# Linking family planning with postabortion services in Egypt: Testing the feasibility, acceptability and effectiveness of two models of integration

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# SUMMARY

Effective linkage between postabortion evacuation services and family planning is essential to reduce the incidence of repeat unwanted pregnancy and unsafe abortion. This collaborative operations research study between FRONTIERS Program, TAHSEEN/ Catalyst Project, and the Egyptian Ministry of Health and Population (MOHP), with funds from USAID, was undertaken to test the feasibility, acceptability, and effectiveness of two models of integrating family planning services with postabortion services. The first model involves provision of family planning counseling to postabortion patients and referral to a clinic near their residence to receive a method. The second model involves, in addition, offering family planning methods to postabortion patients who are interested in immediate initiation of contraception. A companion study investigated pain management perceptions and practices of Egyptian patients and providers in relation to postabortion care in different types hospitals; the research methodology and results are provided in Appendix I of this report.

The study was conducted in six MOHP hospitals in Fayoum and Beni Suef governorates where staff received training on improved PAC (including FP counseling and method provision), a PAC brochure was provided to postabortion patients before discharge, and FP methods were placed on the Ob/Gyn ward. The two models were implemented in tandem over a three month period followed by an assessment using provider interviews, supervisor interviews, patient exit interviews, patient follow-up interviews at home three months after discharge and customized spreadsheets to collect information on incremental costs.

The study results suggest that both models are feasible and acceptable to providers. Model I is somewhat easier to implement because it does not involve method provision, while Model II seemed to be more cost effective as more patients started using contraception within two weeks compared with Model I. However, patients' acceptance of family planning methods before discharge was very low. Desire for more children, concern about method side-effects and need for husband approval were major obstacles to patient acceptance of FP methods before discharge, while some providers had reservation about providing family planning counseling to primiparas or about recommending specific methods immediately postabortion.

As to which model should be adopted on a larger scale, we recommend that the Egyptian MOHP adopts Model II but with further improvements in family planning counseling services to postabortion patients. Every postabortion patient should receive adequate family planning counseling before discharge and should be offered a choice of receiving a family planning method on the ward or at a clinic near her residence within two weeks. It would be helpful if husbands of postabortion patients are involved in the above counseling. Moreover, community awareness activities are needed to dispel misconceptions about immediate use of family planning methods and to solicit community support for inter-pregnancy spacing.

The above findings have been discussed with senior MOHP officials and with service delivery cooperating agencies with the purpose of introducing appropriate changes in service delivery protocols, training manuals and IEC activities to ensure prevention of unwanted or closely spaced pregnancies.

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# ACRONYMS

| | |
|---|---|
| ANE OR/TA | Asia and Near East Operations Research and Technical Assistance Project |
| COCs | Combined Oral Contraceptives |
| D & C | Dilatation and Curettage |
| EFCS | Egyptian Fertility Care Society |
| FGDs | Focus Group Discussions |
| FP | Family Planning |
| IEC | Information, Education, and Communication |
| IUD | Intrauterine Device |
| I.V. | Intravenous |
| MOHP | Ministry of Health & Population |
| MVA | Manual Vacuum Aspiration |
| Ob/Gyn | Obstetrics and Gynecology |
| PA Patients | Postabortion Patients |
| PAC | Postabortion Care |
| RR | Raidat Rifyat (family planning outreach worker) |
| USAID | United States Agency for International Development |

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MOHP undersecretaries in Fayoum and Beni Suef governorates, Family Planning and Curative Care supervisors and the six hospital directors were very supportive of implementation of the two models of integration and were instrumental in resolving logistical and administrative obstacles related to implementation. The cooperativeness of Ob/Gyn physicians and nurses working in the above hospitals and their willingness to take on additional responsibilities are gratefully acknowledged.

Our appreciation also goes to the data collection team who successfully completed interviews with postabortion patients. Needless to say, those interviews would not have been possible without the cooperation of postabortion patients who welcomed interviewers at their homes and willingly shared their experiences with them.

Finally we wish to thank USAID / Washington for funding this study and the USAID Mission in Egypt for their interest in the study and in utilization of its results. Last but not least, we are grateful to our colleagues at the FRONTIERS Program and the TAHSEEN / Catalyst Project for their support and guidance throughout the conduct of this study.

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# BACKGROUND

Abortion (spontaneous or induced) constitutes a public health problem in Egypt. In a study conducted under Asia and Near East Operations Research Technical Assistance Project in Egypt, it was estimated that one in five admissions to the Ob/Gyn ward is for treatment of abortion complications (Huntington et al., 1998). The same study showed that approximately 37 percent of postabortion patients had a history of previous "miscarriage", 56 percent stated that the pregnancy just lost was not planned, while 42% reported an intention to use a family planning method.

Effective linkage between postabortion care services (PAC) and family planning is essential for reducing the incidence of repeat unwanted pregnancy and unsafe abortion. Family planning services need to be initiated immediately postabortion as ovulation returns as early as day 11 and usually occurs before the first menstrual bleeding (Luhteenmuki, 1993). However, in many countries, including Egypt, family planning services are physically and administratively segregated from postabortion care (PAC) services. Not surprisingly, postabortion patients do not receive family planning counseling nor are offered any family planning services before their discharge from the hospital and many of them return to the hospital with another unplanned / unwanted pregnancy.

Considering the importance of integrating PAC with family planning services, it is not known which model(s) would be more effective in different hospital settings. For example, several studies have shown that offering family planning methods to postabortion patients before discharge was associated with higher levels of use (Foreit et al., 1993; Solo et al., 1999). However, it is not known if providing family planning methods on the Ob/Gyn ward would be feasible given that service providers are presumably overburdened with responsibilities or acceptable to postabortion patients who may have concerns about immediate use of contraception. It is also argued that the patient's emotional state following an abortion / miscarriage may interfere with her ability to make voluntary informed decisions, especially on provider-dependent methods like the IUD or sub dermal implants (Benson et al., 1992).

# STATEMENT OF THE PROBLEM

This collaborative operations research study was undertaken to test feasibility, acceptability, and effectiveness of two models of integrating family planning services with postabortion services. The first model (basic model) involves provision of family planning counseling to postabortion patients and *referral* of those patients who are interested in receiving a family planning method to any family planning clinic near their residence. The second model (the comprehensive model) involves provision of family planning counseling as well as offering family planning methods to postabortion patients who are interested in immediate use of contraception. The study was implemented by the FRONTIERS Program[1], TAHSEEN/ Catalyst Project[2], and the Egyptian Ministry of Health and Population, with funds from USAID. In this collaborative study TAHSEEN was primarily responsible for implementation of the intervention, i.e. training on improved PAC and family planning service provision,

[1] FRONTIERS is a ten year cooperative agreement between Population Council and USAID to improve family planning and reproductive health service delivery through operations research.
[2] TAHSEEN/ Catalyst Project is a three year USAID funded project that provided assistance to the Ministry of Health and Population and other public, NGO and commercial sector partners.

while FRONTIERS was responsible for the research component. The study was implemented in MOHP hospitals under supervision of senior officials from the Curative Care and Population and Family Planning sectors. In addition, FRONTIERS conducted a qualitative companion study to investigate postabortion care pain management attitudes and practices in selected public hospitals in Egypt. The study report is attached in Appendix I.

# STUDY METHODOLOGY

## *Study Objectives*

The overall goal of the model-testing study is to reduce the incidence of unwanted pregnancy and induced abortion by increasing accessibility of family planning services to postabortion patients.

Specific objectives of the study are:

(1) To assess the feasibility and acceptability of providing family planning counseling along with referral to a family planning clinic (Model I) versus providing family planning methods and counseling on the Ob/Gyn ward (Model II);

(2) To compare the impact of the above two models on the quality of family planning counseling received by postabortion patients;

(3) To compare the effectiveness of the above two models on postabortion patients' use of contraception after discharge from the hospital;

(4) To measure the incremental costs and cost-effectiveness of the two models

## *The Intervention*

This study was conducted in six MOHP hospitals in Fayoum and Beni Suef governorates. Within each governorate, one general and two district hospitals were selected based on their caseload. All selections were made in consultation with senior officials of the Curative Care Sector at MOHP. Table 1 provides characteristics of the six study hospitals. The two general hospitals, which are located in the capital city of each governorate, had more providers, a large number of beds and received more deliveries and more abortion cases than district hospitals.

**Figure 1: Map of Egypt**

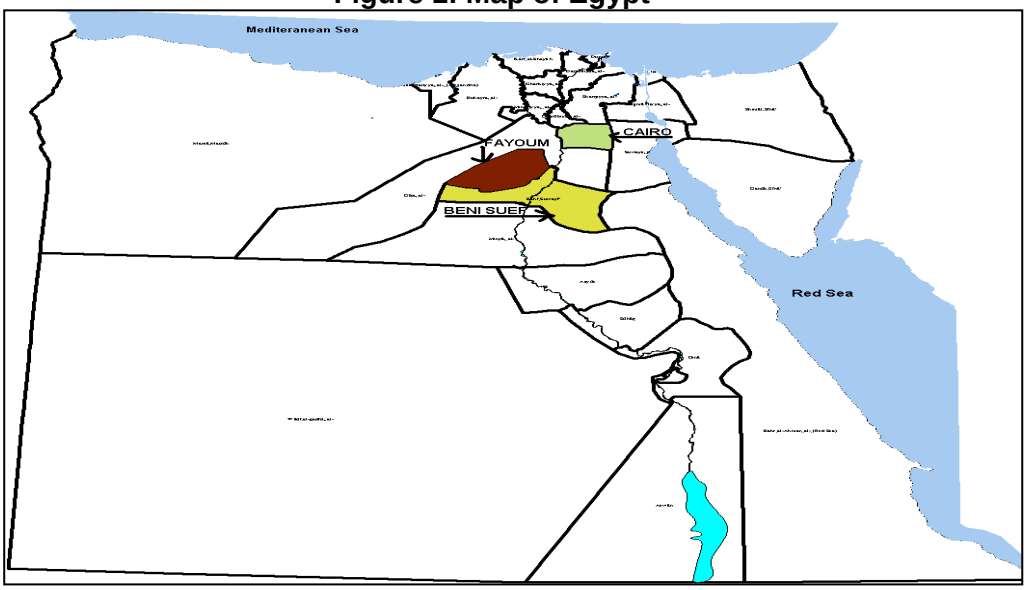


**Table 1: Characteristics of the study hospitals**

| Hospital | No. of beds | No. of residents | No. of specialists/ consultants | No. of nurses | Av. number of normal deliveries/day | Av. number of postabortions/ day |
|---|---|---|---|---|---|---|
| Beni Suef general hospital | 64 | 8 | 21 | 29 | 16 | 4 |
| Wasta district hospital | 8 | 1 | 7 | 8 | 1 | 0.5 |
| Nasser district hospital | 8 | 5 | 12 | 6 | 1.4 | 0.5 |
| Fayoum general hospital | 44 | 10 | 24 | 14 | 8 | 3 |
| Ibshway district hospital | 14 | 3 | 9 | 6 | 3 | 1 |
| Itsa district hospital | 14 | 3 | 11 | 8 | 5 | 1 |

These six hospitals received interventions for improved postabortion care. Strengthening the quality of PAC services in those hospitals followed a three-step process. First, focus group discussions (FGDs) were conducted with women who had recently received hospital-based care for postabortion complications in order to gain an understanding of their perspective on PAC services. Next, a meeting was held with all hospital staff to present the results of the FGDs. Finally, the staff of each hospital developed their own action plans for the improvement of PAC services, taking into account the suggestions offered by clients who participated in the FGDs.

## Training

Training of service providers followed a protocol similar to the one used earlier by the Population Council's ANE OR/TA program and the Egyptian Fertility Care Society (EFCS)[3]. Physicians and nurses in the OB/GYN ward participated in a six-day clinical training in a PAC training center[4]; namely, El-Shatby University hospital and El-Galaa Teaching hospital. The training curriculum covered a theoretical component and clinical training on management of incomplete abortion using the MVA procedure[5] and its complications, training on counseling skills, pain control, high-level disinfection practices of MVA instruments (syringe and cannulae), as well as postabortion

[3] In 1995-96 the Population Council's Asia and Near East Operations Research Project in collaboration with the Egyptian Fertility Care Society (EFCS) conducted operations research on improving postabortion care in six hospitals in Minia as well as four other hospitals in Lower Egypt. The package of improved postabortion services that was introduced in the above hospitals included manual vacuum aspiration (MVA) instead of dilatation and curettage (D&C), paracervical block as well as family planning counseling to postabortion patients.

[4] A hospital with high patient volume that had previously received training by the Population Council and the Egyptian Fertility Care Society.

[5] The clinical training on MVA procedure was practiced first on pelvic models then on patients.

family planning services. Training was conducted over 6 days, of which one day was assigned for postabortion family planning services. It covered a review of suitable methods to be used postabortion, counseling on those methods, and clinical training on postabortion IUD insertion. A total of 78 physicians and 79 nurses from the above six hospitals participated in the above training.

## Postabortion care brochure


In addition to training providers on improved postabortion care and counseling, a brochure on postabortion care was developed to be given to each postabortion patient by the attending nurse before her discharge from the hospital. The brochure included information on: (1) care after discharge from the hospital; (2) warning signs; (3) return to fertility within two weeks; and (4) different family planning methods that a woman could use in the postabortion period. Postabortion patients who were interested in using family planning were advised by the attending nurse to seek contraception at a family planning clinic close to their residence.

## Implementation of Model I

Follow up of the above-mentioned physicians' and nurses' training was conducted over a period of three months through bi-weekly visits by staff from the two training centers. The visits followed up on clinical care (MVA use, counseling, infection prevention etc) as well as adherence to action plans as developed by the hospital staff. Trainers kept records of the numbers of postabortion patients treated with MVA versus D&C, those who received general health counseling, and family planning counseling. As well, they kept detailed running files for each trainee so they could closely follow up their clinical performance until they reached an acceptable level of competence.

## Implementation of Model II

After implementation of Model I for a period of three months, services on the Ob/Gyn ward were re-organized in order to provide family planning methods on the Ob/Gyn ward, besides counseling and improved medical care, i.e. the comprehensive Model II. Reorganization of services entailed a series of steps; first two introductory meetings were held at each of the governorates in order to introduce the comprehensive services model to both MOHP officials as well as providers. Second, a one-day refresher training on provision of FP methods was conducted for providers in the six study hospitals in each of the two governorates. In addition, the central population office of MOHP developed a protocol that explains the system to be followed in order to put methods on the ward. The nurse who is responsible for keeping inventories at the Ob/Gyn department writes a request to borrow family planning methods from the outpatient clinic at the hospital premises. The methods would then be her responsibility since she puts them in a special cabinet. The nurse would then give the key to her colleagues working on shifts. Disbursed methods would accordingly be added to the records at the clinic to ensure that follow-up on the patient's method is conducted there.

These activities were then followed-up through continued on-site supervision/coaching visits by trainers. During that period, there was careful follow-up of the changes to the hospital infrastructure and systems to ensure FP methods availability in the same location as other PAC services.

### Obstacles to implementing the intervention

Remarkable resistance to providing family planning counseling was encountered during the implementation of Model I. Providers, especially physicians, claimed they did not have enough time to provide family planning counseling. That necessitated doubling of follow-up visits by trainers to those hospitals in order to stress the importance of FP counseling to postabortion care patients. For Model II, it was also difficult to put the methods on the Ob/Gyn ward at the initial phases of implementation. Providers complained that they did not have enough time to provide family planning methods over and above their responsibilities. As well, the existing incentive system, which limits distribution of methods revenue to family planning providers, made some Ob/Gyn providers feel that providing family planning methods was not their responsibility but that of family planning providers. An additional factor was providers' belief that postabortion patients wouldn't accept to receive a method before discharge. Several meetings were held with the hospital director, family planning director, and the head of the Ob/Gyn department and hospital staff to resolve these issues.

## *Study design*

To address the first objective, the study used a cross-sectional design to solicit postabortion patients', providers' and supervisors' views about the two models of providing family planning services on the Ob/Gyn ward. After implementation of each of the two models, providers were asked their opinions about the two models, i.e. advantages, disadvantages, feasibility, and acceptability. Postabortion patients who received the basic model were asked their opinion about that model versus the comprehensive model and vice versa.

For the second and third objectives, the study used the one group pretest – posttest design with separate pretest and post-test samples. The quality of counseling provided to postabortion patients was assessed in the study hospitals before and after implementation of each of the two models. In addition, contraceptive use 10-12 weeks[6] after discharge from the hospital was assessed among postabortion patients exposed to each of the two models.

For the fourth objective, we calculated the incremental costs of designing and implementing the two intervention models. Elements of incremental costs included training, supervision, staff time, physical space for providing FP services, equipment, supplies and administration. Incremental cost-effectiveness was estimated for the two intervention models by dividing the change in costs by the change in the impact measure, which we defined as the proportion of PAC clients using contraception at 14 days post-discharge.[7]

## *Sample*

The eligible patient population included all uncomplicated cases of incomplete abortion with gestational age less than 12 weeks admitted to the study hospitals during the data collection period. For each model of the study, sample size calculations yielded 50 cases for each

[6] Home interviews were initially scheduled to be conducted 4-6 weeks from PAC patients' hospital discharge. Yet due to some administrative delay in securing approvals to conduct home visits, they were postponed to be carried on 10-12 weeks from date of discharge from hospitals.

[7] Use of contraception at 14 days was selected as the measure of impact because we would only expect to see early FP use in hospitals providing integrated PAC-FP. It is unlikely that patients attending hospitals providing standard PAC would accept FP at 14 days because of the traditional assumption that ovulation does not resume until at least 40 days after an abortion / miscarriage (Huntington, Nawar and Abdel-Hady, 1997).

hospital, i.e. a total of 300 postabortion patients. The above sample size was estimated based on the following formula:

$$N=z^2\ pq/d^2$$

Where z=1.96, p=expected proportion of family planning users in the control group six weeks after discharge, q=100-p, and d=degree of accuracy desired (Fisher et al., 1991). To calculate the sample size, the following assumptions were made: p=0.20 i.e. 20 percent of postabortion patients under Model I were expected to be using a family planning method at 10-12 weeks after discharge, q=(1-0.15), i.e. 0.80, d=0.05. According to this formula, a sample size of 246 women would be needed for each model. Adding an additional 10% to account for refusals / losses to follow-up gave a total sample size of 269 women, i.e. 45 women per study hospital.

The provider sample included all physicians and nurses who currently worked on the Ob/Gyn ward. Supervisors eligible for participation in the study included hospitals directors, FP and curative care directors at the governorate and the central level.

## *Variable definition*

**Feasibility:** Components of feasibility included provider and facility readiness to provide FP services, provider views about providing FP services.

**Acceptability to patients:** Included proportion of postabortion patients who approved of receiving family planning methods before discharge from the hospital or who have received FP methods before discharge.

**Model effectiveness on family planning use:** Included the proportion of postabortion patients who reported using a modern FP method within 14 days after discharge from the hospital

**Impact on quality of counseling:** Included the proportion of postabortion patients who reported receiving FP counseling at the hospital under each model, and proportion who were told about return to fertility within two weeks.

**Incremental costs:** Additional costs associated with planning and implementing the intervention

**Incremental cost effectiveness of the two models:** The incremental cost associated with implementation of each model, divided by the incremental effectiveness of each model.

## *Sources of data*

The following data sources were used:

1. Patient exit interviews: a questionnaire was administered to consenting[8] postabortion patients before their discharge from hospitals, i.e. after they had received treatment and family planning services. Interviews aimed at ascertaining if patients received counseling about family planning while at the hospital, their knowledge of the expected timing of return to fertility, and if they were offered FP methods or referred to any family planning clinic to receive family planning services after hospital discharge.

[8] To obtain patients' approval on participation in the study, a consent statement was read by the interviewer that explained the purpose of the study as well as the risks and benefits of participation. Approval on home interviews was also obtained.

2. Provider interviews: a questionnaire was administered to physicians and nurses to solicit their views on the feasibility of integrating family planning services with their curative services at the Ob/Gyn wards and the acceptability of providing family planning services to postabortion patients and impact of providing such services on their work. Interviews with providers were conducted after implementation of each model.
3. Home interviews: a home interview was conducted with the above patients 10-12 weeks after their discharge from the hospital to ascertain contraceptive use, onset of use and source of family planning method.
4. In-depth interviews with supervisors: to solicit their views on the feasibility of integration and potential impact of each model could have on workload, patient flow, etc. These interviews were conducted at the end of the study, i.e. after implementation of the two models.
5. Customized spreadsheets in Excel were used to collect information on incremental costs.

### *Data collection procedures*

After each model was implemented, two rounds of data collection were conducted. The first round included provider interviews and patient exit interviews, while the second round included patient home interviews. The data collection team included 12 female data collectors and two supervisors, all recruited from the study governorates. Before each round of data collection, interviewers and supervisors received three days of training on participant enrollment, administering of questionnaires, and informed consent procedures. For conducting interviews with providers and exit interviews with patients, two female interviewers stayed at each hospital for 12 hours each day, with each data collector staying for 6 hours a day (including Fridays). Enrollment of the required sample of patients from each hospital was completed over an average of three months.

Home interviews were conducted with the above patients 10-12 weeks after their enrollment at the hospital. Each round of home interviews was completed in 10 - 12 weeks.

In-depth interviews with managers and supervisors were conducted by the FRONTIERS study investigators after completion of all data collection activities related to Model II.

## FINDINGS

### *Participants' characteristics*

#### Postabortion patients

A total of 320 patients were exit interviewed under Model I and 296 patients under Model II. During data collection for Model I, in one of the district hospitals, seven patients refused to be interviewed while one husband in a general hospital interrupted the interview before it ended. There were no refusals under Model II. Table 2 shows the distribution of participating patients

by study hospital. As expected, the two general hospitals contributed more patients than the district hospitals. The target sample size (50 per hospital) could not be reached in two of the district hospitals (Nasser Hospital in Beni Suef Governorate and Ibshaway Hospital in Fayoum governorate), hence more patients were recruited from the two general hospitals to increase the total sample size. It was also noted that the caseload of patients in district hospitals was generally lower under Model II compared to Model I, which may be due to the fact that data collection to assess that model took place during winter months (January – March 2006) when some patients from rural areas may choose to go to private clinics that may be closer to their residence.

**Table 2: Distribution of interviewed postabortion patients by study model and study hospital**

| Site | Model I | Model II |
|---|---|---|
| **Beni Suef governorate** | | |
| Beni Suef general hospital | 69 | 69 |
| Wasta district hospital | 47 | 40 |
| Nasser district hospital | 37 | 31 |
| **Fayoum governorate** | | |
| Fayoum general hospital | 70 | 73 |
| Itsa district hospital | 50 | 54 |
| Ibshaway district hospital | 47 | 29 |
| Total | 320 | 296 |

Table 3 shows selected characteristics of patients who participated in the exit interview under each of the two models. The two groups of patients were largely comparable on most characteristics, e.g. age, level of education, and number of living children. The only difference was related to ever use of contraception where a larger proportion of patients under Model I reported previous use of contraception compared with Model II (62.8 percent versus 54.7 percent, p=0.025). Moreover, slightly more patients under Model II expressed a desire to have more children compared with Model I (72.0 percent versus 69.4 percent, respectively). However, that difference was not statistically significant.

**Table 3: Selected characteristics of study patients by intervention model**

| Characteristic | Model I (n= 320) Percentage | Model II (n= 296) Percentage |
|---|---|---|
| **Age group** | | |
| <20 | 13.1 | 14.2 |
| 20<25 | 39.1 | 32.8 |
| 25<30 | 20.3 | 26.4 |
| 30<35 | 10.9 | 13.2 |
| 35+ | 16.6 | 13.5 |
| **Mean age** | 25.7 | 25.9 |
| **Education** | | |
| Illiterate | 52.2 | 52.0 |
| Primary/Preparatory | 23.1 | 19.2 |
| Secondary/University | 24.7 | 28.8 |
| **Percent who work for cash** | 8.4 | 6.4 |
| **Number of living children** | | |
| 0 | 11.1 | 10.5 |
| 1-2 | 52.9 | 46.9 |
| 3+ | 36.0 | 42.5 |
| **Mean** | 2.4 | 2.4 |
| **Previous abortion / miscarriage** | | |
| None | 64.1 | 64.5 |
| One or more | 35.9 | 35.5 |
| **Reproductive intentions** | | |
| Want to have more children | 69.4 | 72.0 |
| Want to become pregnant in less than three months | 23.1 | 30.4 |
| **Family planning profile** | | |
| Ever use of contraception* | 62.8 | 54.7 |
| Had used contraception at time of lost pregnancy | 19.4 | 19.8 |

*p<0.05

## Providers

A total of 159 providers were interviewed under Model I (78 physicians and 81 nurses) versus 135 providers under Model II (54 physicians and 81 nurses).[9] As shown in Table 4 the average age of providers who participated in interviews for Model I was somewhat older (33.2 years) and they had more years of work experience (8.9 years) than those who participated in interviews for Model II (29.4 years and 5.9 years respectively). The differences were statistically significant ($p<0.05$). One striking finding is the relatively small proportion of providers under Model II, compared to Model I, who reported attending the offsite training conducted by TAHSEEN on improved PAC (52.6% versus 87.4%, $p<0.01$). This is mainly a result of provider turn-over where a considerable number of new residents and nurses were appointed to the Ob/Gyn department, especially in general hospitals, between the two rounds of provider interviews, while some of the ones who attended the training moved to other hospitals.

**Table 4 : Selected provider characteristics by intervention model**

| Characteristic | Model I (n=159) % | Model II (n=135) % |
|---|---|---|
| ***Provider title*** | | |
| Specialist | 22.4 | 23.0 |
| Resident | 17.6 | 17.0 |
| Nurse | 60.0 | 60.0 |
| ***Mean age**** | 33.2 | 29.4 |
| ***Mean years of experience**** | 8.9 | 5.9 |
| ***Attended TAHSEEN training on improved PAC*** ** | 87.4 | 52.6 |
| Physicians | 84.6 (n=78) | 53.7 (n=54) |
| Nurses | 90.1 (n=81) | 51.8 (n=81) |

*p<0.05 **p<0.01

## Supervisors

A total of nine managers and supervisors were interviewed in-depth after completion of all data collection activities. These included: Health Undersecretary in Beni Suef governorate, Family Planning Directors in Beni Suef and Fayoum governorates, the medical supervisor in Beni Suef, the Curative Care Director in Fayoum Governorate, Head of the Quality Assurance Unit at the Population Sector, one director of a district hospital, and directors of the two general hospitals. All interviewed supervisors are specialists i.e. have a master's degree and more than 10 years experience.

## *Model Feasibility*

The feasibility of providing family planning services to postabortion care patients in the Ob/Gyn ward was measured by ascertaining (1) hospital and provider readiness (knowledge, attitudes and perceived competence) to provide those services, (2) actual provision of family planning services under each model, and (3) provider and supervisor views about each model.

**Hospital and provider readiness:** Table 5 shows that the study hospitals were largely ready to provide family planning services on the Ob/Gyn ward. All six hospitals had the equipment necessary for family planning service provision e.g. gynecological operating table, speculums, and IUD insertion equipment. All six hospitals had combined oral pills (COCs), IUDs, and injectables in their family planning clinics while two of the hospitals did not have condoms. However, none of the hospitals was properly equipped to provide adequate family planning counseling services. For example, none of them had a special room for family

[9] Some providers participated in interviews for model I and model II.

planning counseling, counseling aids or family planning IEC materials (apart from the PAC brochure provided under the project).

**Table 5: Indicators of hospital readiness to provide family planning services**

| Item | Beni Suef General Hospital | Wasta District Hospital | Nasser District Hospital | Fayoum General Hospital | Itsa District Hospital | Ibshway District Hospital |
|---|---|---|---|---|---|---|
| Private counseling room | No | No | No | No | No | No |
| FP IEC materials | No | No | No | No | No | No |
| Speculums | Yes | Yes | Yes | Yes | Yes | Yes |
| Gyn operating table | Yes | Yes | Yes | Yes | Yes | Yes |
| IUD insertion equipment | Yes | Yes | Yes | Yes | Yes | Yes |
| Contraceptive methods at clinics | | | | | | |
| COCs | Yes | Yes | Yes | Yes | Yes | Yes |
| Condoms | Yes | No | No | Yes | Yes | Yes |
| IUDs | Yes | Yes | Yes | Yes | Yes | Yes |
| Injectables | Yes | Yes | Yes | Yes | Yes | Yes |

Table 6 shows indicators of provider knowledge, attitudes and perceived competence to provide family planning services to postabortion patients. As shown in the table more than 90 percent of providers interviewed under Model I or Model II knew the correct timing of return to fertility. Attitudes towards providing family planning counseling to postabortion patients were mostly positive. Three quarters (76 percent under both the models) indicated that postabortion patients need to receive family planning counseling before discharge while a majority, especially under Model II indicated that a postabortion patient needs to postpone her next pregnancy even if she wants more children (67.3 percent under Model I and 82.2 percent under Model II). Moreover, more than four fifths of providers interviewed under Model II (86.7 percent) reported that providing a family planning method immediately postabortion was medically acceptable.

**Table 6 : Providers' readiness to provide FP services by model**

| Indicator | Model I (n= 159) % | Model II (n=135) % |
|---|---|---|
| ***Knowledge*** | | |
| Knew correct timing of fertility return | 91.2 | 90.4 |
| ***Attitudes*** | | |
| Believe it's important to offer FP counseling to postabortion patients | 76.7 | 76.3 |
| Believe all PA patients, including primiparas, should receive FP counseling* | 30.6 | 40.6 |
| Believe PA patients need to postpone next pregnancy even if they want more children* | 67.3 | 82.2 |
| Believe all FP methods are suitable for PA patients* | 45.9 | 25.5 |
| Believe providing a FP immediately postabortion is medically acceptable+ | - | 86.7 |
| Believe it's their duty to provide FP counseling | 90.6 | 84.4 |
| ***Perceived competence*** | | |
| Rated their family planning counseling services as "good"+ | 65.4 | - |
| Feel competent enough to provide FP methods+ | - | 45.2 |

*p<0.05 +Question not asked to providers under that model

However, only a small proportion of providers mentioned that all postabortion patients should be offered FP counseling (30.6 percent and 40.6 percent of providers under Model I and Model II, respectively) or that all family planning methods could be used by postabortion patients (45.9 percent of providers under Model I and 25.5 percent of providers under Model II). The majority of providers believed that primiparas should not receive family planning counseling while in monitoring visits many providers expressed concerns about offering an IUD immediately postabortion for fear of causing infection. Those beliefs reflect a knowledge gap as well as personal biases against immediate use of contraception on the part of service providers.

Providers expressed a positive attitude towards providing family planning counseling, as the majority of providers believed it's their duty to provide family planning counseling to postabortion patients (90.6 percent under Model I and 84.4 percent under Model II). However, about two thirds of interviewed providers under Model I rated the counseling service they provide to postabortion patients as good while less than half of providers interviewed under Model II felt competent to provide family planning methods to postabortion patients with a remarkable difference between physicians and nurses in that respect (70.4 percent of physicians versus 28.4 percent of nurses). This finding may be a result of the fact that a large proportion of nurses who participated in Model II interviews were new and had not attended the training organized by TAHSEEN. It is noteworthy that 62% of providers who attended the TAHSEEN training reported competence in providing family planning methods to postabortion methods as compared to 26% of providers who did not attend the above training.

Table 7 compares family planning services provided to postabortion patients under each of the two models. According to the table, more patients were likely to report receiving FP counseling under Model II than Model I (85.1% versus 77.1%, $p<0.05$). Also, more patients were likely to report being referred to a FP clinic under Model II (75.0 % versus 65.3%, $p<0.05$). According to the providers, family planning counseling was done in the patients' room (52.7 percent) or in the operating room (32.7 percent) (data not shown).

**Table 7: Family planning services received by postabortion patients (by study model)**

| Service received | Model I (n=320) % | Model II (n=296) % |
|---|---|---|
| Received FP counseling* | 77.1 | 85.1 |
| Referred to a FP clinic* | 65.3 | 75.0 |
| Was told that she can receive a FP method before discharge | - | 77.0 |
| FP methods mentioned to patients | | |
| IUD | - | 72.0 |
| COCs | - | 59.8 |
| Injectables | - | 11.1 |

*p<0.05

Three quarters of patients under Model II (77.0 percent) mentioned being told by health care providers that family planning methods were available on the ward. The IUD and oral pills were the most likely methods to be mentioned to postabortion patients (72 percent and 59.8 percent, respectively). Surprisingly, injectables were only mentioned by one in ten postabortion patients.

## Provider and supervisor assessment of the two models

When providers were asked which of the two models they believed was better from a provider's perspective, more than half (59 percent) mentioned Model II; the main reason being "to ensure prompt use of contraception" (mentioned by 40 percent of providers).

Among the providers who preferred Model I (41 percent), the three main reasons were: "I don't have enough time" (14% of total provider sample), "patients refuse to receive a method" (8%), and "I don't have enough experience in providing methods" (7%).

When asked which model was better from a patient's perspective again the majority of providers (80 percent) mentioned Model II for the following reasons: it would help patients avoid an unwanted pregnancy (25 percent of all providers), it would be more convenient for patients (20%), and so the patient would not forget to receive a method within two weeks (7%). Providers who believed that Model I was better from a patient's perspective gave the following two reasons: "patient needs to consult with her husband / family (8%) and body needs to recover before receiving a method (5%).

When providers were specifically asked about difficulties they faced in providing family planning methods to postabortion patients, about two thirds (64.4 percent) mentioned difficulties like patient refusal (43.2 percent), unavailability of specific family planning methods on the ward (30.7 percent) e.g. injectables, and lack of monetary incentives (14.8 percent). Talking about the difficulties in implementing Model I, providers mentioned lack of counseling space (15 percent), lack of family planning methods on the ward (8.2 percent), time not suitable to provide services to patients (7.6 percent).

In addition providers were asked if the new responsibilities, e.g. counseling on family planning and/or method provision posed a burden for them. Less than one fifth of providers answered affirmatively (15.0 percent under Model I and 19.8 percent under Model II).

Almost all (8 out of 9) managers and supervisors interviewed supported the idea of providing family planning counseling and services to postabortion patients before discharge. Although they agreed that Model I was easier to implement, they thought that counseling alone may not be sufficient to motivate patients to use contraception; hence family methods should be available on the ward.

> *"Women may get busy after they go home and may get exposed to pressure from other family members so they end up getting pregnant again soon …"*
>
> (A manager at the central level)

The majority (8 out of 9) of interviewed supervisors believed that although offering family planning methods on the ward would pose an additional burden for some providers, through continuous monitoring and motivation provider resistance could be overcome. Only one supervisor out of nine argued that providers on the Ob/Gyn ward had too many responsibilities and therefore cannot take on an additional responsibility of providing family planning methods to postabortion patients.

The following suggestions and actions were made by managers and supervisors to enhance effectiveness of family planning service provision on the Ob/Gyn ward.

- A written protocol from the central office of the Population sector to be distributed to all hospitals delineating roles and responsibilities of Ob/Gyn ward staff vis-à-vis family planning clinic staff at each hospital.
- Residents should be the focus of training on family planning service provision since they are more available on the Ob/Gyn ward than other doctors. They should be given on-the-job training by medical supervisors who are affiliated with the

Population sector and who happen to be working at the same hospital as Ob/Gyn specialists.

- A selected group of nurses (3-4) who work on the Ob/Gyn ward and who are known to be dynamic and committed should also be trained.
- Supervisors from Curative Care and Population sectors should jointly supervise these physicians and nurses.
- A local committee at the governorate level that involves staff of Curative Care and Population sectors, hospital directors, as well as heads of Ob/Gyn departments in each hospital should be formed to resolve any service delivery problems.
- To motivate curative care providers, it was recommended that family planning method revenues be distributed among all providers who actually provided methods be that at the family planning clinic or on the Ob/Gyn ward.

For women who do not choose to receive a family planning method on the Ob/Gyn ward, one supervisor suggested conducting home visits by the *RR* (family planning outreach worker) to all women who have recently had an abortion / miscarriage to encourage them to use contraception. Another supervisor suggested some community awareness activities so women and their families would be aware of the need to use contraception immediately after an abortion/ miscarriage.

> *"I don't think the woman is the decision maker on this issue .. she should be informed that she could use a method immediately after an abortion or delivery .. women and their families need to be aware of this fact even before an abortion / miscarriage takes place ..."*
>
> (A medical supervisor in Beni Suef governorate)

## *Model acceptability*

Acceptability of Model II by patients, i.e. receiving a FP method on the Ob/Gyn ward, was measured through examining the percentage of postabortion patients who actually received a family planning method before discharge as well as patients who would have liked to receive a method. Patient acceptance of Model I, i.e. counseling alone was not measured in this study. Overall a total of eight patients (2.7 percent) received a method on the Ob/Gyn ward during the three-month data collection period for Model II. An additional 29 patients (13.4 percent) said they would have liked to receive a family planning method before discharge.[10] Reasons given by the patients for not accepting

**Table 8: Postabortion patients' reaction to receiving family planning methods in the ward**

| Statement | Percent of Model II women who agreed with statement N=292 |
|---|---|
| I would feel more comfortable since the doctor would know about my health status | 67.1 |
| It would save me time of going elsewhere to receive a FP method | 45.2 |
| It would be a burden for me to return to the hospital for follow up on the method | 54.8 |
| This would help me use the method at the right time | 62.3 |
| I would not be able to make the right decision when I'm in the hospital | 58.9 |
| My husband would be upset with me if I accept FP | 87.7 |

[10] Those patients did not receive a method perhaps because they were not offered one by the provider or because preferred method was not available.

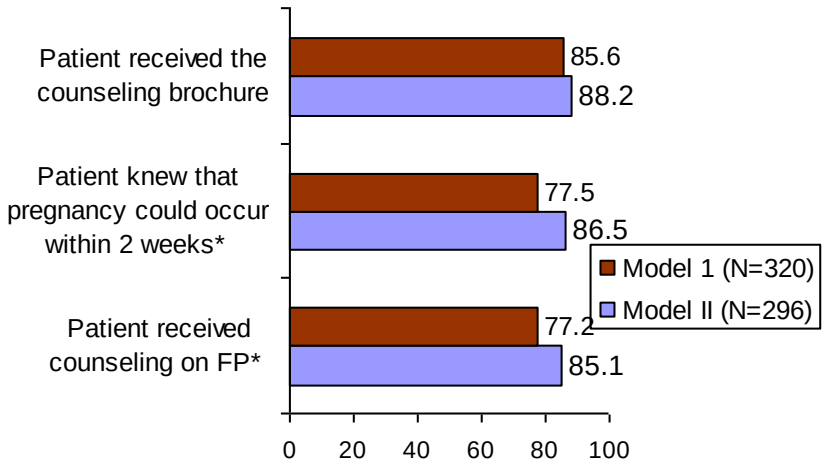
family planning before discharge included: “desire for more children” (51.8 percent), “body needs some rest” (23.5 percent), “need to consult with husband” (11.6 percent).

In follow-up interviews at home each participant was read a battery of statements regarding advantages / disadvantages of receiving a family planning method before discharge. Each participant was asked to indicate if she “agrees”, “slightly agrees”, “disagrees” with that statement or “does not know”. Table 8 shows that the two most important advantages to receiving a family planning method on the ward, as perceived by patients, were that the doctor would be knowledgeable about her health condition and hence would give her the right method (67.1 percent of patients) and that receiving a method on the ward would help her start using contraception at the right time (62.3 percent of patients). As to disadvantages, a large proportion of patients believed that their husband would be upset with them if they received a family planning method before discharge (87.7 percent), most probably because they did not consult with him before accepting a method.

## *Impact of integration models on quality of care*

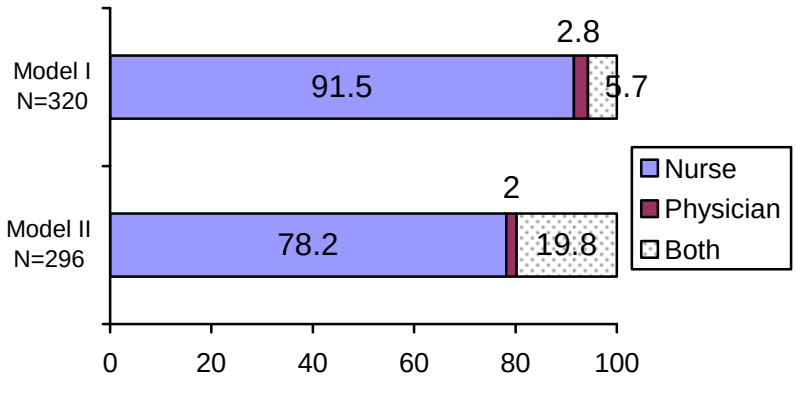
Quality of family planning services offered to PAC services was assessed from the answers given by patients in the exit interview. As shown in Figure 2, more patients under Model II compared to Model I reported receiving family planning counseling before discharge (85.1 percent versus 77.2 percent, $p<0.05$) and more patients under Model II knew that pregnancy could occur within two weeks (86.5 percent versus 77.5 percent, $p<0.05$). Moreover, Figure 3 shows that the proportion of patients who mentioned receiving counseling by both physician and nurse was significantly higher under Model II compared to Model I (19.8 percent versus 5.7 percent, $p<0.01$). This suggests greater involvement on the part

**Figure 2: Patients' reports on FP counseling services received under each study model**




*p<0.05

**Figure 3: Patients' reports of who provided FP counseling****




**p<0.01

of physicians in the counseling process under Model II. An equal proportion of patients under each model reported receiving the PAC brochure.

Table 9 presents selected aspects of patients' satisfaction with the services received under each of the two models. Patients who were exposed to Model II were generally more satisfied than those exposed to Model I. Patients exposed to Model II were particularly satisfied with the information they received from health care providers (86.8 percent under Model II versus 76.3 percent under Model I, p<0.01).

**Table 9: Postabortion patients' satisfaction with quality of services received under each model**

| Patient satisfaction item | Model I N= 320 | Model II N= 296 |
|---|---|---|
| Patient satisfied with level of privacy* | 81.3 | 87.2 |
| Patient satisfied with amount of information received** | 76.3 | 86.8 |
| Patient would have liked to receive more information** | 17.5 | 8.8 |
| Patient described services as good* | 82.8 | 88.5 |

*p<0.05 **p<0.01

## *Model effectiveness*

Effectiveness of the two models was assessed by measuring proportion of postabortion patients under each model who reported contraceptive use within three months after discharge from the hospital.

A total of 308 postabortion patients were successfully reached for the follow-up home interview under Model I and 292 patients under Model II. Table 10 presents data on family planning use status among postabortion patients who were exposed to each model. Slightly more patients under Model I compared with Model II were using a family method at three months post-discharge (29 percent versus 24 percent), but this difference is not statistically significant. Moreover, the proportion of patients who started using contraception within two weeks post discharge was almost equal under the two models (14.3 percent under Model I and 17.5 percent under Model II).

**Table 10: Family planning profile of postabortion patients at three months post-discharge by intervention model**

| Finding | Model I N= 308 | Model II N= 292 |
|---|---|---|
| *FP use status* | | |
| Used a FP method since discharge | 34.7 | 29.1 |
| Currently using a FP | 29.0 | 24.0 |
| *Used a method within 2 weeks post discharge* | 14.3 | 17.5 |
| *Method used since discharge from hospital** | *N= 107* | *N= 85* |
| IUD | 19.6 | 35.3 |
| Oral pills | 58.0 | 43.5 |
| Injections | 21.5 | 35.3 |
| Sub dermal capsule | 0.9 | 1.2 |

*p<0.05

Among patients who reported using a method, oral pills were the most likely to be used method (57.9 % under Model I and 43.5% under Model II) followed by the IUD (19.6% under Model I and 35.3% under Model II). It is noteworthy that

acceptance of the IUD was significantly higher under Model II compared to Model I which perhaps reflects bias for the IUD among providers on the Ob/Gyn ward.

An equal proportion of patients under each model reported family planning discontinuation in the last three months (4.2 percent under Model I and 3.8 percent under Model II). The main reasons for discontinuation were method side effects, husband's absence and desire to get pregnant.

### Profile of women who received a FP method on the Ob/Gyn ward

Even though the number of postabortion patients who received a family planning method before discharge is very small it was important to examine the profile of those women and their experience with the received method.

The patients who received a family planning method before discharge were somewhat older than average postabortion patients who participated in this study (mean age = 29 versus 26) and have on average more living children (mean= 3.4 versus 2.4). All of those women used family planning before while three of them were using a family planning method at the time of the lost pregnancy. Their reports suggest that they had received adequate family planning services, i.e. received family planning counseling, were informed about time of return to fertility and received the PAC brochure. The majority of those patients (six out of eight) received an IUD, one received oral pills and one received an injectable.

Seven of the above patients were successfully reached through a home interview while one was lost to follow up. Of these seven women, three were still using the same family planning method while two had switched to another method as a result of side effects. The remaining two stopped using contraception because they wanted to get pregnant. Interestingly, both of these patients had indicated earlier that they do not want to have more children.

## *Economic analysis of the two intervention models*

For the purposes of the economic analysis it is helpful to think of the interventions as consisting of two phases: Model I (the training intervention) was carried out first, and then Model II (additional training and putting FP methods on the ward) was built upon the foundation established in Model I. In other words, Model II includes Model I plus additional staff training as well as provision of FP methods on the ward. Table 11 provides information on the costs of the two intervention models as implemented by TAHSEEN. It is important to note that the training course covered many topics related to PAC, and only those costs directly related to FP are included in the table. Costs of training dominated the total costs of Model I and the majority of these costs are related to trainee transport, per-diem and accommodation. The majority of training costs were financial costs (costs that require an actual payment from TAHSEEN), but there were also opportunity costs associated with the time that trainees spent away from their regular duties. These costs are very low, reflecting the low wages earned by public-sector medical staff.[11] On-site coaching costs were the largest cost element in Model I not directly related to the original training courses

[11] Hospitals that sent staff to receive training in PAC did not provide replacement staff to fill in during their absence. Therefore, the opportunity cost of trainee time was borne by other providers in the form of a higher workload.

Costs of Model II are only slightly higher than Model I, reflecting mainly the costs of additional training and supervision. The additional training on FP provision lasted for one day and incurred lower trainer fees and trainee costs than the initial training. Supervisory visits were reimbursed under a consultancy arrangement at a per-visit cost of less than half of that in Model I. Finally, there were no costs to reorganize the ward to provide FP methods, since IUD insertions were performed in existing facilities (i.e., the delivery room, and other FP services). Counseling, injectables and oral contraceptives were provided at the client's bedside.

**Table 11: Costs of intervention models by governorate**

| Cost Items | Fayoum | Beni Suef | Total |
|---|---|---|---|
| **Model I** | | | |
| Off-site Training | | | |
| Trainee Costs | 26180 | 26803 | 52983 |
| Trainer Fees | 7700 | 7700 | 15400 |
| Training Overhead | 5082 | 5176 | 10258 |
| Opportunity Cost Provider Time | 636 | 669 | 1305 |
| On-site Coaching | 5244 | 6098 | 11342 |
| PAC brochure | 518 | 518 | 1036 |
| **Total Model I Costs** | **45360** | **46964** | **92325** |
| **Model II (includes Model I)** | | | |
| Model I costs | **45360** | **46964** | **92325** |
| Refresher Training | 3790 | 4570 | 8360 |
| On-site Coaching | 1340 | 1340 | 2680 |
| PAC Brochure | 518 | 518 | 1036 |
| **Total Model II Costs** | **51008** | **53392** | **104401** |
| Number of Trainees | 84 | 86 | 170 |
| Number of Hospitals | 3 | 3 | 6 |
| Model I Cost per Trainee | 540 | 546 | 543 |
| **Model II Cost per Trainee** | **607** | **621** | **614** |
| **Model I Cost per Hospital** | **15120** | **15,655** | **15,388** |
| **Model II Cost per Hospital** | **17003** | **17797** | **17400** |

The table also presents estimates of costs of the interventions per hospital and per trainee. Costs in the two governorates were very similar because the number of trainees and the approaches used to train and supervise them were the same. The total cost of the portion of the intervention dedicated to increasing use of FP among PAC clients was LE 104,401, or approximately US$18,157 at the current exchange rate of LE 5.75 to one US dollar. Average cost per hospital was LE 17,400 (US$3,026) and the average cost per trainee was LE 614 (US$107).

## Incremental cost-effectiveness

Table 12 shows the results of the incremental cost-effectiveness analysis. The analysis is presented separately for general hospitals and district hospitals because of the large differences in numbers of PAC clients attending the two types of facilities. The per-hospital incremental cost (column two) is the same for both hospital types, because the training, supervision and other intervention activities do not vary by type of hospital. The number of PAC clients initiating FP (column three) assumes a one-year timeframe, and was calculated from the values in Table 1.[12] The incremental cost-effectiveness ratio for a general hospital implementing Model I is LE 84 per acceptor; implementing Model II produces a lower incremental cost-effectiveness ratio of LE 49 per acceptor because the increase in

[12] The two general hospitals in the survey attended an average of 3.5 PAC clients per day (1,278 per year), while the four district hospitals attended an average of 0.75 PAC clients per day (274 per year). For Model I, the proportion of PAC clients using FP at 14 days was 14.3 (table 11); 1278 PC clients times .143 = 183 acceptors. For Model II, we assume that PAC clients are exposed to the effects of Model I plus the additional effects of Model II; the number of acceptors is therefore calculated by multiplying the proportion of Model II acceptors (17.5%) by the number of PAC clients per year (1278), which equals 224 acceptors resulting from implementation of Model II.

effectiveness moving from Model I to Model II is proportionally larger than the increase in cost. District hospitals exhibit higher incremental cost-effectiveness ratios, which are simply the result of the intervention costs being distributed across much lower numbers of PAC clients.

**Table 12: Incremental cost-effectiveness of the two models, by type of hospital**

| Hospital Type and Intervention Model | Cost | No. of PAC-FP acceptors | Incremental C/E ratio |
|---|---|---|---|
| | | | |
| General Hospital – Model I | 15,388 | 183 | 84 |
| General Hospital – Model II | 17,400 | 224 | |
| Incremental (Model II – Model I) | 2,013 | 41 | 49 |
| | | | |
| District Hospital – Model I | 15,388 | 39 | 395 |
| District Hospital – Model II | 17,400 | 48 | |
| Incremental (Model II – Model I) | 2,013 | 9 | 224 |

These estimates assume that the effects of the intervention would last for one year, and then the intervention would need to be repeated in order to strengthen provider skills and also to train new staff due to turnover. If the useful life of the intervention is assumed to be two years, however, then we could assume that twice as many acceptors would be produced by one application of the intervention, resulting in incremental cost-effectiveness ratios that would be half of those shown in Table 12.

## Costs of scaling up the intervention

The economic component provides information on the cost and incremental cost-effectiveness of the intervention as it was implemented in the context of the operations research project. But if the intervention were scaled up to an entire governorate or countrywide, what would the costs be? A simple approach would be to assume that costs of a scaled-up intervention could be estimated by multiplying the average cost per hospital by the number of hospitals receiving the intervention. But experience has shown that scale-up costs are not simple multipliers of the costs measured in the OR Project. Pilot projects often use more expensive inputs, and donors often pay higher prices for inputs than would a ministry of health or other local entity. Also, the intensity of the intervention – for example, the number of supervisory visits – may be greater in the pilot project than in a scale-up situation because in the pilot project there is great interest in demonstrating effectiveness. For these reasons and others, estimates of scale-up costs must be made using realistic assumptions about how the intervention would be implemented within the local context, using local resources.

Table 13 provides a comparison of selected cost items of the pilot project per hospital, and also the estimated costs of scale-up per hospital if the MOHP were to implement the intervention in other hospitals. The scale-up estimate assumes that the intervention is carried out in one step rather than in two steps as was done in the OR Project.[13] A one-step intervention would consist of a training course for physicians and nurses to provide better counseling and referral for PAC patients interested in using FP, followed by on-site coaching and FP method provision. Only a subset of items shown in table 11 is included in this table. The reason for excluding certain items is either that there would be no difference between the pilot and the scale-up (for example, costs of brochures or opportunity cost of provider time) or they would not be needed in a one-step intervention (i.e., a second round of training in provision of FP, as was done in Model II).

[13] The two-step design was required by the research design in order to isolate the effects of the two models..

As the table shows, costs of scaling up the intervention would be considerably lower than in the OR pilot project. Trainee costs and on-site coaching account for the largest differences between the pilot project and the scaled-up intervention. The Ministry of Health provides a flat amount for trainee travel that varies by the distance of a governorate from Cairo. Within a governorate this amount is LE 30 per day, while travel to other governorates is reimbursed at LE 80 to LE 100, depending on the distance. The customary perdiem for hotel accommodation is LE 90. Thus, the total per attendee would be either 30 if in the same governorate, or LE 170 – LE 190 if in a different governorate. This amount is much lower than the LE 312 per day[14] provided for trainee costs during the project.

**Table 13: Comparison of pilot and scale-up intervention costs for one hospital**

| Cost Items | Pilot Project | Scale-up Estimate | |
|---|---|---|---|
| | | Different Governorate | Same Governorate |
| Off-site Training (30 persons/1 Day) | | | |
| Trainee Costs | 9,360 | 5,400 | 900 |
| Trainer Fees (2 trainers) | 1,100 | 400 | 400 |
| Training Overhead | 866 | 0 | 0 |
| On-site Coaching | 4,674 | 720 | 720 |
| **Total** | 16,000 | 6,520 | 2,020 |

Notes: Trainee costs in the "different governorate" scenario assume LE 180 for 1 day multiplied by 30 persons to cover travel and accommodation. In the "same governorate" scenario the cost is LE 30 per person to cover travel only. Trainer fees assume LE 200 for 1 day for 2 persons. No training overhead is included in the scale-up scenario because the MOHP would not charge itself overhead. On-site coaching assumes 12 visits for two persons times LE 90 per visit, divided by 3 hospitals.

Fees paid to trainers also would be much lower in the scaled-up intervention. The Ministry of Health pays LE 100 per lecture, up to a maximum of LE 200 per day for an instructor who provides a full day of training. This amount compares to LE 550 per day[15] paid to instructors in the pilot project. Training overheads would disappear in the scaled-up intervention, since the MOHP would not charge overhead on its own activities. Finally, the estimate of costs of on-site coaching visits assumes an average payment of LE 90 per day of supervision. This amount is the average of the LE 80 paid for visits to governorates close to Cairo and the LE 100 paid for visits to distant governorates. Frequency of supervision is assumed to be one visit per month by a team of two persons.

# CONCLUSIONS

The study results suggest that both models (providing family planning counseling and referral to a clinic near the patient's residence versus providing family planning counseling and offering a family planning method to postabortion patients) were feasible. To a great extent hospitals had the facilities and equipment to provide both models. Providers had the knowledge and skills to provide family planning counseling but skills necessary for method provision need further improvement.

According to the study results both models were acceptable, although one of them was more acceptable to providers and supervisors than to patients. In this study only a small proportion of postabortion patients actually received a family method before discharge (2.7%) while an additional 13% said they would have liked to receive a method. This situation contrasts with

[14] See table 13: LE 52,983 divided by 170 trainees = 312 per trainee.
[15] See table 13: LE 15,400 divided by 14 trainings in both sites, divided by 2 trainers per training = LE550.

other countries where more than half of patients who were offered a family planning method actually left with one (Saveliva, 2002; Solo et al., 1999).

The study has shown that putting family planning methods on the ward was associated with improved quality of counseling and improved patient knowledge. This finding is consistent with evidence from other countries e.g. Kenya and Russia (Solo et al., 1999; Saveliva, 2002;). However, the fact that Model II was implemented after Model I may have contributed to those improvements in quality of care, as providers had longer time to master the skills of counseling and improved postabortion care. But still there is room for improving the quality of counseling provided to postabortion patients by designating special space for counseling and by making IEC materials available to postabortion patients and providers.

With regard to effects on contraceptive use, the two models had a rather similar impact. At three months post discharge there were slightly more contraceptive users under Model I compared with Model II (30% for Model I and 25% for Model II) while the proportion of patients who had started family planning use within two weeks postabortion was slightly higher under Model II compared to Model I (17.5% versus 14.3%, respectively). The latter proportion is likely to increase if the quality of family planning counseling offered to postabortion patients is improved.

The economic analysis found that the cost of training hospital staff to provide FP counseling to PAC clients was approximately LE 15,388 per hospital, or US$2,676 at the exchange rate prevailing in 2005. If methods were placed on the ward and an additional day of training provided, the cost increased to LE 17,400 (US$3,026). Incremental cost-effectiveness of Model I was LE 84 (US$14.61) per PAC patient reporting FP use at 14 days post-discharge, and the incremental cost of moving from Model I to Model II dropped to LE 49 (US$8.52) per PAC FP acceptor. The increased effectiveness of Model II probably was related to the higher proportion of clients that received FP counseling, and perhaps the larger group receiving counseling from both a physician and a nurse (see table 9).

Whether these costs are considered to be high or low can be evaluated only in the context of other investments that the Ministry of Health could make with the same resources.[16] If this intervention, compared to other approaches that could be tried, is seen as a low-cost approach for encouraging MOHP goals regarding post-abortion use of contraception, then it may be a good use of scarce resources. Such comparisons are the best example of utilization of findings from economic components.

We estimate that costs of scaling up the intervention would be much lower than the costs measured in the OR Project. Lower costs result mainly from lower input prices but also from reduced intensity of intervention elements such as supervision. However, substituting other resources and changing intervention procedures almost certainly will change the effectiveness of the intervention, although in unpredictable ways. Thus, even though scale-up costs are projected to be much lower, effectiveness may be also be lower, resulting in a different cost-effectiveness ratio. It is not known whether cost-effectiveness would be higher or lower in the scale-up scenario.

This study sought to answer the question: "Given that the two models were fairly equal in terms of feasibility, acceptability and effectiveness, which of the two models should the

[16] This is the concept of "opportunity costs" that underlies all economic theory.

MOHP adopt?" The answer that we propose is to adopt Model II but with further improvements in family planning counseling services to postabortion patients. Every patient should be offered *adequate* family planning counseling, a description of all available family planning methods and a choice of receiving a family planning method on the Ob/Gyn ward before discharge or at a clinic near her residence within two weeks. The importance of receiving a family planning method within two weeks should be emphasized to all postabortion patients in order to avoid an unwanted or a closely spaced pregnancy.

At present, women who are most likely to accept a method before discharge are women who do not want more children and those who had previously used contraception or who had consulted earlier with their husbands about the need to use contraception. Offering family planning methods to those women would save them the effort of going to a family planning clinic after discharge and would protect them from an unwanted pregnancy.

However, for the majority of postabortion patients who want to have more children, offering a family planning method before discharge may not be as useful. Many of those women have concerns about effects of contraception on their future fertility and may be under pressure from their husbands / in-laws to become pregnant soon (Huntington, Nawar and Abdel-Hady, 1997). Those women may need to consult with their husbands / in-laws before accepting a method. At a minimum, those women should receive adequate counseling about the importance of spacing pregnancies for at least six months for the benefit of the mother and the next child and should be advised to initiate family planning use within two weeks. It would be helpful if husbands of those patients received counseling about the above issues as well as their wife's medical condition and recovery as they come to pick up their wives at the hospital (Abdel-Tawab, et al., 1999).

Finally, it is important to note that offering family planning methods and counseling on the ward may not be sufficient for enhancing postabortion use of family planning if families continue to pose pressure on postabortion women to become pregnant soon and if they discourage them from using contraception immediate postabortion. This calls for interventions that target community members and primary health care providers to raise their awareness about the importance of inter-pregnancy spacing, dispel rumors and misconceptions about effects of family planning methods on subsequent fertility and to solicit their support of immediate use of contraception.

# POLICY RECOMMENDATIONS

- Hospitals providing postabortion care services should offer family planning counseling and methods to <u>all</u> postabortion patients. Those who choose to defer the decision to initiate contraceptive use should be offered a choice of referral to a family planning clinic near their residence.
- Postabortion care protocols and training manuals should highlight the need for inter-pregnancy spacing (for at least six months) to ensure adequate maternal and fetal outcomes. Those protocols and manuals should also emphasize that all family planning methods are suitable for postabortion patients unless there are complications that contraindicate use of specific methods.
- A joint supervision system that involves FP and Curative Care supervisors should be developed to ensure availability of family planning methods and counseling services on the Ob/Gyn ward.

- A space for counseling patients and their husbands should be available on every Ob/Gyn ward. In addition, IEC materials that address family planning needs of postabortion patients should be made available on the Ob/Gyn ward and should be offered to every postabortion patient so she could share with her family.
- Community awareness activities by Raedat Rifyat (FP outreach workers), nurses and IEC officers should be undertaken to inform women and their families about the need to postpone pregnancy after an abortion, time of return to fertility and to dispel misconceptions about the effects of using a family planning method immediately postabortion.

# UTILIZATION

The Ministry of Health and Population is the main stakeholder that would benefit from the results of this study. Senior officials of the Curative Care and Population Sectors have been heavily involved in all phases of the study through a steering committee that met every two months. In addition, representatives of the two sectors participated in monitoring visits conducted by TAHSEEN and FRONTIERS staff to ensure adequate implementation of the intervention.

At the governorate level, two smaller steering committees were formed at each study governorate to monitor implementation of the intervention and to resolve administrative and logistical issues that arose during implementation. Each committee included the Undersecretary of Health, Family Planning and Curative Care supervisors at the governorate and district levels, hospital directors and heads of Ob/Gyn departments. The above committee met on a monthly basis.

The MOHP has shown keen interest in the results of the study. Following receipt of a research update of this study, the Minister of Health and Population himself requested that 300 providers in MOHP hospitals receive training on PA FP service delivery. Moreover, a decision to integrate postabortion family planning within postpartum family planning programs was made by the Population Sector Undersecretary. The training protocol that is implemented by the Regional Center for Training for MOHP staff will be adapted to include a component on postabortion family planning methods and counseling. USAID Egypt has provided funds to FRONTIERS in order to expand the above PP FP program to include postabortion FP.

The second stakeholder that will use the study findings is the TAKAMOL Project, the successor of TAHSEEN / Catalyst Project. This USAID funded project will be implementing the Emergency Obstetric Care package in 100 hospitals in Upper and Lower Egypt over a five-year period. FRONTIERS and TAKAMOL will be collaborating on updating National Standards of Practice for Postabortion family planning to emphasize provision of family planning services to all postabortion patients, regardless of parity. In addition, the updated Integrated Standards of Practice for primary health care providers will emphasize return of fertility within two weeks following an abortion and the importance of inter-pregnancy spacing.

The study findings have been presented in a series of publications and dissemination seminars. As mentioned above, a research update was produced half way through the project to describe the process of implementation of Model I and to present key findings. After

completion of the project, a six-page Arabic policy brief describing key study findings was produced and is currently being mailed to concerned policy-makers and program managers nationwide. The English report will mostly go to researchers and donors as well as relevant audiences in the region.

In addition, three dissemination seminars were held to present results of the study, one seminar in Cairo and two in the study governorates. A report describing highlights of those seminars is attached in Appendix II. The Cairo seminar also presented results of the "Pain management study" and was attended by more than 50 participants representing policy makers, program managers, CAs, prominent Ob/Gyn physicians and researchers. The two local seminars that were held in Fayoum and Beni Suef were attended by senior physicians from the study hospitals, as well as representatives of Population and Curative Care sectors in the two study governorates. The following key recommendations were made by participants at the above seminars:

- Family planning services (methods and counseling) should be offered to postabortion patients on the Ob/Gyn ward;
- Standards of Practice manuals on provision of postpartum / postabortion family planning services should be provided to each hospital;
- Curative care providers should receive training on integrated reproductive health services;
- A mechanism of joint supervision that involves officials from both the Curative Care and Population Sectors should ensure provision of quality family planning services on the Ob/Gyn ward.

FRONTIERS is currently working with senior officials at the Population and Family Planning Sector and the Curative Care Sector as well as TAKAMOL Project to ensure implementation of these recommendations.

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# APPENDIX I: Supplemental Report

## Pain Management in postabortion care: An investigation of attitudes and practices in selected public hospitals in Egypt[17]

*Nahla Abdel-Tawab*

*Hala Youssef*

## SUMMARY

Although improved pain management has always been a component of the improved PAC package that was implemented in Egypt over the last decade, implementation of that component of the package has seldom been assessed. The present study investigates pain management attitudes and practices of physicians and nurses in relation to care of postabortion patients and examines patients' perspectives on the care that they received and their preferences for pain management. Data for the present study were collected in eight hospitals: two university / teaching hospitals that have a fairly established improved PAC program, four hospitals that have recently received interventions for improved PAC and two hospitals that have not received any intervention for improved postabortion care (will be referred to thereafter as standard care hospitals). Sources of data included (1) two focus group discussions (FGDs) with doctors at general and district hospitals, (2) in-depth interviews with 8 physicians and 8 nurses, and (3) in-depth interviews with 12 consenting postabortion patients before their discharge from hospital.

The study results revealed that there were no set protocols for pain management in postabortion care. There is overuse of sedatives, narcotics and general anesthesia while local anesthesia (para-cervical block) is severely underutilized. Patients rarely received any form of counseling during their management. Both providers and patients have reservations about use of local anesthesia. Providers are concerned that local anesthesia may not be effective with all patients, while patients want to be assured that they will not feel any pain during the procedure and that their privacy and dignity will be respected during the operation.

The study findings underscore the need for developing pain management protocols, adequate training of service providers on counseling and administration of para-cervical block and community outreach activities to raise public awareness about the risks of general anesthesia and to promote acceptance of local anesthesia. The study results have been shared with colleagues at service delivery projects to ensure their integration within their training programs. Also, they will be shared with senior officials at the Curative Care sector to promote relevant programmatic changes to ensure safe postabortion services in Egypt.

[17] Special thanks go to Dr. Mohamed Abou Gabal of TAHSEEN/Catalyst Project for introducing us to the management team and providers in the study hospitals. We are also grateful to Dr. Ezzeldin Osman, Professor of Ob/Gyn at Mansoura University and Dr. Rafeek Refaat, Lecturer of Anesthesia at Cairo University, for reviewing earlier drafts of this report and for providing invaluable comments.

# BACKGROUND

Abortion (spontaneous or induced) is often a painful experience, both in the physical and emotional sense. Postabortion patients may suffer from pain, bleeding and emotional stress. There are two types of pain that postabortion patients may feel: a deep intense one that accompanies cervical dilation and stimulation of the internal os (orifice) while the second type is a diffuse lower abdominal pain with cramping which occurs with movement of the cervix, scraping of the uterine wall and uterine muscle contractions related to emptying of the uterine cavity (Winkler, Oliveras & McIntosh, 1995). In addition, the condition is often accompanied with fear and anxiety over the bleeding or the procedure itself, which may further exacerbate the feeling of pain. Research from Egypt and Mexico has shown that postabortion patients experience excessive pain and fear before, during and after uterine evacuation (Huntington, Nawar and Abdel-Hady, 1997; Fuentes Valasquez et al., 1998).

In many countries women with incomplete abortion are managed by evacuating the contents of the uterus using Dilatation and Curettage (D & C) under general anesthesia. However, over the last two decades new protocols for improved postabortion care (PAC) have been developed recommending use of manual vacuum aspiration (MVA) instead of the sharp curette and paracervical block instead of general anesthesia. Paracervical block involves injection of small doses of a local anesthetic, e.g. lidocaine, in and around the cervix. Paracervical block guards against shock pain induced during cervical dilatation (Winkler, Oliveras & McIntosh, 1995).

The goal of pain management for use of MVA is to ensure that the patient is feeling as comfortable as possible while reducing the risks and side effects associated with used medication (Casleman & Mann, 2002). In cases where the cervix is already dilated, gentle handling and supportive treatment by the physician and nurse (verbal anesthesia) combined with the administration of a non-narcotic analgesic may be sufficient. If additional dilatation of the cervix is needed, the administration of local anesthesia (paracervical block) is the best and safest choice. In addition, adequate patient counseling before and during the procedure, including information about her medical condition and the management process, would help alleviate her anxiety and calm her down during the procedure (Winkler, Oliveras & McIntosh, 1995).

Egypt is a country with a high caseload of postabortion patients. About one in every five admissions to the Ob/Gyn ward was for treatment of an abortion (miscarriage and induced abortions combined, including inevitable, incomplete, missed and complete abortions) (Huntington et al, 1997). Over the last ten years several interventions have been implemented by the Population Council and other organizations with the aim of improving postabortion care in Egypt. In 1994, improved PAC was introduced through an operations research study that was conducted in two large hospitals (one university and one teaching hospital) by the Population Council ANE OR/TA Project and the Egyptian Fertility Care Society (Huntington et al., 1995). The above intervention was subsequently scaled up in ten university and Ministry of Health and Population (MOHP) hospitals in Upper and Lower Egypt (Nawar et al., 1997). Most of the components of the improved PAC package were adopted afterwards by the Ministry of Health and Population Safe Motherhood Program that was implemented in more than 70 hospitals in Upper Egypt between 1995 an 2002. Recently, TAHSEEN / CATALYST project (2002 – 2005) and its successor TAKAMOL Project (2006 – present )

have focused on improved PAC services in more hospitals in Upper and Lower Egypt with an emphasis on linking family planning with postabortion care.[18]

# STATEMENT OF THE PROBLEM

Although improved pain management has always been a component of the improved PAC package, implementation of that component of the intervention has seldom been studied in Egypt. In fact, most assessments that were conducted over the last decade examined the extent to which providers used MVA as opposed to D & C and the percent of cases that were managed under local anesthesia (paracervical block) as opposed to general anesthesia. For example, a study that was conducted in ten hospitals under the ANE OR/TA project showed that before the intervention only 1% of postabortion cases were managed under local anesthesia while after the intervention this proportion increased to 30% (Nawar et al., 1997). However, very little of that research explored pain management practices in postabortion care in more depth to understand why certain regimens are used / not used or to understand provider or patient attitudes about new regimens for pain management. This information would assist the Egyptian MOHP in identifying and addressing gaps related to postabortion pain management in public hospitals. Moreover, results of this study would assist in the development of treatment protocols that are better suited for working conditions in the Asia and Near East region and hence make postabortion care services safer for millions of women in this region.

# STUDY METHODOLOGY

## *Study Objectives*

The study investigated pain management attitudes and practices in relation to care of postabortion patients. Specific objectives of the study were:

- To examine pain management practices in hospitals that had been exposed to improved postabortion care interventions as well as hospitals providing standard care;
- To understand providers' perspectives on pain management and use of para-cervical block;
- To understand postabortion patients' perspectives on the care that they received and their preferences for pain management.

## *Research Methods*

Data for this study were collected from eight hospitals: two university / teaching hospitals that have a fairly established improved PAC program (will be referred to thereafter as training hospitals)[19], four hospitals that have recently received the TAHSEEN/ Catalyst intervention for improved PAC services in Fayoum and Beni Suef governorates (will be referred to thereafter as intervention hospitals) and two hospitals that have not received any intervention for improved postabortion care (will be referred to thereafter as standard care

[18] Both projects are funded by USAID Mission in Egypt

[19] The above two hospitals had participated in earlier operations research studies conducted by the Population Council ANE OR/TA Project and Egyptian Fertility Care Society (EFCS) hence were used as training centers by TAHSEEN/CATALYST Project.

hospitals).[20] The above selection aimed at providing different types of hospital settings and hence a wide range of pain management practices and perspectives.

The study used qualitative data collection techniques consisting of:

1. Two focus group discussions (FGDs) were conducted with doctors from four general and district hospitals in Fayoum and Beni Suef governorates. Those discussions collected information on different pain management regimens that are practiced in public hospitals. Each of the two session lasted about 1 hour 15 minutes.
2. In-depth interviews with 8 physicians and 8 nurses representing different categories of hospitals, namely training hospitals (2 physicians and 1 nurse), intervention hospitals (4 physicians and 3 nurses) and standard care hospitals (2 physicians and 3 nurses). Those interviews probed into use of analgesia, general anesthesia and para-cervical in that hospital and attitudes towards different pain management regimens. Each interview lasted for 20-30 minutes.
3. In-depth interviews with 12 consenting postabortion patients before their discharge from hospital (6 from training hospitals, 4 from intervention hospitals and 2 from standard care hospitals). Those interviews probed into actual care received by postabortion patients, their perceptions of the received care and their pain experience while at the hospital. Interviews with patients lasted 15-20 minutes. It is noteworthy that difficulties were met in interviewing postabortion patients in standard care hospitals due to the low caseload in those hospitals.

# FINDINGS

## *Hospital characteristics*

The two training hospitals were the largest of the eight study hospitals and both are maternity hospitals. The teaching hospital has a total of 400 beds, 50 residents, 12 assistant specialists, 40 specialists / consultants and 350 nurses. That hospital receives 6-7 abortion cases and about 70 deliveries per day. The university hospital has about 330 beds in the Ob/Gyn department, 240 nurses, 24 residents and about 20 Assistant lecturers (specialists). On average that hospital receives 40-50 deliveries and 5-6 abortions per day.

The four intervention hospitals include two general hospitals and two district hospitals i.e. public hospitals located in smaller cities. The two general hospitals have an average of 28 doctors, 21 nurses and 54 beds. On average they receive 15-20 deliveries and 3-4 abortions per day. The two district hospitals have an average of 11 physicians, 6 nurses and 14 beds. They receive an average of 3-4 deliveries and about one case of abortion per day.

The two standard care hospitals are both district hospitals located in Beni Suef and Fayoum governorates. They are more or less similar to the above district hospitals but have a lower caseload (4-5 cases per week).

[20] Two of the four hospitals in Fayoum and Beni Suef were also part of the "Postabortion family planning model-testing study"

## *Participants' characteristics*

Physicians who participated in the in-depth interviews included two residents, one assistant specialist and five specialists / consultants. The number of years of experience for physicians ranged from 3 - 25 years and from 4 - 21 years for nurses.

Postabortion patients who were interviewed in this study were on average 26 years old (range 16-37). More than half of them were primiparas, i.e. pregnant for the first time. All interviewed patients were less than three months pregnant at the time of lost pregnancy.

## *Patients' presentation at the hospital*

For all except three (out of 12) of the interviewed patients the abortion experience started with spotting few days before admission to the hospital. A private physician was consulted first who advised the patient to stay in bed and to take some medication to "stabilize the pregnancy". But the condition soon progressed to bleeding and/ or abdominal pain at which point the treating doctor referred the patient to the study hospital for evacuation. Three of the interviewed did not experience any symptoms until a routine ultrasound revealed that the fetus was not growing hence they were referred to the study hospital for evacuation.

> *"After doing laundry I noticed some blood spots .. I saw a doctor who told me my uterus was closed and asked to rest on my back .. the following day the bleeding increased"* (A 37 year old patient treated at an intervention hospital)

At the time of admission to the hospital 8 out of 12 of the interviewed patients had lower abdominal pain while some had back pain as well. Only two patients described the pain as mild, while the others said the pain was as severe as labor pain. For the remaining four patients bleeding was the main presenting symptom.

> *"It is much worse than menstrual pain .. I almost lost consciousness; it was like labor pain .. I never had it before. They said to me that for the blood clot to come out I would feel this severe pain …"* (a 20 year old patient at a training hospital)

> *"I had severe colic .. a stabbing pain that would stop for two minutes and come back …"* (a 16 year old patient at an intervention hospital)

## *Providers' perceptions of pain*

Although interviewed physicians and nurses acknowledged the pre operative pain felt by postabortion patients, they tended to attribute that pain to psychological factors, namely the patient's sadness over the lost pregnancy or fear of the surgical procedure. One doctor argued that the condition of incomplete abortion was not very painful but some patients may over express pain in order to draw more attention from hospital staff. However, all providers agreed that primiparas were more likely to experience pain than other postabortion patients because their cervix would be usually closed and because of their sadness over the lost of first pregnancy.

*"Part of the felt pain is psychological especially if the woman has lost a wanted pregnancy or one that came after a period of infertility"* (A resident working at an intervention hospital)

*"The sheer fact that they are bleeding makes them panic and think that they will die but if you handle them gently and act like a sister to them they would calm down …"* (a nurse working at a training hospital)

## *Providers' pain management practices*

### Before the surgical procedure

In general, interviewed patients mentioned that they were operated upon shortly after admission to the hospital (within 1-2 hours). Only patients whose cervix was still closed on admission (n=4) had to wait for several hours to be operated upon. Patients in one of the two training hospitals received a medication (Misoprostol / Mesotec) to open the cervix and one of them had to wait for up to 24 hours for her cervix to open. Those hours of waiting were described by patients as being painful and dreadful.

*"I was admitted at 2:00 pm .. I was having abdominal pain, headache and back pain .. they gave me a suppository to open my cervix .. it was only at 9:00 pm when my cervix started to open .. I used to cry but each time the doctor would tell me that I am not ready yet and that I have to wait until my cervix opens ..* (A 29 year old patient at a training center)

Interviewed providers indicated that they rarely gave analgesics to postabortion patients before the operation. Doctors said they were more concerned about stopping the bleeding than about relieving pain. Only providers who worked at the two training hospitals (2 physicians and 1 nurse) mentioned that they prepared their patients for the operation by offering them counseling together with mild analgesia or sedation.

*"The analgesics are there but the issue is that if it's a case of inevitable abortion we have no time to lose until the analgesic starts to work .. I am concerned about the bleeding because it threatens the patient's life …"* (A resident working at an intervention hospital)

*"We routinely give patients Voltaren and Valium immediately after admission .. that would calm her down during the operation .. and of course we provide counseling …"* (A consultant at a training hospital)

Although all providers agreed that "counseling" was the most effective way to reduce pain and anxiety before the surgical procedure, it was clear from providers' and patients' reports that patients rarely received such counseling. Physicians were likely to turn the responsibility of counseling to nurses, since the former have "more important duties to take care of". Although physicians at training hospitals were more likely to mention providing pre-operative counseling to patients, it was not clear from their reports if counseling was adequately done.

*"Let me explain, because we are in a public hospital, I don't have time to sit by the patient's side. Once I diagnose the case, I tell her that's alright*

*madam, next time your pregnancy would continue and I get ready for the surgical procedure"* (A specialist at a standard care hospital)

*"Of course she receives counseling .. if the woman finds someone who listens to her, speaks nicely with her, explains to her and reassures that would definitely relieve her pain …"* (A consultant at a training hospital)

All nurses mentioned that they provided counseling to postabortion patients to calm them down. However, with further probing it was found that this "counseling" mostly comprised reassuring the patient and consoling her over the lost pregnancy.

*"I calm her down by telling her don't worry and be thankful to God .. now you know that you are capable of getting pregnant .. in two weeks you can be pregnant again …"* (Nurse at an intervention hospital)

According to patients' reports the counseling that they received was quite deficient as four patients complained that providers did not show enough empathy or understanding of their condition while only two patients reported receiving any information on their medical condition or the procedure that would be carried out for them.

*"All of them here thought I was over-reacting .. but believe me I could not take that pain .. I'm not that kind of person who would say I'm in pain when I am not …"* (A 20 year old patient at a training center)

## During the procedure

From focus group discussions and in-depth interviews with providers it was clear that there were no written protocols for pain management during the evacuation procedure. Selection of pain management regimens was largely based on the doctor's judgment and the availability of an anesthesiologist and /or specific drugs.

At the two training centers where almost all patients are managed by MVA there is an internal agreement that patients whose cervix is fully dilated receive analgesia (e.g. Pethidine 50 mg slowly i.v.) or sedation (e.g. Neuril 10 mg i.v.) shortly before the procedure and are evacuated without anesthesia. Primiparas are usually managed under general anesthesia using Intraval or Katalar because providers find them to be too irritable and difficult to manage.

*"If the cervix is dilated we give her good counseling .. if she does not need dilatation we do her without anesthesia, may be give her some Voltaren or Valium shortly before the procedure"* (A Consultant at a training hospital)

*"It is hard (with a primipara) .. this woman has lost a loved one .. I've tried it several times … with those women you got to give general anesthesia from the beginning …"* (A specialist at a training hospital)

However, the two training hospitals differed in their management of cases with a partially dilated cervix. At one hospital, those patients receive mild sedation along with paracervical block. At the other training hospital, cases that are not dilated receive Misoprostol / Cytotec (orally and intra vaginally) 4-6 hours before the operation so their cervix would open and then they are evacuated by MVA under Pethidine.

> *"Why give paracervical block when I have a drug that could dilate the cervix for me? We give misotec 3-4 hours before the operation .. and then the cervix opens .. "* (A specialist at a training hospital)

At the four intervention hospitals providers mentioned that about half of patients were managed by MVA while the other half by D & C. Patients were managed by MVA under analgesia and/or sedation (e.g. Pethidine or Neuril) if the cervix was open. If the cervix was partially dilated few patients received para-cervical block with sedation while the majority were managed under general anesthesia. Two doctors, one in a general hospital and one in a district hospital, mentioned that they gave Cytotec (orally or vaginally) to patients with partially dilated cervix to speed up cervical dilatation.

> *"If her cervix is dilated and she is calm and quiet we can do her under local anesthesia, but if she is irritable or cervical dilatation is needed we take her to the operating theater…"* (A resident at an intervention hospital)

> *"You know what I give her.. three tablets of Cytotec and I leave her for one hour .. after that the cervix would be as soft as dough .. as soon as you insert the cannula the cervix gets dilated…"* (A consultant at an intervention hospital)

At hospitals providing standard PAC services, patients were managed using the standard D & C technique. If the cervix was dilated she would only be given an analgesic or a sedative but if further dilatation was needed, the case would be managed under general anesthesia using Intraval (thiopental) or Katalar (Ketamine).

> *"If the cervix is fully open and the products of conception are all coming out, you can pull it by hand and there would be no need for anesthesia .. just a sedative like Neuril or Pethidine and you scrap .. but if there is severe bleeding and the products are still inside the uterus you will need to dilate and therefore give general anesthesia …"* (A specialist at a standard care hospital)

It was noted from providers' interviews that district hospitals suffered from a shortage of anesthesiologists. When asked how general anesthesia was administered in absence of an anesthesiologist, almost all doctors said they administered Intraval themselves because they had no other choice.

> *"I give Intraval when I am stuck .. if the patient is in shock, I cannot refer her to a higher level neither do I have an anesthesiologist on duty .. I have to give her Intraval myself …"* (A specialist at a standard care district hospital)

> *"For me I had some training in anesthesiology before switching to Ob/Gyn so I know what to do and how to assess the patient before giving her anesthesia …"* (A specialist at an intervention district hospital)

As to intra-operative counseling, it is rarely offered mainly because most patients are drowsy or unconscious during the operation. Of the 12 interviewed patients only four reported being

awake during the operation (two at an intervention hospital and two at a training hospital). The two patients at the training hospital reported receiving some "counseling" and reassurance during the operation and not feeling any pain, while the other two patients reported feeling pain during the procedure.

> *"I was awake during the procedure; the doctor and nurse spoke and laughed with me .. it went so fast, I could not believe they were done." (*A 25 year old patient at a training hospital)

> *"I was conscious during the operation .. there was only a male and a female doctor in the room .. they were talking with me and I could feel everything .. when he inserted his hands inside me I used to feel my heart tighten …* (16 year old patient at an intervention hospital).

## After the procedure

According to interviewed providers most postabortion patients left the hospital within 2-4 hours after the procedure. Only if the operation was done at night the patient would have to wait for the morning physician to sign her discharge papers. Patients do not routinely receive an analgesic before discharge from the hospital unless if the doctor sees that she is in pain. According to the three providers from training hospitals cases managed by D & C tend to experience more post-operative pain than those managed by MVA. Only two of the interviewed patients reported experiencing postoperative pain while the others reported that the pain had gone by the time they woke up from the operation.

> *"About 70-80 percent of cases experience pain after the operation especially on the first day and for that we give them Voltaren to reduce the pain …"* (A specialist at a standard care hospital)

## Use of paracervical block versus general anesthesia

Although physicians were aware of the risks associated with general anesthesia, many of them still preferred to use it in managing cases with partially dilated cervix. All providers agreed that the procedure was easier to perform and took less time when the patient was asleep. According to providers who worked at training centers, use of general anesthesia was limited to primiparas because those "*patients are often too irritable*". All doctors agreed that Egyptian patients, especially from lower socio-economic classes, would not accept to be awake during uterine evacuation.

> *"If all patients would receive general anesthesia that would be better for me .. that would give me a better chance to examine her and make sure there are no remnants in the uterus .. if the patient is awake and nervous that would negatively affect my work …"* (A resident at an intervention hospital)

> *"A patient would have more confidence in the doctor if he gives her general anesthesia .. she might think that she is not getting general anesthesia because she is in a public hospital when her friends who go to a private doctor receive general anesthesia …"* (A specialist at a training hospital)

With the exception of one provider at a training hospital, all interviewed providers had concerns about using paracervical block. Two of them mentioned that they found it too time consuming because one has to inject the patient at three sites and then wait for 6-7 minutes for the drug to work. Those two doctors (one from a general hospital and one from a training center) believed that it was sometimes quicker to call in an anesthesiologist to give general anesthesia than to administer local anesthesia. Two other providers argued against the effectiveness of paracervical block in abolishing the sensation of pain expressing a concern that the patient might move suddenly during the operation and cause damage. Doctors who had recently received PAC training were concerned about not feeling competent enough to administer paracervical block because they did not personally practice the procedure during training. Finally, providers in four of the study hospitals complained about shortage of supply of spinal needles that are needed to administer the local anesthetic, while no problems were reported with regard to supplies of the local anesthetic (xylocaine or lidocaine).

> *"The problem with local anesthesia is that if it is not well administered, it won't be effective i.e. the proper dosage of drug and site of injection, and if the physician doesn't wait for 4-5 minutes till the drug acts"* (A specialist at a training hospital)

> *"The operation is usually easy and fast (with paracervical block) but the drawback is that it is not always effective .. if the patient is agitated no matter how much local anesthetic you give her, she would still be restless .. also we do not have this type of needle on the ward .. the patient has to buy it for about L.E.7-8, so this is another problem …"* (A resident at an intervention hospital)

## Patients' preferences for anesthesia

When asked if they would prefer to be awake during the procedure and not feel any pain, the majority of patients (7 out of 12) still preferred to be sleeping, three said they preferred to be awake and two could not decide. The main concern that patients had about being awake during the procedure was seeing the doctor taking their "baby" out of their womb or seeing blood coming out of their body. Three patients said they would be too embarrassed to show their body to a male doctor. Not surprisingly, six out of the eight patients who had their surgical procedure performed under general anesthesia stated that they preferred to be sleeping during the procedure, while two out of four patients whose operation was done while awake preferred to be wake. For some patients it was not clear how one could be awake during a surgical procedure and not feel any pain.

> *"I prefer to get general anesthesia because I am very weak, I could worry or even pass out if I see the procedure, the scissors, even when he is cleaning me up with Dettol .. this could take my heart out …"* (A 20 year old patient treated at a training hospital)

Interestingly two of the patients who had received general anesthesia, said that if they were told that they would not feel any pain under local anesthesia or if someone offered them reassurance during the procedure they would have considered being awake during the procedure. One patient said that if she were told about the risks of general anesthesia, she would have considered getting local anesthesia.

> *"If a doctor or a nurse would speak to me and reassure me I would calm down and won't feel any pain"* (A 25 year old patient at an intervention hospital*)*

According to patients who prefer to be awake during the procedure, the main advantage would be to know what actually happened during the operation. Two believed it was safer and more convenient to be awake during the procedure so they would go home quickly.

> *"(If I'm awake) I would feel more secure because I would know what was done to me .. now I know something was done to me but I don't know what it is ..."* (A 29 year old patient at a training hospital)

> *"I prefer to be awake because when you get general anesthesia there is always a possibility that you will not wake up again..."* (A 25 year old patient at a training hospital)

### Patients' assessment of the care they received

In general, patients were satisfied with the care they received at the study hospitals. However, five of them made suggestions to make their experience less painful. Patients mainly wanted more empathy, reassurance and information from the hospital staff. Four of the above five patients wanted the doctor to give them medication to relieve pain before the procedure. Patients who received medication to dilate the cervix (n=3) complained about the long waiting time before the operation and not receiving adequate explanation from providers about their medical condition.

> *"I wanted him to do the operation quickly and to relieve me of this agony ..."* (a 35 year old patient at an intervention hospital)

> *"I would have liked the doctor to be available to talk to us .. if she would explain to us what was going on that would have alleviated my pain .. it's the thinking and the worrying that makes the pain worse ...* (A 29 year old patient at a training hospital)

## CONCLUSIONS

The study revealed several gaps in pain management of postabortion patients in the studied hospitals. Although practices at training hospitals were remarkably better than the others, yet there were some commonalities among the three sets of hospitals. First and foremost, there are no standard protocols for providers to follow with different types of patients except for some unwritten protocol in the two training hospitals. The decision to use general or local anesthesia is left to the doctor's discretion, his/her preferences as well as availability of drugs. This situation poses a risk to patients' safety as well as a professional risk to providers who cannot be held accountable to specific standards of practice.

Care provided to postabortion patients in the three sets of study hospitals is more provider or procedure-oriented than patient-oriented. Patients do not receive medication or counseling to relieve their pain before or after the procedure but only receive medication to calm them down during the procedure so they would not bother the doctor. What matters more to physicians is to manage the patient's physical condition, namely to stop bleeding. Although providers acknowledge that a large part of the pain is psychological, they do very little to

alleviate that pain since it "*does not pose a threat to the woman's life*". The above reflects both an attitude problem on the part of providers as well as lack of adequate counseling skills.

Anxiolytics and narcotics seem to be used in abundance in the study hospitals when all that is needed may be adequate pre and intra-operative counseling and reassurance along with a non-steroidal anti-inflammatory drug. The fact that several patients indicated they were unconscious during the procedure, while their treating doctor indicated that they did not receive general anesthesia, suggests that those patients were under large doses of anxiolytics / narcotics. This practice put the patient at a risk of complications such as respiratory depression or cardiac arrest.

Use of general anesthesia with MVA, as mentioned in intervention hospitals and with primiparas in training centers, is not justified even when the cervix is not dilated. Besides carrying several health risks to the patient, its use may be costly to the health system as it requires the presence of an anesthesiologist and prolongs recovery time (Castleman & Mann, 2002). Needless to say, use of Intraval (Thiopental) in the absence of an anesthesia specialist, a common practice in district hospitals due to lack of anesthesiologist, is extremely risky and should be prevented by all means.

Use of Misoprostol (Cytotec, Mesotec) to enhance cervical dilatation seems to be arbitrary in the study hospitals. While some providers give it orally others give it intra-vaginally, with doses that vary from one hospital to the other. What this study has shown is that this practice exposes patients to undue pain for several hours before the procedure, besides prolonging the hospital stay unnecessarily. This warrants the development of a protocol to regulate use of Misoprostol for management of postabortion patients.

Paracervical block provides a good and safe alternative to general anesthesia and to Misoprostol for the management of cases with partially dilated cervix. Use of para-cervical block is especially needed in district hospitals where there is a shortage of anesthesiologists as well as hospital beds. Difficulties associated with use of para-cervical block could be overcome by sufficient practical training of service providers on administration of para-cervical block, adequate counseling to alleviate the patient's anxiety and respect of patients' dignity and privacy, especially during the procedure. Efforts should also be made to change public perceptions about local anesthesia and to raise their awareness about risks of general anesthesia.

Registration of MVA instruments and ensuring their availability in all public hospitals continue to be a challenge for adequate pain management of postabortion patients. Projects like TAHSEEN and TAKAMOL rely upon donated instruments while the commercial sale of MVA instruments has not yet been approved by the Registration Committee of MOHP. Pain management regimens that have been recommended by Ipas and others e.g. use of non-steroidal anti-inflammatory drugs, para-cervical block, etc. can only be used with MVA. Until there is continuous supply of MVA instruments in Egyptian public hospitals, providers will continue to use D & C along with general anesthesia.

# PROGRAMMATIC IMPLICATIONS

The above findings have several important programmatic implications:

- Pain management protocols need to be developed for different types of postabortion patients (cases with dilated / undilated cervix) and for different types of hospital

settings (settings where MVA instruments are / are not available) and distributed to general and district hospitals in Egypt. Hospital directors and heads of Ob/Gyn departments in each hospital should ensure that those protocols are being adequately followed by hospital staff.

- Training courses for improved PAC should allow sufficient time for providers to practice the technique of para-cervical block as well as counseling skills at different stages of patient management. Those courses should also highlight the risks associated with the use of general anesthesia and overuse of narcotics / anxiolytics and should encourage use of local anesthesia whenever possible.
- To ensure a more lasting change in providers' pain management practices medical schools should teach the technique of para-cervical block and should train students on providing more patient-centered care along with adequate counseling and interpersonal communication.
- Enough supplies of spinal needles should be made available in general and district hospitals to be used in administration of para-cervical block. Although this item may be somewhat costly, its presence on the ward would reduce other costs like staff time, bed use, general anesthesia and its associated complications.
- Community interventions to improve PAC should raise awareness among women and their families about risks of general anesthesia and should present local anesthesia as a safer alternative that allows for early recovery and discharge from hospital.

# UTILIZATION

The above results have been shared with TAKAMOL Project and ways for incorporating the study recommendations into their program have been discussed. The above results have also been shared with master trainers at the Regional Center for Training, an affiliate of Ain Shams University Medical School, which conducts most training courses for MOHP.

In June of this year the study results were presented at a dissemination seminar along with the "Postabortion family planning model testing study". A full description of the dissemination seminar is attached in Appendix II. Participants at the seminar highlighted the need for integrating counseling and interpersonal communication skills in the curricula of medical and nursing schools as well as registration of MVA instruments.

Arabic and English one- page summaries of the findings and recommendations have been developed to be mailed to key stakeholders. In the next few months FRONTIERS will hold discussions with senior officials at MOHP Curative Care Sector to advocate the development of pain management protocols for postabortion patients and to ensure their utilization by service providers. Those discussions will also recommend placing enough supplies of spinal needles and ensuring availability of safe analgesics / anxiolytics on the Ob/Gyn ward of every hospital in Egypt.

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# APPENDIX II

## Report of Dissemination Activities

***Executive summary***

This report presents key results of three dissemination meetings that were organized by Frontiers in Reproductive Health program of the Population Council (FRONTIERS) to present results of an operations research (OR) study for linking planning with postabortion care services. The following key recommendations emerged from the above meetings:

- Family planning services (methods and counseling) should be offered to postabortion patients on the Ob/Gyn ward;
- Standards of Practice manuals on provision of postpartum / postabortion family planning services should be provided to each hospital;
- Curative care providers should receive training on integrated reproductive health services;
- A mechanism of joint supervision, that involves officials from Curative Care and Population Sectors, should provision of quality family planning services on the Ob/Gyn ward.

***Background***

A collaborative OR study undertaken by the Ministry of Health and Population (MOHP), FRONTIERS Program and TAHSEEN/Catalyst project assessed feasibility, acceptability and effectiveness of two models of linking family planning with postabortion care services. The first model included counseling postabortion patients about family planning and referring them to a family planning clinic near their residence. The second model included counseling postabortion patients and offering a family planning method before discharge to those who are interested in immediate use.

To support dissemination of the study results and institutionalization of family planning services within postabortion care services in Egypt, the following activities were undertaken by FRONTIERS program, with financial support from USAID Mission in Cairo: ,

1. Two dissemination meetings were held in Fayoum and Beni Suef in January to present results of the study and to suggest mechanisms for strengthening linkages between curative care and family planning services. The two meetings involved Directors of the six study hospitals, heads of Ob/Gyn department, head nurses, and Directors of Curative Care and Family Planning sectors at the two study governorates. A list of participants and highlights of discussion is attached in Attachment A. Participants at both meetings agreed that the following interventions would help in make family planning service delivery on the Ob/Gyn ward more effective:

- A copy of the standards of practice protocol for postpartum and postabortion family planning services should be provided to every hospital;

- Sufficient copies of the postabortion care brochure should be made available in every hospital and provided to postabortion patients by the attending nurse;

- Collaboration between providers at the FP clinic and those on the Ob/Gyn ward should be strengthened to ensure availability of family planning methods on the Ob/Gyn ward;

- A joint supervision system needs to be developed to ensure adequate provision of family planning services on the Ob/Gyn ward;

- Establishing a system of continuous on-the-job training, that relies on local trainers from each governorate, to ensure sustainability of the intervention and to overcome the problem of provider turn-over.

2. A dissemination seminar was held on June 18th, 2007 at the Shepheard Hotel in Cairo. The seminar objectives were: (1) to disseminate results of two operations research studies that were conducted by the FRONTIERS program, with the aim of improving postabortion care services in Egypt; (2) to present recommendations that would assist MOHP in improving quality of postabortion care services and reducing unwanted and closely spaced pregnancies in Egypt. Over 50 participants attended the seminar, representing Ministry of Health and Population, NGOs, teaching hospitals and CAs. A list of seminar participants and agenda is provided in Attachment B. Highlights of the meeting are described below.

*Opening statements*

Dr. Ragui Assaad (Regional Director, Population Council, West Asia and North Africa office) welcomed participants and gave a brief background about the Council's work in the region and about postabortion care studies undertaken under ANE OR/TA project and under FRONTIERS program. Dr. Nahla Abdel-Tawab (FRONTIERS Country Representative) explained seminar objectives and provided a background of the two studies that were to be presented. Engineer Mohamed Abou Nar (Chief of Party, TAKAMOL Project) gave a background about TAKAMOL, the USAID service delivery project that followed TAHSEEN, and explained how the collaboration between TAHSEEN and FRONTIERS has furthered the work of TAHSEEN and TAKAMOL. Finally, Dr. Yehia El-Hadidi (First undersecretary of Population and Family Planning) commended FRONTIERS and TAHSEEN for conducting this collaborative study and emphasized the importance of this study in addressing the problem of unmet need and missed opportunities for providing family planning services.

*Presentation 1*

**Postabortion care: Egyptian and international perspectives (by Dr. Mahmoud Fathalla, Professor of Ob/Gyn at Assiut University).**

Dr. Fathalla began his presentation by sharing data on the magnitude of the abortion problem in Egypt and worldwide. He referred to the Population Council's study on the caseload of postabortion patients which showed that one-fifth of all Ob/Gyn admissions were receiving treatment for complications of abortion (spontaneous or induced). Moreover, he mentioned that population-based surveys like the Demographic and Health Survey (DHS) show that 20 percent of pregnancies in Egypt ended in fetal loss. He argued that although women may not want to an undergo an abortion, yet they do it because they are often faced with an unwanted / unplanned pregnancy as a result of inability to say "no"

to unprotected sex, limited access to family planning services/ information, or as a result of contraceptive failure.

Dr. Fathalla highlighted the need for adequate family planning services, including emergency contraception, as a means to preventing unsafe abortion. He also emphasized the importance of postabortion care services to help women avoid complications of abortion (spontaneous or induced). In that regard, he reiterated resolutions made at the ICPD in 1994 that *"governments should take appropriate steps to help women to avoid abortion"* and should provide for the humane treatment and counseling of women who have had recourse to abortion.

*Presentation 2*

**Linking family planning with postabortion care: Testing feasibility, acceptability and effectiveness of two models of integration (Dr. Hala Youssef, former Research Coordinator at FRONTIERS Program and Dr. Mohamed Abou Gabal, former Training Specialist at TAHSEEN Project).**

The study, which was undertaken in six hospitals in Beni Suef and Fayoum, revealed that both models of integration (family planning counseling and referral versus family planning counseling plus offering family planning methods on the ob/Gyn ward) were feasible although model I was easier to implement. Model II was more acceptable to providers and supervisors because it "guaranteed immediate use of contraception" but less acceptable to patients who had concerns about immediate use of contraception following abortion and who wanted to consult with their husband before accepting a family planning method. Provision of family planning methods on the Ob/Gyn ward was associated with improved quality of family planning counseling, but not increased use of family planning methods at three months post-discharge. The presenters concluded that family planning methods should be available on the Ob/Gyn ward and that every postabortion patient be offered a choice of receiving a method before discharge or at a clinic near her residence within two weeks but they highlighted the need for improving quality of family planning counseling. They also presented a set of recommendations to enhance family planning service delivery on the Ob/Gyn ward.

*Presentation 3*

**Pain management in postabortion care: An investigation of attitudes and practices in selected public hospitals in Egypt (Dr. Nahla Abdel-Tawab, FRONTIERS Country Representative)**.

This qualitative study revealed that the care provided to postabortion patients was more procedure than patient-centered. Providers tend to rely more on sedatives, narcotics and general anesthesia and less on counseling, reassurance and local anesthesia. Dr. Abdel-Tawab stressed the need for developing pain management protocols and sending them to every hospital, adequate training of service providers on counseling and administration of paracervical block and raising public awareness about the risks of general anesthesia.

*Commentary*

Dr. Ezzeldin Osman [Professor of Ob/Gyn at Mansoura University and Executive Director of Egyptian Fertility Care Foundation (EFCF)] emphasized the need for providing family planning methods and services on the Ob/Gyn ward to prevent unwanted and unplanned pregnancies. He gave an example from an earlier study that was undertaken by EFCF and Family Health International (FHI) where women who were denied a family planning method at the clinic because of absence of menstruation were followed up for 4-6 weeks.

The study showed that of 369 women who were asked to return to the clinic after menses, more than half did not come back. When visited at home, it was found that 18.3 percent were not using any method of contraception while 4.7 percent were already pregnant. The above findings underline the need to provide family planning methods immediately postabortion/postpartum to ensure prompt use of contraception by women who do not want to become pregnant soon. He also highlighted the need for adequate training of curative care providers on postpartum and postabortion family planning to overcome their resistance for providing FP services to postabortion patients.

On the pain management study, Dr. Ezzeldin argued that the main issue was provider's attitudes, which tend to be more procedure than patient - oriented. He asserted that current medical education tends to focus on medical procedures and what is convenient to the doctor than on communicating with the patient and finding out what is convenient for her. He emphasized that if providers, especially doctors, were more patient sensitive during the surgical procedure and respected the patient 's privacy and maintained a quiet atmosphere in the operating theater, a large part of the patient's anxiety would be alleviated and there would be no be no need for administering sedatives or general anesthesia.

*Discussion and Recommendations*

Following the presentations and commentary, the floor was opened for discussion. There was general agreement among participants that postabortion patients have a right to receive adequate and comprehensive postabortion care, including family planning services (counseling and methods). There was also agreement among participants that counseling and interpersonal communication skills of service providers need to be improved. Participants provided examples of successful initiatives e.g. provision of FP services on the Ob/Gyn ward in Beni Suef governorate, the postpartum postabortion family planning program that was initiated by MOHP and AVSC in the mid 90s and use of para-cervical block in ElShatby hospital.

Following are specific recommendations that participants made for enhancing FP service delivery on the Ob/Gyn ward and for improving quality of provider-patient relations:

(a) Service delivery protocols should include family planning services as an integral component of postabortion and postpartum services on the Ob/Gyn ward;

(b) The Curative Care sector should issue a decree urging hospitals to provide family planning services on the Ob/Gyn ward to postpartum and postabortion women;

(c) Training of physicians and nurses on the Ob/Gyn ward on the integrated standards of practice and on providing postabortion family planning services;

(d) Developing a comprehensive training curriculum for curative care providers to cover postpartum and postabortion FP;

(e) Establishing a steering committee, that includes members of Population, MCH and Curative Care sectors, to guide and monitor activities of the postpartum / postabortion family planning program;

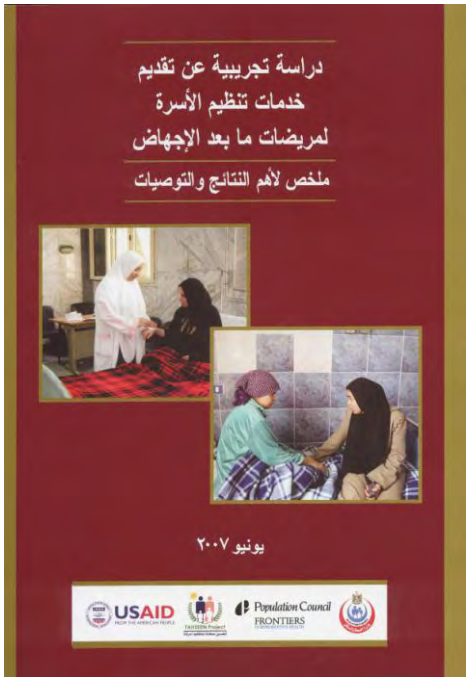
(f) Medical and nursing students should receive adequate training on counseling, interpersonal communication and pain management during their undergraduate training;

(g) Standards of practice should be posted on MOHP's website so as to be accessible to providers nationwide;

(h) Allowing husbands of postpartum and postabortion women into the Ob/Gyn ward to increase their participation in FP counseling with their wives;

(i) Manual Vacuum Aspiration should be registered in Egypt and used in MOHP hospitals as it allows providers to perform uterine evacuation under local anesthesia and hence safeguards patients from running the risks of general anesthesia and also overcomes the shortage of anesthesiologists in some district hospitals.

3. A six page Arabic summary of the study report entitled "Linking Family Planning with Postabortion Care Services" was developed. The summary which highlights key findings and policy recommendations was distributed at the seminar along with an English one page OR summary. Additional copies of the Arabic summary report will be sent by mail to invitees who could not attend the seminar as well as other key stakeholders, including Minister of Health and Population.




**PAC study Arabic Summary**

## ATTACHMENT A

### Dissemination meetings in Fayoum and Beni Suef

### I. Meeting in Fayoum

***Attendants***

The meeting was held at Fayoum General Hospital and was attended by:

| | |
|---|---|
| Dr. Mahmoud M. Saadeldin | Curative Care Director |
| Dr. Moenes El-Meligy | Family Planning Medical Supervisor |
| Dr. Mamdouh Ragheb | Fayoum General Hospital (FGH) director |
| Dr. Hany Moemen | Head of OB/GYN department at FGH |
| Ms. Wafaa Mostafa | Head nurse at OB/GYN department at FGH |
| Dr. Naguib Ahmed Abdel Malek | Itsa District Hospital (IDH) director |
| Dr. Ahmed Aly Hafez | Head of OB/GYN department at IDH |
| Dr. Mohamed AbdelAleem Terfaya | Ebsheway District Hospital (EDH) director |
| Dr. Shaaban AbdelRazek | Head of OB/GYN department at EDH |
| Dr. Hala Youssef | FRONTIERS / Population Council |

***Regrets:***

| | |
|---|---|
| Dr. Hussein Abu Taleb | Health Undersecretary at the governorate |

***Summary of discussions:***

After introductions, Dr. Hala Youssef gave a brief introduction of the study design and intervention followed by the study findings.

There was agreement among participants that family planning services on the OB/GYN ward were not functioning adequately for a number of reasons:

1. Some providers were not convinced that all PAC patient need family planning services; they were concerned especially about IUD insertion, which could be hazardous to some patients, especially if those patients have any element of infection.
2. Hospitals did not have a Standard of Practice Manual, which states that it was safe to provide PAC patients with family planning methods after their treatment and prior to their discharge from hospital.
3. There was resistance from patients themselves who could not take the decision of using a method without their husband's approval.
4. The provider who dealt with PAC patients was usually a resident (not a specialist) and he / she was usually overloaded with work and sometimes lacked adequate skills to provide FP services.
5. Many providers were opposed to family planning per se.
6. Training received by providers was not competency- based and was mostly theoretical.

***Suggestions to make the service more effective***

1. Deliver a Standards of Practice Manual to each hospital for counseling and providing family planning methods to PAC patients.
2. Make enough copies of the PAC brochure available to nurses so they would distribute to patients during counseling.

3. Involve providers from the FP clinic in the hospital in FP service provision on the OB/GYN ward.
4. Develop a mechanism for joint supervision.

***Who will do what?***

MOHP central office

Participants expected MOHP at the central level to develop service protocols and ensure their distribution to hospitals. The protocols would outline roles and responsibilities of different staff members on the Ob/Gyn ward versus FP clinic. They also expected MOHP central office to provide competency-based training courses on family planning counseling and method provision and to develop supervision tools.

Health directorate

The head of the curative care at the directorate level would act as a facilitator to the service in terms of ensuring the availability of enough residents working at the department, coordinate between the hospital/department and the family planning division at the directorate level. The FP medical supervisor would make monthly monitoring visits to the hospital.

Hospital

The Hospital Director would coordinate with the head of OB/GYN department and the family planning clinic to ensure the availability of methods on the ward. The head of the department would be responsible for day-to- day supervision of residents and nurses to ensure that FP services are provided to PAC patients.

FRONTIERS Program

Participants requested that the FRONTIERS Program coordinates with MOHP to ensure the distribution of the protocol to all hospitals and development of an adequate system of supervision. They also requested a follow-up meeting after one month to monitor progress of the activity.

## II. Meeting in Beni Suef governorate

***Attendants***

The meeting was held at the Beni Suef H**e**alth Directorate and was attended by:

| | |
|---|---|
| Dr. Hesham Zikri | Family Planning Director |
| Dr. Fayez ElShahed | Beni Suef General Hospital (BGH) director |
| Dr. Ahmed Aly Mabrouk | Director of Hospitals Division (Governorate level) and PP/PA FP services coordinator |
| Dr. Badreya Bahnasawy | Head of OB/GYN department at BGH |
| Ms. Kamelia Marzouk | Head nurse at OB/GYN department at BGH |
| Dr. Badawy Abu ElMakarem | Nasser District Hospital (NDH) Director |
| Dr. Hesham ElBanna | Head of OB/GYN department at NDH |
| Dr. Mohamed Aly Amin | Family Planning Director at ElWasta district |
| Dr. Mohamed Abu Gabal | TAKAMOL Project |
| Dr. Hala Youssef | FRONTIERS/ Population Council |

***Regrets***

| | |
|---|---|
| Dr. Ahmed Youssef | Health Undersecretary at the governorate |

***Summary of discussions***

After introductions, Dr. Hala Youssef gave a brief introduction of the study design and intervention followed by the study findings.

Discussions with participants revealed a different situation in Beni Suef governorate where there is an active postpartum / postabortion FP program. This is because the Health Undersecretary at the governorate was formerly a Family Planning Director and was keen on establishing this service. A team to follow on the PP/PA FP program was organized under the supervision of Dr. Ahmed Aly Mabrouk. But the bulk of activities were carried out at the BGH where the family planning responsibilities were assigned to two nurses and two *Raedat Rifyat* to provide family planning counseling services to postpartum and postabortion women. They obtained the patient's consent to receive a method and clipped it to her medical record for the doctor to see and act accordingly. Those nurses worked under close supervision of two selected specialists working at the OB/GYN department. At AlWasta hospital, provision of family planning counseling was recorded on every patient's medical record.

However, participants at the meeting reported considerable resistance on the part of providers to offer FP services. On one hand, they were not convinced and on the other hand, they were afraid of being held legally responsible if something went wrong. The fact that there were no PP PA FP protocols at each hospital has made the situation more difficult.

***Suggestions to make the service more effective***

1. Deliver to each hospital a protocol that addressed the safety of PP/PA IUD insertion;
2. Hold scientific seminars on PP PA FP using evidence- based medicine;
3. Implement a system of on the job training for providers on the Ob/Gyn ward;
4. Make enough copies of the PA FP brochure available to nurses for counseling purposes.

***Who will do what?***

MOHP central office

Participants requested that MOHP central office develops PP/ PA FP protocols and ensures its distribution to hospitals.

Health Directorate

The PP/PA FP program coordinator and hospital directors would coordinate with the head of OB/GYN department and the family planning clinic to ensure the availability of methods in the department.

TAKAMOL Project

Dr. Mohamed Abu Gabal from TAKAMOL project offered to conduct refresher training to providers working at the seven hospitals in Beni Suef to ensure mastering of skills in family planning service provision together with the use of a supervision checklist. TAKAMOL would also provide instruments such as Kochers, mosquitoes, and IUD insertion kits to every hospital.

FRONTIERS Program
FRONTIERS would monitor the above activities and organize a follow up meeting to monitor progress.

**ATTACHMENT B**

## Seminar Agenda

## Results of Operations Research to Improve Postabortion Care Services in Egypt

**Shepheard Hotel - Cairo**
**June 18, 2007**

### List of seminar participants

DR. ABDEL HALIM RAGAB
HEAD OF MONITORING UNIT / FP SECTOR
MINISTRY OF HEALTH & POPULATION
CAIRO EGYPT

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**Seminar Agenda**

**Results of Operations Research to Improve Postabortion Care Services in Egypt**

**Shepheard Hotel - Cairo**
**June 18, 2007**

| | |
|---|---|
| 9:00 – 9:30 | Registration |
| 9:30 – 10:00 | Welcome and introduction to seminar objectives |
| 10:00 – 10:15 | Postabortion care: Egyptian and international perspectives<br>***Prof. Mahmoud Fathallah***<br>***Assiut University*** |
| 10:15 – 10:45 | Linking family planning with postabortion services study<br>***Dr. Hala Youssef***<br>***Dr. Mohamed Abou Gabal***<br>***TAKAMOL/Pathfinder Project*** |
| 10:45 – 11:00 | Pain management in postabortion care:<br>An investigation of attitudes and practices<br>in selected public hospitals<br>***Dr. Nahla Abdel-Tawab***<br>***Population Council*** |
| 11:00 – 11:15 | Commentary<br>***Prof. Ezz El-Din Osman***<br>***Egyptian Fertility Care Foundation*** |
| 11:15 – 12:15 | Discussion |
| 12:15 – 12:30 | Recommendations and wrap-up |