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HEALTH CARE IN CENTRAL ASIA

TECHNICAL REPORT:

## **Expanding the Role of Midwives in the Kyrgyz Republic: A Pilot Project on IUD Services**

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**Bishkek  
August 2003**



FUNDED BY:  
THE U.S. AGENCY FOR  
INTERNATIONAL DEVELOPMENT



IMPLEMENTED BY:  
ABT ASSOCIATES INC.  
CONTRACT NO. 115-C-00-00-00011-00

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# Table of Contents

I. Background .....	2
A. The Pilot Project .....	3
B. Results .....	5
C. Policy Impact .....	7
D. Analysis .....	7
E. Recommendations for the Future .....	8
II. APPENDIX 1: Results of Observation of the Midwives' Skills .....	9
III. APPENDIX 2: Results of Client Survey .....	12

## Abbreviations

BHU	Bishkek Humanities University
COC	Combined oral contraceptives
DMPA	Depot Medroxyprogesterone Acetate (injectable contraceptive)
FAP	Feldsher and Midwife Post
FGP	Family group practice
GTZ	Gesellschaft fuer Technische Zusammenarbeit (German technical assistance)
IUD	Intrauterine device
JHPIEGO	Johns Hopkins Program in Obstetrics and Gynecology
LAM	Lactation Amenorrhea Method
MOH	Ministry of Health
PHC	Primary health care
SEATS	Family Planning Services Expansion & Technical Support Project
STI	Sexually transmitted infection
UNFPA	United Nations Population Fund
USAID	U. S. Agency for International Development

## I. Background

The ZdravPlus project, funded by the US Agency for International Development (USAID), works with the governments of five Central Asian countries to improve the quality and efficiency of health services, with an emphasis on strengthening primary health care (PHC). Key aspects of the project's work are the retraining of specialist physicians as family doctors to work at the PHC level and building the skills and status of mid-level health workers, such as midwives and nurses.

In the Kyrgyz Republic, newly formed Family Group Practices (FGPs) bring together internists, gynecologists and pediatricians into PHC practices that provide a range of services in a single facility close to where people live. FGPs have their own budgets and considerable autonomy in how they manage their facilities and services.

Many doctors in the Kyrgyz Republic have already been retrained as family doctors, but gynecologists remain the only doctors trained to provide intrauterine device (IUD) services. There are rural areas of the country, though, where there are few doctors and even fewer gynecologists. In these areas, midwives provide some methods of contraception but they are not authorized to provide IUDs, the most popular contraceptive method, used by 78 percent of women using contraception in the country<sup>1</sup>. Many rural women have to travel for hours to obtain the method, while others cannot even afford to take the trip to the nearest city.

The Director of Primary Health Care at the Ministry of Health (MOH), Dr. Doskeeva Jumabubu, expressed interest in conducting a pilot project to train midwives to provide IUD services as one way to make this popular service more accessible to rural women. This proposal had another benefit from ZdravPlus' perspective. One of the aspects of health reform that the project is eager to support is an enhanced role for nurses and midwives. Currently, these mid-level staff generally serve as assistants to doctors and spend much of their time on paperwork. In rural areas, however, some of them provide a limited range of women's and children's health services.

### Patients speak out:

Gulyasar Z. "The midwife is kind, attentive, and experienced. She explained everything before inserting the IUD. She inserted the IUD free of charge. Now I don't have to go any more to the capital and spend money. I will recommend her to my friends and relatives."

Burul M. "This is the first time I am using the IUD. The midwife is very considerate and friendly. She also delivered my baby and I trust this midwife."

Gulzat S. "The IUD doesn't bother me. The midwife is very considerate and she constantly asks about my health. I am very satisfied with the service."

Bazar-Korgon rayon (district) in Jalal-Abad Oblast (region), in the south of the country, was chosen as the pilot site because it is a poor rural area of the country in the strategically important Ferghana Valley. The region has suffered from years of political unrest and is in need of substantial investment. With a total population of 123,300, Bazar-Korgon rayon has 16 FGPs and 17 Feldsher Ambulatory Posts (FAPs), which are smaller, less equipped facilities than FGPs without a doctor on site. There are nine gynecologists in Bazar-Korgon, of whom four work in the rayon center and five work in outlying areas. There are 60 midwives, 40 of whom work in FGPs or FAPs. Thus, midwives can play a major role in providing reproductive health services.

Jalal-Abad Oblast had another important advantage as a site for the project because it has skilled and experienced trainers available through the Oblast Center for Human Reproductive Health Care. The director, Dr. Bakhtygul Umarakhunova, was eager that the center conduct the training and serve as the local coordinating agency for the project. The Jalal-Abad Health Promotion Center agreed to support the project through educational outreach activities and by assisting in monitoring.

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<sup>1</sup> Research Institute of Obstetrics and Pediatrics, Ministry of Health of the Kyrgyz Republic and Macro International Inc, *Demographic and Health Survey 1997*.

During an assessment visit to ascertain potential interest, both oblast and rayon authorities expressed strong support for a pilot project to train midwives to provide IUD services. Gynecologists in the rayon were also enthusiastic because they recognized that they did not go to outlying areas frequently enough to provide the services women need. At a meeting with many of the primary health care midwives, most of them were eager to participate in the training and expressed appreciation for the recognition of the importance of rural midwives that is implicit in the pilot project.

## **A. The Pilot Project**

The goal of the project, which ran from May to December 2002, was to demonstrate that trained midwives can safely provide IUD services. ZdravPlus trained 18 rural midwives of the Bazar-Korgon district in Jalal-Abad Oblast in contraceptive technology and prepared them for providing IUD services. In addition, one midwife from the Oblast Center for Human Reproductive Health Care was trained to serve as a model for other midwives at the center in Jalal-Abad. The midwives were trained in two groups—one group of nine participants and one group of ten—to ensure that all training participants received individual attention while learning.

Many midwives were eager to participate in the pilot project and wanted to participate in the training. However, they were only included if they met a number of criteria:

- Worked in a facility without a gynecologist, so that access to services would be expanded;
- Worked in a facility with a large catchment area, so the impact of the project would be maximized and the midwife would have a sufficiently large volume of clients to maintain her skills;
- Had at least five years experience as a midwife; and
- Were not on the verge of retirement or an extended leave of absence.

The curriculum for the training was based on the SEATS<sup>2</sup> curriculum for FGP physicians in the Kyrgyz Republic. It was adapted for this training to account for the different educational needs of midwives. The following changes were made:

- Greater focus on indications and contraindications for IUDs, especially on diagnosing pregnancy and anemia;
- An expanded module on sexually transmitted infections (STIs);
- Extending the course for midwives from five days (for doctors) to twelve; and
- Practice with real patients.



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<sup>2</sup> The SEATS project was a USAID centrally-funded project focused on reproductive health that ended in 2000.

### **The safety of IUD recipients was protected through three strategies:**

1. *Ensuring the competency of the midwives during training.* All midwives had to demonstrate appropriate IUD insertion and removal skills during the training course using models and studying clinical cases before they were allowed to work with real patients. Then, under the guidance and supervision of a trainer, they had to demonstrate their competence with at least eight patients before they returned to their workplace.
2. *Monitoring the clinical skills of the midwives at their worksites over a six month period,* and, when necessary, conducting complementary training on the job. Four visits were conducted to each midwife.
3. *Surveying recipients of IUD services.* Two client surveys were conducted. The first took place two months after the first training course and the second five months after training. The goal of the surveys was to reveal any complications that might have caused women to visit another provider, to evaluate the satisfaction of patients with the service, and measure the quality of care provided by the midwives from the clients' perspective.

The adapted program encompassed the following topics:

- Modern contraceptive technology and counseling (3 days);
- Sexually transmitted infections (STIs) (1 day);
- IUDs and counseling on IUDs (1 day);
- Infection prevention, clinical case studies and practice on uterine models (1 day);
- Practice on gynecological models, detecting and managing side effects and complications (1 day);
- IUD removal – practice on models (1 day); and
- Practice with real patients under the guidance of trainers (4 days).

The trainers were from the Jalal-Abad Oblast Center for Human Reproductive Health Care and included Bakhtygul Umarakhunova, the director of the center; Ainura Davletova, deputy director; Gulzad Nurumbetova, the gynecologist working with adolescents; and Raziya Abdurakhmanova, obstetrician-gynecologist. All four are qualified as trainers by JHPIEGO or AVSC International and were experienced in conducting RH training courses for organizations such as SEATS, UNFPA, and GTZ. The JHPIEGO guidebook and clinical manual for FGP nurses on reproductive health care served as instruction manuals during the training. All participants were supplied with manuals to keep as reference materials.

An assessment prior to the project showed that many of the rural midwives in Bazar-Korgon did not have adequate instruments to offer IUD services, so ZdravPlus procured additional instruments to be sure that all the trained midwives had a full IUD kit.

The availability of contraceptives is a major problem in the Kyrgyz Republic. Before the project, none of the FGPs or FAPs visited in Bazar-Korgon rayon had any in stock. However, a supply was available at the Family Medicine Center in the rayon, ready for distribution, and the Ministry of Health's Head of Primary Health Care allocated stocks for Bazar-Korgon from future shipments. The United Nations Population Fund (UNFPA) is the main supplier of contraceptives to the Republic and kindly agreed to provide the pilot project with all methods of contraception.

The Ministry and ZdravPlus wanted to ensure that women would not feel pressured to choose the IUD over other methods because of the pilot project. Rather, the project sought to provide access to an expanded range of methods. Thus, all methods—not only IUDs—were provided to facilities participating in the pilot project and, as already noted, the training covered all methods available in the country.

The Jalal-Abad Oblast Health Promotion Center also contributed to the success of the pilot through its health education activities. The center informed community leaders and community members in Bazar-Korgon about the pilot project and raised women's awareness of the availability of the new services. They placed notices about the new services in busy public places in the communities where the trained midwives were working, they arranged appearances on radio and TV and placed articles in the newspapers. The Health Promotion Center staff themselves thought that the most effective strategy was

to attend FGP staff meetings and advise FGP staff on how to promote their own services. The results of the pilot project show that these education/outreach efforts were successful.

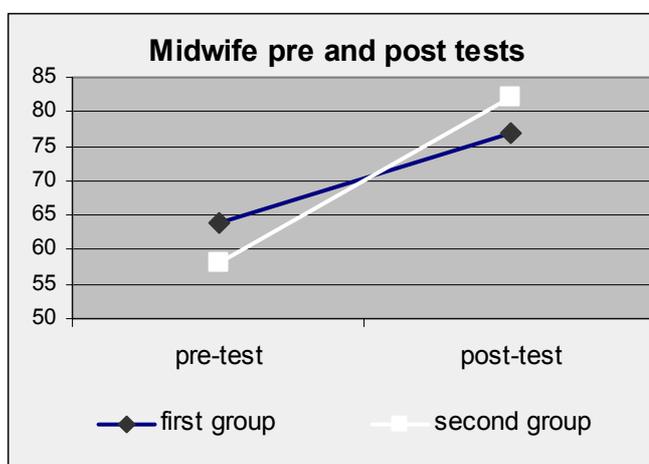
## B. Results

Patients were more than willing to go to trained midwives for contraceptive services; there was no trouble whatsoever with their acceptance as service providers. During the project period, 1,843 women received contraception from project-trained midwives, with 468 women receiving IUDs. On average, each midwife performed 4.5 IUD insertions and removals a month. The midwives demonstrated full competence in providing contraception, and patients appreciated the convenience and personal attention of visiting a midwife.

### 1. Midwives' Skills

The clinical skills of the midwives clearly improved as a result of the pilot project. The trained midwives provided quality IUD care. Several monitoring instruments, including follow-up visits and a patient survey, demonstrated this success.

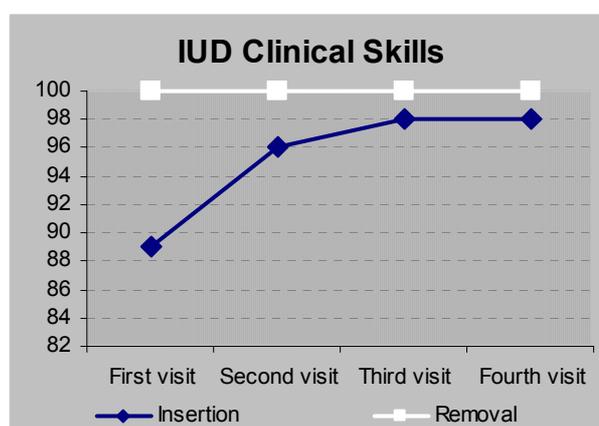
At the beginning of the course, the midwives were tested to assess their initial level of knowledge and an expanded post-test was conducted after the course. The average overall score on the pretest was 64 percent and rose to 77 percent for the first training group. For the second group, it went from 58 percent at the pretest to 82 percent at the end of the training. Clearly, the midwives acquired more knowledge.



More important than the midwives' theoretical knowledge, their skills also increased. The midwives were visited four times over a six month period by specialists from the Oblast Center for Human Reproductive Health Care to observe their skills. The goal of the monitoring visits was to observe the midwives' clinical skills to ensure patient safety, to provide refresher training as necessary, and to evaluate the success of the training and the project as a whole. The monitoring visits were not done by the trainers who initially trained the midwives. In order to avoid bias, they were performed by other physicians with the necessary skills to evaluate IUD care.

During observation, the midwives' skills were assessed using a checklist of key steps to follow when seeing patients. The checklist included many different skills such as counseling on oral contraceptives, infection prevention, IUD insertion and counseling, and the lactation amenorrhea method. A scoring system was used to measure the midwives' skills in quantitative terms. The results of the observation are included in Appendix 1.

The observation of skills found that midwives' skills were high enough throughout the months of observation to provide quality care for their patients. Some skills, such as the washing of instruments, improved over time. Others, for example counseling on oral contraceptives, slipped over the six month period and four monitoring visits. In general, clinical skills



Midwives' skills measured during monitoring visits

remained the same as at the end of the training or improved over time, while counseling skills worsened. However, even in those practical areas where the midwives' skills decreased, their level of skill remained sufficient to provide quality care.

Clinical skills, such as IUD insertion (see graph on previous page), were at a consistently high level, and often improved over time. DMPA injection skills went from 89 to 100 percent. Instrument washing improved on average from 93 to 100 percent over the course of the monitoring visits, and steam sterilization skills remained at 100 percent through all four visits.

In addition to the monitoring visits and the pre- and post-tests, provider skill acquisition was also measured by a client survey that was administered one month and five months after the beginning of the project. The survey measured the patients' recall of the midwives' care to determine their success in counseling patients, providing necessary information, and taking patient histories. A total of 335 women were interviewed in the two rounds of the survey. The results of the survey are shown in Appendix 2.

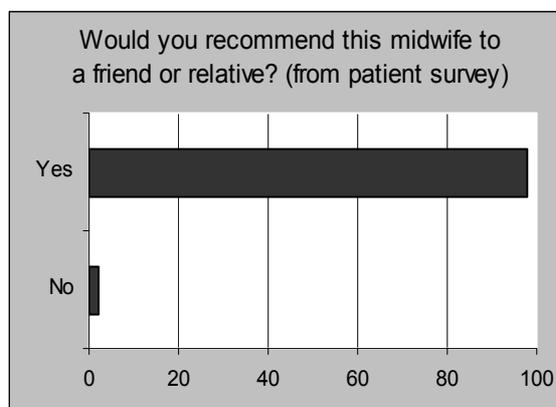
The midwives' clinical skills as reported by the survey were good. The survey found that 97 percent of clients were told that an IUD could be used from one to 10 years. The same percent said that they had been shown the IUD that the midwife was about to insert, and 98 percent said that the midwife explained what she was doing during the insertion so that they would understand what was going on. Ninety-nine percent answered that their midwife checked if they could be pregnant before inserting the IUD, and the same percentage stated that the midwife asked about their last menstrual period before inserting the IUD. Ninety-five percent or more of women recalled being asked if they had anemia or might be at risk for a sexually transmitted disease. Ninety-nine percent of recipients were still using their IUDs at the end of the project, and those women who had stopped had had the IUD removed by a medical professional, generally the midwife who had inserted it. There were no cases of IUD expulsion.

The counseling skills of the midwives were less well-reflected in the survey – although it should be kept in mind that the clients' recollection would have faded several months after visiting the midwife. Only eight percent of women remembered being told that they should see a doctor immediately if they found that their IUD strings were too long or too short. Ninety-eight percent remembered being given information about alternative contraceptive methods but most clients did not remember which specific methods were described. These data indicate that the midwives' counseling skills may not be as strong as desired. Seen in light of the results of the monitoring visits, it seems that midwives do counsel patients, but they may not consider it to be an important part of providing quality patient care. They may be delivering the necessary messages, but failing to ensure that the client understands them. This was a common shortcoming of the Soviet medical system, where health care personnel received little or no training in communicating with patients.

## 2. Patient Satisfaction

Patient satisfaction in the pilot project was high. As was previously mentioned, patient surveys were conducted on two occasions, in order to monitor patients' opinions about the care provided by the newly trained midwives and as another check on the quality of care provided. The first survey was conducted one month after the start of the project and the second survey was conducted five months from the start of the pilot project.

Three hundred and thirty-five women were interviewed for the survey. Overall, the patient surveys found that patients were satisfied with the quality of care offered by the midwives and glad to have the opportunity to choose an IUD without having to travel a long distance to have it inserted. Ninety-eight percent of clients stated that they would recommend their midwife to a friend or relative.



### 3. Midwives' Satisfaction

At the end of the pilot project, staff from the Republican Institute for Retraining and Qualification Improvement and the Jalal-Abad Health Promotion Center took part in a meeting of the Jalal-Abad trainers and midwives. The midwives shared their experiences in providing IUD services and their feelings about the pilot project.

The midwives repeatedly stated that they were very happy and proud that they can now provide IUD care. They were glad to be able to provide a wider choice of contraceptives to their patients and felt great satisfaction that they could do it free of charge. They also discussed their concerns. They felt that patients prefer to see doctors rather than midwives in places where doctors are available, and that some villages had populations so small that they lacked demand for a midwife at all.

The meeting concluded that:

- IUD services became more accessible to women in isolated areas as a result of the pilot project.
- Training midwives to insert and remove IUDs is very convenient for women, especially in places where doctors are not available. When there is no need to go to the rayon center for IUD services, patients save time and money.
- The status of midwives as independent medical workers increased and midwives became more confident because they were able to provide better service to their patients.
- The pilot project on IUD services should be expanded to other areas, because it will provide access to IUD services to women who choose this method of contraception, and improve family planning services in general.
- It would be good if midwives could be trained to provide IUD services in midwifery schools, because the pilot project has proved the demand for these services among the population. Midwives who are not trained cannot provide these services. It will benefit both sides if IUDs are included in pre-service training. Midwives will be able to provide a better range of services and IUD services will be more accessible to women.

### C. Policy Impact

Despite its small scale, the success of the pilot project convinced the MOH that training midwives could effectively expand access to contraception, and that midwives could do a good job with such a clinical task. After a presentation of the pilot project that took place on April 1<sup>st</sup>, 2003, representatives from the MOH concluded that the IUD insertion project was successful, and that it increased access to health services, especially in remote regions of the Republic. It was decided that this activity could be expanded to rural areas throughout the country. A working group was formed to prepare a *prikaz* (decree) to authorize appropriately trained midwives to provide this service.

### D. Analysis

The midwife pilot project attained all of its objectives. It expanded access to family planning for women in under-served areas, raised the prestige of midwives and mid-level personnel, demonstrated that midwives could provide additional clinical services, and convinced the Ministry of Health that such training should be expanded nationwide. The success of this project resulted from four main factors: the positive environment for the training, the focus on patient safety, the skill and enthusiasm of the trainers and participants, and the curriculum.

#### The newly trained midwives speak:

Erkaim T.: "In the past I did not think that mid-level personnel could provide such services. Today I can counsel others on all of the methods of contraception and, most importantly, I can insert an IUD myself."

Akiz K.: "We can sense a difference between us, the trained midwives, and those who did not attend the pilot project. It's as if we are one step ahead of them and more in demand. However, now we are also more responsible."

Jalal-Abad was well suited as a pilot site because the Oblast Center for Human Reproductive Health Care had the capacity to oversee this kind of project. Dr. Umarakhunova was willing and able to manage all aspects of the project, including follow-up evaluation. Without this strong local capacity, it would have been impossible to implement the project. Local capacity was also important for the selection of trainers and midwives. Without skilled trainers, the project would have been unworkable. It was very dependent on the ability of the trainers to teach a new skill and ensure that the participants had learned it well enough to provide quality patient care. It was an advantage that the trainers were from the region. However, the project could have successfully taken place using trainers from Bishkek who traveled in for the trainings.

The midwife trainees themselves were critical to the successful implementation of the pilot project. IUD insertion is a skill that requires careful attention to detail, and a willingness to practice repeatedly to perfect the technique. This required energetic participants who were enthusiastic about learning new skills.

Choice of curriculum was also important to the success of the pilot project. The curriculum needed to cover the clinical aspects of IUD insertion and removal, as well as addressing broader issues of reproductive health and family planning. It had to present the IUD as a valid contraceptive choice that was one of a number of valid choices. It also needed to be sufficiently detailed to complement the basic midwifery education in the Kyrgyz Republic, and to win the trust of Kyrgyz health officials. The adapted SEATS curriculum met all of these criteria and, using a curriculum developed by an international organization, added to the credibility of the training.

Finally, the emphasis on patient safety was vital to the success of the pilot project. This ensured that midwives felt confident inserting and removing IUDs—and patients responded to that confidence. It also meant that the pilot project could take place with minimal fears for the health of the patients involved. The focus on safety also gave the training the credibility with the government that it needed.

## **E. Recommendations for the Future**

This pilot project could be gradually expanded to other areas in the country. Although Bazar-Korgon had some specific points in its favor as a pilot site, such as the presence of skilled trainers and enthusiastic midwives, other locations could be found with similar strengths. While it would benefit many rural areas of the Republic to widen access to contraceptive choices, this pilot was too small to conclude that the provision of IUD services by midwives can be rolled out nationwide. Moreover, the lengthy (12-day) training course and the precautions put in place to protect clients' safety cannot be replicated on a large scale. Thus, expansion to other sites should be gradual, with continued protection for clients, until it is considered safe to drop these protections.

As the meeting of midwives recommended, IUD provision could be incorporated into pre-service education for midwives. This would ensure wider accessibility to IUDs all over the country, and enhance the social and educational status of midwives. Inclusion of this service into the basic midwifery curriculum would be important testimony to the capabilities of midwives.

It would also be beneficial to include some of the skills that the midwives found difficult—such as counseling—in continuing medical education, where they could be reinforced over a longer time period.

This pilot project has proven that midwives can master additional clinical responsibilities and provide quality care. This could be used as a basis to train them and other mid-level personnel, such as nurses and fieldshers, in providing more clinical services. Clearly, with appropriate training, mid-level staff can provide basic primary health care services beyond their limited current scopes of work.

## II. APPENDIX 1: Results of Observation of the Midwives' Skills

### Counseling on Family Planning Options

**Table 1. Counseling on Family Planning Options**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
88.6%	96.6%	97.2%	99.8%

### Counseling on STIs

**Table 2. Counseling on STIs**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
72.4%	85.6%	86.8%	96.4%

### Counseling on IUDs (before insertion)

**Table 3. Counseling on IUDs (general)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
91.8%	87.2%	85.8%	87.6%

**Table 4. Counseling on IUDs (indications and contraindications)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
82.4%	68.3%	65.3%	72.9%

**Table 5. Counseling on IUDs (advantages, disadvantages, side effects, warning signs)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
99.3	100.0	100.0	100.0

**Table 6. Counseling on IUDs (how to use the IUD)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
74.1	71.8	71.8	68.2

**Table 7. Counseling on IUDs (problems and complications that require an immediate visit to midwife)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
97.7%	99.4%	97.1%	93.5%

### Insertion of IUD (clinical skills)

**Table 8. Insertion of IUD (clinical skills)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
88.6%	96.1%	97.9%	97.7%

## Counseling on IUD (after insertion)

**Table 9. Counseling on IUD (after insertion)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
98.6%	99.0%	97.6%	98.1%

**Table 10. Counseling before removal of IUD**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
96.0%	98.0%	94.0%	94.0%

## Removal of IUD (clinical skills)

**Table 11. Removal of IUD (clinical skills)**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
100.0%	100.0%	100.0%	100.0%

## Counseling after IUD removal

**Table 12. Counseling after IUD removal**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
98.7%	100.0%	96.0%	98.7%

## Instrument Processing

**Table 13. Instrument processing**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
85.6%	97.8%	98.9%	100.0%

**Table 14. Instrument washing**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
93.3%	98.3%	98.3%	100.0%

**Table 15. Packing of instruments**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
100.0%	0.0%	100.0%	100.0%

## Sterilization

**Table 16. Steam sterilization skills**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
91.7%	0.0%	100.0%	95.8%

**Table 17. Dry sterilization skills**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
98.2%	97.8%	98.0%	100.0%

**Table 18. Sterilization through boiling**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
96.0%	100.0%	100.0%	96.4%

**DMPA****Table 19. DMPA counseling before injection**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
0.0%	91.8%	91.2%	86.6%

**Table 20. Clinical skills on DMPA injection**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
0.0%	89.4%	99.0%	99.2%

**Table 21. DMPA counseling after injection**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
0.0	95.0	85.0	100.0

**COCs****Table 22. Counseling on COCs**

<b>I monitoring</b>	<b>II monitoring</b>	<b>III monitoring</b>	<b>IV monitoring</b>
99.9	97.2	94.0	89.9

### III. APPENDIX 2: Results of Client Survey

How many times have you been pregnant?						
# of pregnancies	Round 1		Round 2		Total	
	N	%	N	%	N	%
1	14	8%	12	8%	26	8%
2	34	18%	36	24%	70	21%
3	29	16%	29	19%	58	17%
4	47	25%	30	20%	77	23%
5	16	9%	17	11%	33	10%
6	16	9%	10	7%	26	8%
7	16	9%	6	4%	22	7%
8	10	5%	7	5%	17	5%
9	1	1%	1	1%	2	1%
10	1	1%		0%	1	0%
11	1	1%	1	1%	2	1%
13			1	1%	1	0%
<b>Total</b>	185		150		335	

How many live births have you had in your life?						
# of births	Round 1		Round 2		Total	
	N	%	N	%	N	%
1	17	9%	13	9%	30	9%
2	42	23%	43	29%	85	25%
3	41	22%	36	24%	77	23%
4	47	25%	25	17%	73	22%
5	21	11%	16	11%	37	11%
6	11	6%	9	6%	20	6%
7	4	2%	4	3%	8	2%
8	2	1%	3	2%	5	1%
<b>Total</b>	185		150		335	

Was this the first time in your life that you had an IUD inserted?						
	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>Yes</b>	125	68%	114	76%	239	71%
<b>No</b>	60	32%	36	24%	96	29%
<b>Total</b>	185		150		335	

Did you have to pay to have this IUD inserted?						
	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>Yes</b>	13	7%	4	3%	17	5%
<b>No</b>	164	89%	146	97%	310	93%
<b>I do not remember</b>	8	4%	0	1%	8	2%
<b>Total</b>	185		150		335	

<b>If you paid, how much did you pay?</b>						
<b>Amount paid</b>	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>15 soum</b>	1	1%	0	0%	1	6%
<b>50 soum</b>	1	1%	1	1%	2	12%
<b>10 soum</b>	0	0%	1	1%	1	6%
<b>I do not remember</b>	7	4%	6	1%	13	76%
<b>Total</b>	9		8		17	

<b>Did the midwife give you information about other methods of contraception so you could choose which method you preferred?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	181	98%	148	99%	329	98%
<b>No</b>	2	1%	2	1%	4	1%
<b>I do not remember</b>	2	1%	0	0%	2	1%
<b>Total</b>	185		150		335	

<b>Which other methods did she tell you about?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Pills, OC</b>	88	48%	41	28%	129	39%
<b>Injections, DMPA, Noristerat</b>	52	28%	44	30%	96	29%
<b>Condoms</b>	25	14%	43	29%	68	20%
<b>VSS</b>	6	3%	15	10%	21	6%
<b>Withdrawal</b>	2	1%	2	1%	4	1%
<b>I do not remember which method</b>	5	3%	0	0%	5	2%
<b>Breastfeeding</b>	3	2%	4	3%	7	2%
<b>Barrier method</b>	2	1%		0%	2	1%
<b>Total</b>	183		149		332	

<b>Who recommended that you use an IUD?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Midwife</b>	35	19%	4	3%	39	12%
<b>Another health worker</b>	5	3%	1	1%	6	2%
<b>I chose the method myself</b>	134	72%	142	95%	276	82%
<b>Family, friends</b>	11	6%	3	2%	14	4%
<b>Total</b>	185		150		335	

<b>Did the midwife tell you for how long you can use an IUD?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes, 1- 10 years</b>	176	95%	150	100%	326	97%
<b>No, she did not say</b>	3	2%	0	0%	3	1%
<b>I do not remember</b>	6	3%	0	0%	6	2%
<b>Total</b>	185		150		335	

<b>Did the midwife ask whether you were pregnant before she inserted the IUD?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	183	99%	150	100%	333	99.4%
<b>No</b>	1	1%	0	0%	1	0.3%
<b>I do not remember</b>	1	1%	0	0%	1	0.3%
<b>Total</b>	185		150		335	

<b>Did she ask when you had your last period?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	184	99%	150	100%	334	99.7%
<b>I do not remember</b>	1	1%	0	0%	1	0.3%
<b>Total</b>	185		150		335	

<b>Did she ask if you have anemia?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	181	98%	148	99%	329	98%
<b>No</b>	1	1%	2	1%	3	1%
<b>I do not remember</b>	3	2%	0	0%	3	1%
<b>Total</b>	185		150		335	

<b>Did the midwife explain to you the risks of having more than one partner?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	172	93%	149	99%	321	96%
<b>No</b>	4	2%	1	1%	5	1%
<b>Difficult to answer</b>	9	5%		0%	9	3%
<b>Total</b>	185		150		335	

<b>Did the midwife explain to you the risks of your partner having more than one partner?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	178	96%	149	99%	327	98%
<b>No</b>	5	3%	1	1%	6	2%
<b>Difficult to answer</b>	2	1%		0%	2	1%
<b>Total</b>	185		150		335	

**Did the midwife tell you about the side effects that occur to many women after an IUD is inserted—and that should not cause you concern?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Longer and heavier periods	98	53%	77	51%	175	52.2%
Bleeding, spotting between periods	49	26%	45	30%	94	28.1%
More painful menstruation	31	17%	26	17%	57	17%
Midwife told me about side effects but I don't remember	5	3%	1	1%	6	1.8%
Midwife did not tell me about side effects	0	0%	1	1%	1	0.3%
Midwife told me, but I don't remember which ones	1	1%		0%	1	0.3%
Not to lift heavy things	1	1%		0%	1	0.3%
<b>Total</b>	<b>185</b>		<b>150</b>		<b>335</b>	

**Did the midwife tell you about *warning signs* that could indicate a *serious* problem – when you *must* come back to the clinic?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Delay or absence of menstruation	52	28%	32	21%	84	25%
Sharp pain in abdomen	50	27%	21	14%	71	21%
Painful sexual relations	35	19%	28	19%	63	19%
Abnormal vaginal discharge	13	7%	22	15%	35	10%
High fever	16	9%	26	17%	42	13%
IUD strings missing, too short or too long	11	6%	17	11%	28	8%
Midwife told me about warning signs, but I do not remember which ones	4	2%	2	1%	6	2%
Midwife did not tell me about warning signs	4	2%	2	1%	6	2%
<b>Total</b>	<b>185</b>		<b>150</b>		<b>335</b>	

**Did the midwife show you a sample of the IUD she was planning to insert?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Yes	177	96%	149	99%	326	97%
No	6	3%	1	1%	7	2%
I do not remember	2	1%	0	0%	2	1%
<b>Total</b>	<b>185</b>		<b>150</b>		<b>335</b>	

**Did the midwife explain what she was doing while she was inserting the IUD, so you would know what was happening?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Yes	180	97%	150	100%	330	99%
No	3	2%	0	0%	3	1%
I do not remember	2	1%	0	0%	2	1%
<b>Total</b>	<b>185</b>		<b>150</b>		<b>335</b>	

**After the IUD was inserted, did the midwife ask you to feel for the strings so you'd know how to check routinely if the IUD is still in place?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>Yes</b>	178	96%	149	99%	327	98%
<b>No</b>	5	3%	1	1%	6	2%
<b>I do not remember</b>	2	1%	0	0%	2	1%
<b>Total</b>	185		150		335	

**After the IUD was inserted, did the midwife ask you to come back for a routine check-up after your period, or after 3-6 weeks?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>Yes, 10 days after first menstruation</b>	184	99%	149	99%	333	99%
<b>I do not remember</b>	1	1%	0	0%	1	0%
<b>Three days after</b>	0	0%	1	1%	1	0%
<b>Total</b>	185		150		335	

**In the first week after insertion, many people experience some side effects. After that first week, did you experience any side effects?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>Bleeding between periods</b>	8	4%	0	0%	8	2%
<b>Missed period</b>	11	6%	1	1%	12	4%
<b>Sharp pain</b>	2	1%	0	0%	2	1%
<b>Painful sexual relations</b>	1	1%	0	0%	1	0%
<b>Sharp pain in lower abdomen</b>	3	2%	0	0%	3	1%
<b>Heavy and prolonged menstruation</b>	4	2%	1	1%	5	1%
<b>No side effects</b>	154	83%	148	99%	302	90%
<b>I do not remember</b>	2	1%	0	0%	2	1%
<b>Total</b>	185		150		335	

**When you had that problem, did you go back to the midwife or go to another health worker for help or advice?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>To the midwife</b>	18	62%	0	0%	18	58%
<b>To another health worker</b>	3	10%	0	0%	3	10%
<b>To no one</b>	8	28%	2	100%	10	32%
<b>Total</b>	29		2		31	

**When you went back to the midwife, were you satisfied with the help she gave you?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
<b>Yes</b>	17	100%	1	100%	18	100%
<b>No</b>	0	0%	0	0%	0	0%
<b>Total</b>	17		1		18	

**(For those who did not go back to the midwife) Why did you not go back to the midwife who inserted the IUD? (More than one answer permitted—reasons given by respondents)**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Discharge lasted only 3 days	6	55%	0	0%	6	46%
Pain improved in two days	2	18%	1	50%	3	23%
I do not remember	2	18%	0	0%	2	15%
Midwife works in another FAP and she was on duty	1	9%	0	0%	1	8%
Do not trust	0	0%	1	50%	1	8%
<b>Total</b>	<b>11</b>		<b>2</b>		<b>13</b>	

**Are you still using the same IUD?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Yes	182	98%	150	100%	332	99%
No	3	2%	0	0%	3	1%
<b>Total</b>	<b>185</b>		<b>150</b>		<b>335</b>	

**When did you stop using the IUD?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
One month after	2	67%	0	0%	2	67%
Five days after	1	33%	0	0%	1	33%
<b>Total</b>	<b>3</b>		<b>0</b>		<b>3</b>	

**Was the IUD removed or was it expelled by your body?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Removed	3	100%	0	0%	3	100%
Expelled	0	0%	0	0%	0	0%
<b>Total</b>	<b>3</b>		<b>0</b>		<b>3</b>	

**Why did you decide to remove the IUD?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Due to bleeding	2	67%	0	0%	2	67%
Heavy menstruation	1	33%	0	0%	1	33%
<b>Total</b>	<b>3</b>		<b>0</b>		<b>3</b>	

**Where did you go to have the IUD removed?**

	Round 1		Round 2		Total	
	N	%	N	%	N	%
Midwife who inserted IUD	2	67%	0	0%	2	67%
Other health worker	1	33%	0	0%	1	33%
<b>Total</b>	<b>3</b>		<b>0</b>		<b>3</b>	

<b>Were you satisfied with the midwife's services when she removed the IUD?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	2	100%	0	0%	2	100%
<b>No</b>	0	0%	0	0%	0	0%
<b>Total</b>	2		0		2	

<b>Why did you not have the same midwife remove the IUD?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>She was on duty</b>	1	100%	0	0%	1	100%
<b>Total</b>	1		0		1	

<b>Have you had another IUD inserted?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	0	0%	0	0%	0	0%
<b>No</b>	3	100%	0	0%	3	100%
<b>Total</b>	3		0		3	

<b>Are you using another contraceptive method?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	1	33%	0	0%	1	33%
<b>No</b>	2	67%	0	0%	2	67%
<b>Total</b>	3		0		3	

<b>Would you recommend your midwife to a friend or relative for IUD insertion?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	180	97%	149	99%	329	98%
<b>No</b>	4	2%	1	1%	5	1%
<b>Difficult to answer</b>	1	1%	0	0%	1	0%
<b>Total</b>	185		150		335	

<b>If not, why not?</b>						
	<b>Round 1</b>		<b>Round 2</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
<b>I will go only to a doctor</b>	4	100%	1	100%	5	100%
<b>Total</b>	4		1		5	