 | 40.4 |
| Personalizes information and correct any rumors or misconceptions (i.e., that the COC causes weight gain) | 22.1 | 26.0 | 51.9 |
| Informs client about different types of COCs (e.g., Yasmin and Yas)                                       | 19.2 | 13.5 | 67.3 |
| Mean score (out of a maximum of 10) 5.4 (53.6%)   |      |      |      |
| Score guide: 0 = Not met; 1 = Partially met; 2 = Completely met   |      |      |      |

#### Provision of general information about COCs and their use

Table 21 shows pharmacist scores for providing general information on how COCs work and how they are to be used. Almost none of the pharmacists mentioned that the COCs do not protect against STIs; a majority failed to discuss the advantages of the pills compared to other contraceptives (72 percent). More than half failed to show the client how to use the package, and 44 percent failed to discuss what the client should do if she misses a pill. Pharmacists performed somewhat better in other areas — discussing the efficacy and period of protection of pills, their mechanism of action, the need to take them every 21 days per cycle, and their advantages or disadvantages and side effects. Overall, pharmacists scored almost 50 percent for this section.

Table 21. Provision of general information about COCs and their use

| Score  | 0    | 1    | 2    |
|--|------|------|------|
| Does not protect against STIs  | 96.2 | 1.0  | 2.9  |
| Advantages other than contraception (e.g., treatment of hirsutism, acne, iron deficiency and dysmenorrhea) | 72.1 | 2.9  | 25.0 |
| Shows client the COC packet; describes when to start and what to do when completing one cycle (packet)     | 55.8 | 1.9  | 42.3 |
| Reemphasizes counseling messages and information   | 49.0 | 21.2 | 29.8 |
| What to do in case of missed pill(s)   | 44.2 | 8.7  | 47.1 |
| Efficacy and period of protection  | 30.8 | 14.4 | 54.8 |
| Mechanism of action  | 29.8 | 13.5 | 56.7 |
| Must be taken every day for 21 days per cycle  | 23.1 | 7.7  | 69.2 |
| Advantages and disadvantages; side effects   | 17.3 | 34.6 | 48.1 |
| Mean score (% out of 18) 8.6 (49.4%)   |      |      |      |
| Score guide: 0 = Not met; 1 = Partially met; 2 = Completely met  |      |      |      |

Table 22: Side effects of COCs and health check prior to provision

| Score  | 0           | 1           | 2    |
|--|-------------|-------------|------|
| Side effects   |             |             |      |
| Breast tenderness  | 98.1        | 1.0         | 1.0  |
| Nausea is common side effect   | 72.1        | 1.9         | 26.0 |
| How to minimize common side effects  | 72.1        | 12.5        | 15.4 |
| How to deal with side effects  | 72.1        | 13.5        | 14.4 |
| Possible change in bleeding pattern: lighter, irregular, fewer days, or amenorrhea | 55.8        | 7.7         | 36.5 |
| Emphasizes that most side effects usually disappear within a few months            | 52.9        | 7.7         | 39.4 |
| Weight gain  | 32.7        | 18.3        | 49.0 |
| Headache   | 27.9        | 13.5        | 58.7 |
| Mean score (% out of 16 points)  | 5.6 (35.0%) |             |      |
| Health check   |             |             |      |
| Unexplained and abnormal vaginal bleeding  | 91.4        | 0.0         | 8.7  |
| Medications currently taken: anticonvulsants, rifampin, or griseofluvin            | 88.5        | 2.9         | 8.7  |
| Current or past breast cancer  | 87.5        | 0.0         | 12.5 |
| Smoking  | 85.6        | 0.0         | 14.4 |
| Regularity of menstrual cycles   | 66.4        | 1.9         | 31.7 |
| Chronic and/or acute health problems (contraindications to COC use)                | 60.6        | 5.8         | 33.7 |
| Mean score (out of a maximum of 12 points)   |             | 2.3 (19.2%) |      |
| Score guide: 0 = Not met; 1 = Partially met; 2 = Completely met                    |             |             |      |

#### **Discussion of side effects**

As noted above, 17 percent of the pharmacists failed to address the benefits or disadvantages of COCs at all, and 35 percent addressed these only partially. The checklist included a section on side effects (listed in Table 22). Pharmacists scored only a mean of 35 percent of the possible points in this section.

Almost none of the pharmacists discussed breast tenderness (2 percent); slightly more than one-quarter discussed nausea as a common side effect; and just 44 percent discussed the possibility of changes in menstrual bleeding pattern. Only 28 percent advised clients how to minimize common side effects and how to deal with these side effects should they arise; 47 percent advised that most side effects would be transient. The most commonly discussed side effects (completely or partially) were headache (72 percent) and weight gain (67 percent).

#### **Health checks for COCs**

In checking the client's suitability for COCs, pharmacists scored only 19 percent of the possible points relating to relevant health factors that pharmacists ought to inquire about prior to providing COCs. The health factors that were most often ignored were: unexplained or abnormal vaginal bleeding (91 percent), contra-indicatory medications (89 percent), history of breast cancer (88 percent), and smoking (86 percent) (Table 22).

#### **Summary of checklist findings**

As shown in Table 23, the pharmacists performed best in the area of client-provider interaction, attaining a mean score of 77 percent for this section. The lowest score was 19 percent, for the discussion of health factors that ought to be inquired about prior to providing the method.

Table 23. Summary of checklist scores for pharmacists (%)

| Subsection                                | Mean score (n=104)  |
|---|---------------------|
| Client-provider interaction               | 76.7%               |
|   | (Maximum 12 points) |
| Client demographics and preferences check | 53.6%               |
|   | (Maximum 10 points) |
| Method's benefits and use                 | 49.9%               |
|   | (Maximum 18 points) |
| Method's side effects                     | 35.0%               |
|   | (Maximum 16 points) |
| Health check prior to provision           | 19.2%               |
|   | (Maximum 12 points) |
|   | 30.0%               |
| Total score                               | (Maximum 68 points) |

#### **Visit outcome**

As shown in Table 24, mystery clients reported that 84 percent of the pharmacists agreed to provide the COC. The most commonly agreed upon method was Yasmin (61 percent), followed by Microgynon 30 (23 percent) and Marvelon (9 percent).

Of the 17 clients who reported that the pharmacists did not agree to provide the COC, 10 (59 percent) said that that the pharmacist insisted that the client have a prescription, two clients (12 percent) said that the pharmacist insisted on another FP method, and two others said the refusal related to the client's health status (small varicose veins on her legs, as specified in the script). This health condition was included specifically because some doctors refuse to prescribe the COC if the client has a few small veins, even though WHO standards do not include this as a contraindication to COC provision — a point that was addressed in all trainings related to COCs. One pharmacist did not recommend any modern FP methods, one recommended against hormonal methods, and one insisted that the client should instead choose a long-acting FP method.

The mean client satisfaction score for pharmacy visits was 3.2 (on a scale from 1 to 5), as shown in Table 25. One-quarter of the clients reported that they were not satisfied with the visit, one quarter were neutral, and 35 percent said that they were somewhat satisfied. Only 14 percent were very satisfied with the visit.

**Table 24. Pharmacist visit outcome** 

|   | n=104 |
|---|-------|
| Pharmacist agreed to provide COCs (%)                     | 83.7  |
| Method provided (%):                                      | n=87  |
| - Yasmine   | 60.9  |
| - Microgynon 30   | 23.0  |
| - Marvelon  | 9.2   |
| - Micronor  | 3.4   |
| - Yaz   | 2.3   |
| - Neogynon  | 1.0   |
| Pharmacist did not agree to provide COCs (%)              | 16.3% |
| Reason (%):   | n=17  |
| - Asked the client to go to the doctor for a prescription | 58.8  |
| - Insisted that the client use another FP method          | 11.8  |
| - Client's health status (varicose veins)                 | 11.8  |
| - Does not recommend any modern methods                   | 5.9   |
| - Pharmacist did not recommend hormonal methods           | 5.9   |
| - Recommended that client use a long-acting method        | 5.9   |

Table 25. Pharmacy client satisfaction (n=104)

| Not satisfied at all                | 13.5% |
|-------------------------------------|-------|
| Not satisfied                       | 12.5% |
| Neutral                             | 25.0% |
| Somewhat satisfied                  | 34.6% |
| Very satisfied                      | 14.4% |
| Mean level of satisfaction (1 to 5) | 3.2   |

## Pharmacists' performance in association with training

Given that only 11 percent of the visited pharmacists attended even one EBM seminar, it was not possible to detect any association between the pharmacists' performance and seminar attendance. No significant associations were noted between the performance of pharmacists in each area (e.g., client-patient interaction, health check) and training dose (total number of detailing visits about COCs received by the pharmacists, with or without inclusion of the EBM seminars) (Table 26).

Table 26. Pharmacists' performance: regression in association with trainings

| Dependent variable                       | Independent variable                 | Coefficient *    |  |
|--|--------------------------------------|------------------|--|
|  | Number of COC detailing visits       | 0.0 [-0.4, 0.4]  |  |
| Client-patient interaction               | Number of COC detailing visits and   | -0.2 [-0.5, 0.2] |  |
|  | EBM seminar attendances              | -0.2 [-0.3, 0.2] |  |
| Client demographics and                  | Total number of COC detailing visits | -0.1 [-0.5, 0.4] |  |
| preferences check                        | Number of COC detailing visits and   | -0.3 [-0.7, 0.2] |  |
| preferences check                        | EBM seminar attendances              | -0.3 [-0.7, 0.2] |  |
| Method's benefits/general and            | Total number of COC detailing visits | 0.1 [-0.7, 0.9]  |  |
| use info mean score                      | Number of COC detailing visits and   | -0.2 [-0.9, 0.5] |  |
| use into mean score                      | EBM seminar attendances              | -0.2 [-0.9, 0.3] |  |
|  | Total number of COC detailing visits | -0.1 [-0.7, 0.6] |  |
| Method's side effects                    | Number of COC detailing visits and   | -0.2 [-0.8, 0.4] |  |
|  | EBM seminar attendances              | -0.2 [-0.8, 0.4] |  |
|  | Total number of COC detailing visits | 0.1 [-0.3, 0.6]  |  |
| Health check prior to provision          | Number of COC detailing visits and   | 0.0 [-0.4, 0.5]  |  |
|  | EBM seminar attendances              | 0.0 [-0.4, 0.5]  |  |
|  | Total number of COC detailing visits | 0.1 [-2.2, 2.4]  |  |
| Total score                              | Number of COC detailing visits and   | -0.9 [-3, 1.3]   |  |
|  | EBM seminar attendances              |                  |  |
| * Showing 95 percent confidence interval |                                      |                  |  |

## Client satisfaction in association with pharmacists' performance

The level of satisfaction reported by clients was significantly associated with the pharmacists' performance. On average, the level of satisfaction increased by 0.06 points with each one-point increment in the pharmacists' overall score (regression coefficient = 0.06, 95 percent CI [0.05-0.07]).

## **Conclusions and Recommendations**

## **Doctors' performance**

- For all three FP methods, doctors performed best in the area of client-provider interaction. Doctors
  excelled in interpersonal communication in more than 90 percent of the visits, by treating the client
  with respect, practicing effective communication skills, showing mutual understanding, and assuring
  confidentiality.
- A weakness in the area of client-provider interaction was the doctors' failure, in most cases, to use the project's informative visual aids, when discussing the range of FP methods available to the client. Ta'ziz had provided doctors with flip-charts containing key information for all available FP methods in Jordan, including photographic depictions of the method and side effects, as well as its mechanism of action. Ta'ziz had also oriented the doctors on the use of these flip charts during the network doctors' annual meetings and through detailing visits. Doctors were advised to use visual aids during patient consultations in order to improve the FP counseling encounter and ensure that clients were well-informed about their FP choices.

Recommendation: Present evidence to doctors demonstrating how clients benefit from the use of visual aids in the context of FP counseling. Get feedback from network doctors about their opinions regarding the visual aids and reasons why they do or do not use them.

- Another area of weakness in client-provider interaction was how the secretary introduced herself to the client. Secretaries' performance scored slightly lower than doctors' for all three scenarios.
  - Recommendation: Doctors need to be made aware of the importance of the secretaries' welcome to clients, in providing a foundation for a positive client/provider interaction. More work also needs to be done with doctors themselves, to improve their initial rapport with the client.
- Very few doctors asked clients whether they had a history of STIs, and even fewer doctors informed
  clients that IUCDs, Implanon, and COCs do not protect against STIs. Indeed, none of the doctors
  attended the four clinical trainings on STIs conducted by Ta'ziz, and very few attended the training
  on IUCD insertion. Evidently, doctors tend to avoid the topic of STIs a very important issue to
  discuss in reproductive health.
  - Recommendation: Ask doctors why they did not attend the trainings on STIs: arrange focus group discussions or in-depth interviews with participating doctors to explore why doctors do not discuss STIs with their clients. Trainings on STIs should emphasize gaining the client's trust in order to assess her risk of exposure to STIs, if her FP method does not provide protection.
- Network doctors' overall performance in all of the assessed procedures requires improvement. This
  is especially the case with regards to their discussion of the chosen FP method. Doctors attained
  mean scores of 55 percent or lower with relation to counseling on the chosen method's benefits,

use and side effects. They also scored poorly in assessing clients' eligibility of the chosen methods through checking for method-specific contraindications.

When doctors join the network, they provide Ta'ziz with certifications from pervious trainings they have attended. Doctors who do not have trainings on IUCD insertion and general FP counseling procedures are first listed as advocates. Doctors who choose to become referral points for the outreach program must complete a set number of required training sessions before doing so. Therefore, not all doctors who are advocates have completed the proper training.

Recommendation: These findings suggest that all network doctors should attend the offered trainings, which were not required for advocates (doctors who do not participate in the voucher program). A certification program with mandatory (rather than voluntary) trainings could serve as a platform, with regular performance assessment through observation. Interviewing those doctors who partially or completely performed most tasks could help in designing modifications to program interventions.

• Clients who sought COCs experienced a lower level of service quality than those who sought Implanon or IUC, especially in regard to the method's benefits and side effects, and contraindications. Also, doctors were significantly less likely to schedule a follow-up visit for COC clients as compared to the two other long-term methods. These findings are extremely important since COCs, being hormonal, are associated with side effects. Network doctors should always inquire about contraindications and should inform the clients about possible side effects before prescribing COCs.

Recommendation: Additional work with doctors is required to ensure that they understand these important components of the counseling procedure, especially for clients seeking COCs, as a hormonal method. Interviewing doctors whose performance was weaker for COC clients would help inform more effective training approaches and techniques.

• The COC scenario was deliberately designed to test whether doctors would refuse to provide a nulliparous recently-married woman a modern contraceptive method. Three out of the 55 doctors refused to provide the mystery client with COCs and explicitly stated that it was because she was newly married. While this proportion (5 percent) appears to be low, it is very important to make note of it since a client who is seeking contraception prior to having her first child is breaking social norms and she has taken initial action by visiting the doctor. The existence of this type of provider bias against modern methods, in any proportion, results in an unmet need for contraceptives.

Recommendation: Interview doctors who do not encourage recently married (childless) women to use COCs to explore the reasons for their refusal. Develop EBM research that includes evidence about the socio-economic benefits of delaying pregnancy after marriage.

• Client satisfaction was positively associated with the doctors' overall performance. It is possible that mystery clients, who differ from typical clients in that they are aware of the performance checklist

and could compare a doctor's performance with other doctors they visited during the study, would better be able to associate a doctor's performance to their own level of satisfaction.

Recommendation: Inform prospective FP clients of what they should expect during network doctor FP counseling visits will be a key to assuring that clients are the driving force behind improved quality in the private sector. Community health workers, who focus on reaching the lower strata of the socioeconomic spectrum, may continue to play a key role in informing the client of what she should expect at the doctor, but new approaches are necessary to inform all sectors of society.

#### Associations between doctors' performance and training

Most doctors receive clinical training from other training providers prior to their inclusion in the
Taz'iz network. Therefore, it is difficult to accurately assess the dose of clinical training that network
doctors had obtained (whether provided by the project or elsewhere). This study was thus not able
to accurately assess whether training dose was associated with performance.

Recommendation: A longitudinal study of newly graduated general practitioners would be required to assess the impact of clinical trainings on FP service provision. Future research should take into account the performance checklist developed for this study.

• No statistically significant associations were detected between doctors' performance and the attendance of EBM seminars or reception of detailing visits. It is likely that the small sample size reduced the power of this analysis to detect differences. In addition, many of the EBM seminars were conducted two or three years ago and were not repeated although some updates were made to CATs relating to the methods covered in the first EBM seminars. This limits the study's ability to detect the immediate short-term effects of EBM seminars on doctors' behaviors.

Recommendation: A more rigorous assessment of clinical trainings, EBM seminars, detailing visits, and other training activities should be conducted to assess their effectiveness at improving doctors' service provision for a wide spectrum of FP methods, and to identify the most effective approaches for this population of doctors.

#### Association between doctors' performance and the use of free vouchers

• The mean checklist performance score for the IUCD scenario was significantly lower for mystery clients presenting with a voucher, as compared to paying clients.

Recommendation: This finding is especially important because the IUCD is the most preferred FP method among outreach clients (and among Jordanian women in general). Further investigation is required to identify the reasons for the lower performance score, and why it affected the IUCD scenario but not the Implanon and COC scenarios.

• The amount of time in consultation with the doctor did not vary based on voucher status; however, clients with the free voucher waited nearly 18 minutes longer than those without the voucher. (This was not statistically significant, likely due to the small sample size).

Recommendation: Ta'ziz conducts routine focus group discussions with CHWs that have consistently revealed that some clients have complained of longer waiting times at network doctor clinics when they went with the free-service voucher. Ta'ziz addressed these complaints by contacting doctors through telephone or in-person during detailing visits, yet the problem appears to have persisted. Waiting time is often determined by the secretary, with or without consensus of the doctor. While it appears that the doctors do not rush the services they provide to clients with free vouchers, delayed waiting time is a concern of equity. This finding ought to be shared with network doctors and discussed openly to identify possible reasons for delays and strategies to reduce those delays. Direct interventions with doctors' secretaries are one possible approach to be explored.

## Pharmacists' performance

 Pharmacists performed well in the area of client-provider interaction, but for the other areas (demographic check, health check, discussion of side effects, etc.), pharmacists' scores were just 54 percent or lower. Only 19 percent performed adequately on the health check before prescribing COCs.

Recommendation: Additional interventions are required to ensure that pharmacists know how to assess medical eligibility and that they understand the importance of providing clients with complete information on side effects, as part of the FP counseling visit and before prescribing a method.

 Very few pharmacists who received detailing visits also attended EBM seminars, demonstrating a missed opportunity in building synergy from the two activities.

Recommendation: Future detailing visits should not be considered as a stand-alone activity; rather, they ought to be directly linked to training activities and considered as a complement to EBM seminars. Ta'ziz conducted seminars for pharmacy university students as well. Tracking these students after they graduate and providing them with detailing visits might be more effective than the targeting of 300 pharmacies nationally. In this way, a longitudinal assessment, possibly with a randomized design, could be utilized to evaluate the effectiveness of EBM seminars alone or with detailing visits.

Less than 10 percent of the pharmacists refused to provide COCs because the client did not have a
doctor's prescription.

Recommendation: A mechanism is needed to assure that pharmacists conduct the required physical checks and ask about clients' medical history prior to dispensing contraceptives, when the client does not present a prescription for the method.

 There was no association between pharmacists' performance and their dose of training (mainly detailing visits).

Recommendation: Detailing visits alone should be considered as follow-up reinforcement for EBM seminars rather than stand-alone trainings.

• Client satisfaction was positively associated with pharmacists' performance.

Recommendation: As was mentioned previously regarding the positive association between client satisfaction and network doctors' performance, it is possible that mystery clients, who are aware of the checklist and who may compare different experiences with pharmacists together, would better be able to associate a pharmacists' performance to their own level of satisfaction. For this reason, having well-informed and clients who may seek FP services directly from pharmacists is integral to improving services in the private sector.

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# **Appendix: Mystery Client Scenarios**

| Implanon scenario outline                           |   |
|---|---|
| Number of children                                  | 3 daughters and 1 son                               |
| If asked the date of the last delivery              | 4 years ago   |
| If asked about educational attainment               | Secondary   |
| If asked about previous caesarian section delivery  | None  |
| If asked about how long she wants to delay          | Wants a long-term method for limiting births        |
| pregnancy   | wants a long term method for minung births          |
| If asked about her history of modern contraceptive  | IUCD during the past three years: caused her a lot  |
| use   | of bleeding and back pain;                          |
|   | Oral contraceptives between previous                |
|   | pregnancies: had trouble remembering to take the    |
|   | pills;  |
|   | Currently uses withdrawal                           |
| If asked about her menstrual cycle                  | Consistently 5 days long, moderate bleeding         |
| If asked about vaginal discharge or reproductive    | There is discharge and some itchiness               |
| tract infections                                    |   |
| If asked about hemoglobin levels                    | Does not know                                       |
| If asked about breast illnesses (past or current    | None  |
| such as breast lumps or cancer)                     |   |
| If asked about her blood pressure                   | Does not have hypertension                          |
| If asked about ecotopic pregnancy                   | None  |
| If asked about her preferences or if she has a      | Implanon (use the term implant or capsule)          |
| method in mind                                      |   |
| If the doctor suggests an oral contraceptive        | Replies that she does not want oral contraceptives  |
|   | because she forgets to take them daily              |
| If the doctor suggests the Implanon                 | Replies that she prefers a non-hormonal method      |
| If the doctor suggests the IUCD                     | Replies that she used it in the past and it caused  |
|   | her a lot of bleeding                               |
|   |   |
| The client should discuss the following rumor       | The implant migrates as time passes                 |
| If the doctor does not volunteer any information    | The client should ask about side effects and record |
| about side effects                                  | a score of 1 (incomplete) should the doctor discuss |
|   | the side effects                                    |
| If the doctor suggests the implant                  | The client should say that her next menstrual cycle |
|   | is in two days. The client should ask exactly when  |
|   | she should come for insertion and what clinical     |
|   | bed exams or lab work is required prior to the      |
|   | implant (blood pressure measurement, blood test,    |
|   | weight measurement, clinical breast exam)           |
| If the doctor does not agree to provide the implant | The client should ask for the reason and record the |
|   | reason as soon as possible after the completion of  |
|   | the visit. The client should inform the doctor that |
|   | she needs to think about her options and will       |
|   | return at a later time                              |

| IUCD scenario outline                              |  |
|--|--|
| Number of children                                 | 1 son and 1 daughter   |
| If asked the date of the last delivery             | 1.5 years ago  |
| If asked about educational attainment              | Secondary  |
| If asked about previous caesarian section delivery | None   |
| If asked about how long she wants to delay         | 4 years  |
| pregnancy  | . , , , , , , , , , , , , , , , , , , ,  |
| If asked about her history of modern contraceptive | Oral contraceptives; Male condom   |
| use  | ,  |
| If asked about current breast feeding              | Not breastfeeding  |
| If asked about her menstrual cycle                 | Consistently 4 days long, moderate bleeding  |
| If asked about vaginal discharge or reproductive   | Regular discharge, no odor   |
| tract infections                                   |  |
| If asked about hemoglobin levels                   | Does not know  |
| If asked about ecotopic pregnancy                  | Yes, prior to the birth of her last child. Was   |
|  | detected at 7 weeks and was treated with   |
|  | medication   |
| If asked about medical history and current health  | She had some lump in her breast, which was   |
| status   | examined at a health center. After the exam, the   |
|  | doctor informed her that it was normal for some  |
|  | women and does not represent any health  |
|  | concerns   |
| If the doctor suggests an oral contraceptive       | Replies that she does not want oral contraceptives   |
|  | because she might forget to take them daily  |
| If the doctor suggests the Implanon                | Replies that she prefers a non-hormonal method   |
| If the doctor suggests the male condom or a        | Replies that she wants a more effective method   |
| traditional FP method                              | and that her husband does not collaborate and  |
|  | does not prefer these methods  |
|  | The state of the s |
| The client should discuss the following rumor      | That the IUCD causes sterility in some cases if it is  |
| If the dector does not valuateer any information   | used for a long period of time  The client should ask about side effects and record  |
| If the doctor does not volunteer any information   |  |
| about side effects                                 | a score of 1 (incomplete) should the doctor discuss the side effects   |
| If the doctor suggests the IUCD                    | The client should say that she will return during  |
| if the doctor suggests the local                   | the coming menstrual cycle, which is supposed to   |
|  | be in two days. The client should ask exactly when   |
|  | she should arrive and what clinical bed exams or   |
|  | lab work is required prior to the IUCD (blood test,  |
|  | weight measurement, abdominal and pelvic exam,   |
|  | ultrasound)  |
| If the doctor does not agree to provide the IUCD   | The client should ask for the reason and record the  |
|  | reason as soon as possible after the completion of   |
|  | the visit. The client should inform the doctor that  |
|  | she needs to think about her options and will  |

| COC scenario outline   | return at a later time   |
|--|--|
| Juliulio Catille   | 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2  |
| Number of children   | None, she is newly married   |
| If asked about educational attainment  | Secondary  |
| If asked about how long she wants to delay   | One year so that she can secure a new position as  |
| pregnancy  | a secretary  |
| If asked about her history of modern contraceptive   | Did not use any modern contraceptives before.  |
| use  | She has been using withdrawal since she became   |
|  | married  |
| If asked about her menstrual cycle   | Inconsistent, 5 days of moderate bleeding with   |
|  | some pain  |
| If asked about vaginal discharge or reproductive   | None   |
| tract infections   |  |
| If asked about hemoglobin levels   | 11   |
| If asked about breast illnesses (past or current   | None   |
| such as breast lumps or cancer)  |  |
| If asked about her medical history   | She is in good health (no hypertension or  |
|  | diabetes), she has some acne and some small  |
|  | varicose veins   |
| If asked about her preferences or if she has a   | She wants a method that she can control, like the  |
| method in mind   | pills  |
|  |  |
| If the doctor suggests the male condom   | Replies that her husband does not like to use it   |
| If the doctor suggests the Implanon  | Replies that she prefers a non-hormonal method   |
| If the doctor suggests a traditional method like   | Wants a more reliable method and her husband   |
| withdrawal   |  |
|  |  |
| If the doctor suggests the IUCD  |  |
| (()  |  |
| If the doctor does not suggest OCPs  | •  |
|  |  |
| If the dector asks about her last monstruel avelo  |  |
| If the doctor asks about her last menstrual cycle  | , - , , , , , , , , , , , , , , , , , ,  |
| If the doctor does not volunteer any information   | •  |
|  |  |
| about side effects   |  |
| If the doctor says that she cannot take the nills  |  |
|  |  |
|  | •  |
|  |  |
|  |  |
| The client should discuss the following rumor  | The client should ask for the reason and record the  |
| The client should discuss the following rumor  If the doctor does not agree to provide OCPs or   | The chefit should ask for the reason and record the  |
| If the doctor does not agree to provide OCPs or asks the client to return after her she has her next   | reason as soon as possible after the completion of   |
| If the doctor does not agree to provide OCPs or  |  |
| Withdrawal  If the doctor suggests the IUCD  If the doctor does not suggest OCPs  If the doctor asks about her last menstrual cycle  If the doctor does not volunteer any information about side effects  If the doctor says that she cannot take the pills now because she must use the pills during the first give days of her period in order to make sure that she is not pregnant | does not like to use any method that interferes with intercourse  She fears placing a foreign object inside her uters before she gets pregnant or has a baby  She should say that she read about the pills on the internet and that she wants to learn more about them  It ended two days ago (usually she has 5 day periods)  The client should ask about side effects and record a score of 1 (incomplete) should the doctor discutthe side effects  The client should say that she did not have intercourse with her husband since the period started nor during the previous two days after he period ended  Pills cause weight increase |