

ACQUIRE Evaluation and Research Studies

Reproductive Health and Services in Azerbaijan, 2005: Results of a Baseline Survey in Five Districts

E & R Study #6 ♦ July 2006



USAID
FROM THE AMERICAN PEOPLE

the **ACQUIRE** project

ACQUIRE Evaluation and Research Studies

Reproductive Health and Services in Azerbaijan, 2005: Results of a Baseline Survey in Five Districts

E & R Study #6 ♦ July 2006

Authors:

The ACQUIRE Project
Jan Bradley

The ACQUIRE Project/Azerbaijan
Nabat Mursagulova



USAID
FROM THE AMERICAN PEOPLE

the **ACQUIRE** project

© 2006 EngenderHealth/The ACQUIRE Project. All rights reserved.

The ACQUIRE Project
c/o EngenderHealth
440 Ninth Avenue
New York, NY 10001 U.S.A.
Telephone: 212-561-8000
Fax: 212-561-8067
e-mail: info@acquireproject.org
www.acquireproject.org

This publication is made possible by the generous support of the American people through the Office of Population and Reproductive Health, U.S. Agency for International Development (USAID), under the terms of cooperative agreement GPO-A-00-03-00006-00. The contents are the responsibility of the ACQUIRE Project and do not necessarily reflect the views of USAID or the United States Government.

Map on page 1 from: U.S. Central Intelligence Agency (CIA). 2006. *The world factbook*. Washington, DC. Retrieved from <https://www.cia.gov/cia/publications/factbook/geos/aj.html>, July 2006.

Printed in the United States of America. Printed on recycled paper.

Suggested citation: Bradley, J., and Mursagulova, N. 2006. Reproductive health and services in Azerbaijan, 2005: Results of a baseline survey in five districts. *E&R Study #6*. New York: EngenderHealth/The ACQUIRE Project.

Contents

Acknowledgments	vii
Acronyms/Abbreviations	ix
Executive Summary	xi
Background	1
Azerbaijan Geopolitics	1
The Azerbaijan Health Sector	1
Family Planning Services and Support	2
Fertility and Contraception in Azerbaijan	3
The ACQUIRE Azerbaijan RH/FP Project	4
Baseline Methodology	7
Survey Tools	7
Data Collection	7
Study Findings	9
Family Planning Services at Public-Sector Facilities	9
Infrastructure	9
Family Planning Services	10
Quality Improvement, Management, and Supervision	13
When Clients Cannot Be Served: Absence of Methods and Referral Practices	14
Infection Prevention	14
Laboratory Diagnostic Capability and STI Treatment	14
Family Planning Providers at Public-Sector Sites	15
Respondent Characteristics	15
Provider Training in Family Planning	15
Provider Knowledge: Methods of Pregnancy Prevention	15
Provider Knowledge and Practice	16
Provider Knowledge and Practices: Medical Barriers	18
Personal Contraception Preferences	22
Family Planning Provided in Apteks	23
Access to Apteks	23
Aptek Staff	23
Pregnancy Prevention Methods	23
Contraceptive Brands Available	24
Commodity Suppliers and Availability	24
Prescription Issues	25
Aptek Family Planning Clients	25

Demand Issues: Users and Nonusers of Contraception	26
Respondents' Characteristics	26
Family Size, Reproductive Intentions, and Decision Making	27
Knowledge of Pregnancy Prevention Methods	27
Ever-Use of Pregnancy Prevention Methods	28
Current Use of Pregnancy Prevention Methods	28
Sources of Contraceptive Supply	29
Overall Use of Modern Contraception	29
Never Users of Modern Contraception	29
Discontinuers of Modern Contraception.....	30
Unmet Need for Limiting Births	32
Current Use of Modern Contraception	32
Attitudes toward Contraception	33
General Health-Seeking Behavior	34
Community Involvement in Family Planning Programs	35
Pregnancy Termination	35
Respondents' Sources of Information	36
Summary and Recommendations	39
Summary of Findings	39
Supply Issues: Public-Sector Health Facilities and Services	39
Supply Issues: Public-Sector Health Providers	39
Supply Issues: Private-Sector Apteks	40
Demand Issues	40
Recommendations: Opportunities for Intervention	41
Family Planning Supply	41
Demand Creation	41
Appendix: Baseline Survey Sampling Strategy	43
The Mapping/Census Exercise	43
Sampling of Health Facilities for Audit	43
Sampling of Apteks	44
Sampling of Staff for Interview	44
Sampling of Community Members for Interview	46
Populations and Surveyed Areas	48
Tables	
Table 1. Data collection tools and sample numbers	7
Table 2. Number of health facilities with specified aspects of infrastructure, by type of facility	9
Table 3. Number of facilities with family planning areas considered to need major repair	9

Table 4.	Number of facilities with specified infrastructure and services, by type of facility	10
Table 5.	Number of providers reporting supplying FP methods or prescriptions to clients in previous six months	11
Table 6.	Estimated number of FP clients served per month, by type of facility	12
Table 7.	Number of facilities with commodities and supplies on day of visit	12
Table 8.	Number of facilities with FP instruments and supplies on day of visit	13
Table 9.	Number of facilities reporting availability of selected laboratory services	15
Table 10.	Number of providers who mentioned various methods of pregnancy prevention, by type of provider	16
Table 11.	Percentage distribution of providers, by number of years they believe the IUD can be used to prevent pregnancy	16
Table 12.	Number and percentage of ob-gyns and midwives citing various FP methods as appropriate for use postabortion and postpartum	17
Table 13.	Percentage of all providers mentioning various danger signs for the IUD and pill requiring a client to return to the clinic	18
Table 14.	Percentage of all providers citing age and parity criteria for offering clients the IUD, the pill, and the injectable	19
Table 15.	Percentage of providers mentioning specific personal information that needs to be discussed before clients are prescribed the IUD or the pill	20
Table 16.	Percentage of providers mentioning specific medical history issues that need to be discussed before clients are prescribed the IUD or the pill	20
Table 17.	Percentage of providers mentioning specific tests or examinations that they would need to perform before prescribing the IUD or the pill	21
Table 18.	Percentage of providers reporting how many pill cycles are given routinely to new or returning pill clients	21
Table 19.	Number of providers citing a personal preference for a method of pregnancy prevention, by type of provider	22
Table 20.	Number and percentage of apteks where pregnancy prevention methods and related products were sold	24
Table 21.	Number and percentage distribution of apteks, by whether they required a prescription to provide various FP methods	25
Table 22.	Estimated numbers (and percentages) of aptek clients obtaining FP methods in a given week	25
Table 23.	Number and percentage distribution of household survey respondents, by age, according to gender	26
Table 24.	Percentage of women and men who knew of methods to prevent pregnancy, who had ever used such methods, and who currently use such methods	28
Table 25.	Number and percentage distribution of all respondents, by whether they knew of or had ever used modern pregnancy prevention methods	29
Table 26.	Number and percentage of respondents mentioning various reasons for why they personally (or their partner) had never used modern contraceptives (multiple responses allowed)	30

Table 27.	Number of respondents who had ever used (or whose partners had used) modern contraception, and number and percentage who had then discontinued modern method use (multiple responses to types of methods allowed)	31
Table 28.	Number and percentage of respondents giving various reasons for having personally (or having a partner who) discontinued use of modern contraceptives (multiple responses allowed)	31
Table 29.	Number and percentage of current users of a method reporting who decided on their use of the current method	32
Table 30.	Number and percentage of respondents who would prefer discussing pregnancy prevention with various people	33
Table 31.	Among women who had had an abortion, total number obtained, percentage of women who had an abortion, and percentage of all women	35
Table A1.	Total number and type of facilities per district	43
Table A2.	Facility sampling in five districts	44
Table A3.	Number of staff employed at all sites, by facility type and district	44
Table A4.	Number of staff employed at all sites, by facility type and staff cadre	45
Table A5.	Number of staff employed, by district and type of health professional	45
Table A6.	Health worker sampling	46
Table A7.	Overall sampling framework—community selection	46
Table A8.	District populations and sample numbers	47
Table A9.	Final sample numbers per town/village, in each district	47
Table A10.	Community male and female respondents—intended sample	47
Table A11.	Household survey respondents	48

Figures

Figure 1.	Azerbaijan and the Caucasus Region	1
Figure 2.	Azerbaijan survey districts	4

Acknowledgments

This report summarizes the findings of a study undertaken in five districts of Azerbaijan in 2005, as a baseline for the ACQUIRE Azerbaijan Reproductive Health and Family Planning Project. Nabat Mursagulova (M&E Advisor for the ACQUIRE Azerbaijan Reproductive Health and Family Planning Project) and Jan Bradley (Senior M&E Associate, the ACQUIRE Project, New York) managed all aspects of the study and wrote this report. The authors would like to acknowledge all those others who participated in the survey from inception to completion.

First, their thanks go to Ali Hasanov, Deputy Prime Minister, Chairman of the Republican Commission on International and Humanitarian Assistance, and to Gurban Sadigov, Head of the Department for Problems of Refugees, Internally Displaced Persons, Migration, and Work with International Organizations, for their overall support to the project and its baseline study. Acknowledgment is also due to the staff of the Ministry of Health and of the National Reproductive Health Office, for their continuous support to the project, including this study.

The authors also would like to express their appreciation to district authorities, including Executive Committee Heads, District Chief Doctors, and their staff in all five districts (Aghsu, Kurdemir, Ismayilli, Goychay, and Shamakhi) for their facilitation and administrative support to the survey. They sincerely thank all health providers who participated in the survey, as well as the 1,011 residents in the five districts who agreed to be interviewed.

The authors' appreciation goes to ERA Research and Consultancy Company, responsible for all aspects of data collection, data entry, and preliminary analysis. In particular, they would like to acknowledge the energetic and reliable efforts of ERA's management, including Elmir Gasimov, Director, Anar Ibrahimov, Deputy Director, and Emil Mammadov, Business Development Manager, for their administrative, technical, and supervisory support.

Special thanks go to Marianna Nosa (Project Director) and Afat Alizadeh (RH/FP Program Officer), ACQUIRE Azerbaijan Reproductive Health and Family Planning Project, for their input and support throughout the project. The authors also extend thanks to Evelyn Landry, the ACQUIRE Project's Regional Director, Asia/Near East, for her leadership and support to the project, and to Hannah Searing, ACQUIRE's Director of Monitoring and Evaluation, New York. They would also like to thank their colleagues for all of their support: Shafag Rahimova, Maia Smith, Teymur Huseynov, Elshan Gurbanov, Sevinj Hasanova, Vafa Abbasova, Ulker Javadova, and Shams Asgarova.

Thanks are also given to our donor agency, the U.S. Agency for International Development (USAID) Caucasus/Azerbaijan Mission: James Goggin, Country Coordinator; Valerie Ibaan, Social Sector Advisor; Melinda Pavin, Senior Technical Advisor for Health; and Nargiz Shamilova, Health Project Management Specialist.

This report was edited by Michael Klitsch and was formatted by Elkin Konuk.

Acronyms/Abbreviations

ACQUIRE	Access, Quality, and Use in Reproductive Health
ADRA	Adventist Development and Relief Agency International
AHAP	Azerbaijan Humanitarian Assistance Program
AIDS	acquired immunodeficiency syndrome
ARHI	Azerbaijan Reproductive Health Initiative
ARHP	Azerbaijan Reproductive Health Program
CDH	central district hospital
DAC	doctor ambulatory clinic
FAP	feldsher action post
FP	family planning
GDP	gross domestic product
GP	general practitioner
HIV	human immunodeficiency virus
IEC	information, education, and communication
IDP	internally displaced persons
IUD	intrauterine device
LAM	lactation amenorrhea method
M&E	monitoring and evaluation
MOH	Ministry of Health
NRHO	National Reproductive Health Office
NGO	nongovernmental organization
ob-gyn	obstetrician-gynecologist
PH	peripheral hospital
RHS	reproductive health survey
RH	reproductive health
STI	sexually transmitted infection
SPSS	Statistical Package for the Social Sciences
TFR	total fertility rate
TIAR	total induced abortion rate
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
USAID	U.S. Agency for International Development

Executive Summary

The ACQUIRE Project—which stands for Access, Quality, and Use in Reproductive Health—is a global Leader with Associate cooperative agreement funded by the U.S. Agency for International Development (USAID) that works worldwide to advance and support reproductive health and family planning (RH/FP) services, with a focus on facility-based and clinical care. EngenderHealth is the lead partner of ACQUIRE overall.¹ In October 2004, the USAID Caucasus Azerbaijan Mission awarded the ACQUIRE Project a five-year associate award in Azerbaijan. Currently, the ACQUIRE Project is the main implementer of RH/FP programming in the country, and unlike all previous programs, this project is designed with a broad mandate to implement RH/FP strategies that address policy change, contraceptive security, demand creation, and service expansion and quality improvement.

The Project began in five core districts in 2005 (Aghsu, Goychay, Ismayilli, Kurdemir, and Shamakhi). Later that year, eight new districts (previously part of the Azerbaijan Reproductive Health Initiative) were incorporated into the program. Another 5–10 districts, previously not covered by any FP program, will be included during the third year of the project. The criteria used for identification of the first five districts included: large population size; good mix of rural cities and rural areas; high abortion rate; low modern contraceptive prevalence rate; high fertility rate among women 15–19 years old; high unmet need for FP; expressed support from district administrative and health authorities; the presence of a Family Planning Centre at a Central District Hospital (CDH); administrative feasibility; and the presence of international and local nongovernmental organizations (NGOs) in the district. The first five districts selected are contiguous and are located in the center of the country. Together, they have a population of almost half a million people, almost one-third of whom live in the five main urban centers and the rest of whom live in a total of 257 small villages in rural areas.

Baseline Assessment

To identify problems and barriers to services specific for each district, provide data that could assist with project implementation, and allow determination of benchmarks and targets to measure success, the project started with a baseline assessment of facilities, providers, and community members in the five core districts.

The objectives of the assessment were to evaluate factors contributing to the current use of FP services, including:

- ◆ The supply of FP in the public and private sectors: the availability and quality of facilities providing FP services, including the availability of contraceptive methods, information, education, and communication (IEC) materials, and trained providers; and
- ◆ The demand for FP: the population's knowledge of, attitudes toward, and practice of pregnancy prevention.

¹ EngenderHealth leads ACQUIRE in partnership with the Adventist Development and Relief Agency International (ADRA), CARE, IntraHealth International, Inc., Meridian Group International, Inc., SATELLIFE, and the Society for Women and AIDS in Africa.

Methodology

First, a mapping/census exercise was undertaken to develop a full picture of facilities in the districts and to develop a sampling framework for all aspects of the baseline survey. Project staff visited all districts and collected information on health facilities and registered apteks and on health staff at each facility. The following tools were then used to collect detailed information:

- ◆ Three survey tools were used to evaluate the *supply* side of FP services:
 - ◇ An audit of a sample of public health facilities collected data on services provided, infrastructure, equipment, and FP supplies and services. Surveys were conducted in CDHs, polyclinics, Peripheral Hospitals (PHs), Doctor Ambulatory Clinics (DACs), and Feldsher Action Posts (FAPs).
 - ◇ Structured interviews with health care providers in the same health facilities collected data on FP services provided, training, and other RH-related information.
 - ◇ An audit and interview in all apteks evaluated the role played by pharmacists in contraceptive provision.
- ◆ To gain insight into the *demand* side of FP, we interviewed a representative sample of community members. Questions were asked about FP use and intent, use of abortion, utilization of health services, and potential avenues for IEC messages.

Data Collection

All data collection tools were developed, translated into Azeri and edited, then field-tested and revised. All questionnaires were approved by the National Office of Reproductive Health (NHRO) and by the Ministry of Health (MOH). Five supervisors and 20 interviewers, eight of whom were doctors, were trained as data collectors and were divided into five teams (one per district). Each district team had at least one doctor. Data collection took 20 days between March and June 2005. Verbal informed consent was obtained from all respondents, and interviewers signed that this had been obtained; every evening, supervisors reviewed all forms to ensure compliance with consent procedures.

Summary of Findings

Supply Issues: Public-Sector Health Facilities and Services

- ◆ Most PHs have an inadequate supply of water, electricity, and telephones. The CDHs are in poor repair, as are the lower-level facilities. Some FAPs are barely operational.
- ◆ Few facilities have FP supplies (including commodities, gloves, and antiseptics), including most of the CDHs. Only two of the 76 surveyed sites had condoms, three had oral contraceptives, eight had IUDs, and none had injectable contraceptives. Norplant implants, tubal ligation, and vasectomy are not available anywhere. Few facilities have basic FP IEC materials.
- ◆ FP services are theoretically available at CDHs, but in reality, few clients are served there. Within the CDHs, there were missed opportunities for providing FP information to women in postabortion and postpartum settings. FP services are not really available anywhere other than in the central towns, to a large extent because of the absence of gynecologists.
- ◆ Outreach and community-based services are very limited. Referral systems appear to be basic, although members of the community probably know not to waste time seeking FP services anywhere other than at CDHs.
- ◆ Diagnostic capabilities for sexually transmitted infections (STIs) are poor, even at the district level.

- ◆ Quality improvement and facilitative supervision are unfamiliar concepts for the management of surveyed health facilities.
- ◆ Infection prevention practices are often inadequate.

Supply Issues: Public-Sector Health Providers

- ◆ There are many gynecologists in Azerbaijan, but they are concentrated in Baku and in other major urban areas. In the five districts, all ob-gyns are posted at CDHs and polyclinics. Also, given the current policy of only allowing gynecologists to prescribe hormonal contraception and insert IUDs, the number of gynecologists would be insufficient for serving all clients should demand for services increase significantly. There are only three gynecologists in Aghsu, for example, and they manage all pregnancy and RH issues for a population of approximately 22,000 women of reproductive age. Other cadres are very underutilized for providing clients with FP information and referrals.
- ◆ Of all providers surveyed, few are trained to provide FP aside from ob-gyns, and even fewer actually provide services. Among the ob-gyns, only two of the three had prescribed or provided pills or had provided condoms in the previous six months. Six of the 35 gynecologists had not inserted an IUD in the previous six months.
- ◆ Provider knowledge of FP methods and how to use them is low among all cadres of providers, including physicians. There is some evidence that previously trained gynecologists may need FP updates to orient them to new contraceptive technology. Knowledge of appropriate postabortion and postpartum contraception is poor.
- ◆ In discussions of pregnancy prevention methods with providers, abortion emerges as a key theme, mentioned by providers more often than some modern contraceptives. Induced abortion clearly is still widely practiced.
- ◆ Provider bias may exist for some methods: Almost half personally prefer the IUD to other methods, and one-quarter have a personal preference for using traditional methods or for not using any method.
- ◆ Counseling and informed choice may need to be enhanced in Azerbaijan. Sixty-three percent of providers thought that the provider should choose an FP method for the client.
- ◆ Considerable medical barriers exist, even among ob-gyns, with respect to eligibility for methods based on age and parity. Sometimes tests (such as ultrasound and diagnostic tests for STIs) are required before contraception can be given. Most gynecologists restrict women to three months of pill supplies, which is inconvenient for clients. Spousal consent often appears to be a requirement of contraceptive provision, which may pose a barrier in some cases. This issue needs to be addressed at the policy and training levels.

Supply Issues: Private-Sector Apteks

- ◆ Apteks are the main suppliers of FP commodities, given the absence of FP supplies from health facilities. Most apteks are small, serving fewer than 25 people a day in total. People in the community reported that they would be happy to purchase supplies from apteks, although most people do not live close to one, as almost all are in the main town of a district.
- ◆ Most apteks reported selling contraceptives, though the range of methods was limited in most. Condoms are the most widely available and commonly purchased method, followed by the pill; access to the IUD and spermicides is very limited, and progesterone-only pills and injectables were not available at all. For most methods, a range of brands were available, at varying prices and supplied by various suppliers.

- ◆ Apteks report a general lack of demand for contraceptives. Nevertheless, clients do ask their staff about pregnancy prevention methods, particularly emergency contraception. This presents a good opportunity to provide further information about modern contraceptive methods to potential clients.
- ◆ Very few aptek staff have had any training in FP; in the meantime, they often sell methods without prescription. Several aptek staff expressed a desire to be trained in FP. Most apteks have only one or two staff, which has implications for the type and duration of FP training the project should adopt.

Demand Issues

- ◆ Most people in these communities are well-educated, yet many are poor, with high levels of unemployment.
- ◆ It appears that very few clients attend health facilities specifically for contraception. Furthermore, few clients appear to purchase contraception at apteks.
- ◆ Most families are small. Men and women clearly want to limit family size, yet they do not use contraception. Men appear to be in consensus with their wives about family size, and most want to share decision making.
- ◆ More than three-quarters of men and women (78% of married men and 85% of married women) reported that they had tried to prevent a pregnancy at some time. The most common method of preventing pregnancy (mentioned by more than half of the men and women) was withdrawal. About one-quarter of respondents had tried modern methods; however, almost two-thirds of these had discontinued use. Fewer than 9% of respondents were currently using a modern method. Many respondents acknowledged that they still use abortion as a key means of fertility control.
- ◆ There is a huge unmet need for contraception in Azerbaijan, with 88% of sexually active, fertile women not wanting another child yet not using a modern method.
- ◆ Reasons given for nonuse of modern contraception (by those who do not desire pregnancy) were fear of side effects, preference for natural methods, or lack of information.
- ◆ There appeared to be general support for the provision of FP information to young people before marriage. There is a need for premarital education for young people through incorporation of FP messages into the health component of the basic school curriculum and through out-of-school peer education programs.
- ◆ Abortion continues to be widely practiced. Most women do not like having abortions, but they seek them as a last resort after having unprotected sex or using inadequate traditional methods of contraception.

Recommendations: Opportunities for Intervention

Family Planning Supply

- ◆ Access to FP is limited by policies that allow only gynecologists to prescribe oral contraceptives. Given clients' limited access to the few gynecologists, there is a need to consider policy changes that would allow other cadres to prescribe this method.
- ◆ Staff are interested in being trained in FP and in providing services. Training at higher levels should include contraceptive technology updates, counseling for informed choice, reduction of medical barriers, quality improvement, and improved management and supervision of those providing FP services (both within the site and in the community). At lower levels, training

could include counseling, basic FP knowledge, and infection prevention, as well as how to strengthen linkages for referrals from FAPs and DACs to hospitals.

- ◆ Investments in equipment are needed, as well as improvements in supply mechanisms.
- ◆ Opportunities for improving the supply of commodities in aptekas need to be examined. There appears to be a need to rationalize the supply of a limited number of well-priced and effective brands, while possibly discouraging the use of others. FP training is attractive to aptek staff. Given the difficulties of leaving the shop for training, self-study might be an option to consider. Social marketing programs should also be explored as a means to increase demand.
- ◆ More research is needed on individuals' ability to pay for contraceptives in the private sector.
- ◆ Strengthening preservice education on FP in medical universities, medical colleges, and schools would be useful.
- ◆ Contraceptive security is a matter of urgency. Government and the private sector should work jointly to seek viable solutions, without which all other interventions may be wasted.

Demand Creation

- ◆ Both men and women clearly want to limit family size. Abortion remains a key means of fertility control, although most people do not like it and know it is not a healthy choice. To reduce this dependence, effective modern contraception must be made available, and communities should be informed about the availability of services.
- ◆ There are huge opportunities for engaging women and men together in FP counseling. Men share small-family aspirations and want to be involved in decision making.
- ◆ Television programs on FP airing in the evenings would reach the greatest number of people.
- ◆ More research is needed on myths around modern contraception. IEC messages need to focus on providing information and dispelling fears of side effects.
- ◆ Many women reported obtaining contraceptives directly from pharmacies without consulting a health care provider. With the project's emphasis on improving services at health facilities, women need to be encouraged to engage with health workers to receive appropriate counseling and prescriptions. Joint community-facility initiatives would enhance the public's confidence in this partnership between the public and private sectors.
- ◆ Discussions of FP in communities, through community activities, mass media, and local organizations, would build on respondents' assertions that the people with whom they would most prefer to discuss FP are friends and family members. Although women reported not discussing FP much with spouses, interest by men could be exploited by encouraging counseling for couples and by aiming IEC at men.
- ◆ As there appeared to be general support for provision of FP information to young people before marriage, efforts should be made to target youth with FP information, either through the Ministry of Education or through other channels.

Women currently face limited choices in their ability to control their fertility, often still resorting to abortion, despite the fact that the dangers of abortion are known in the community and among health professionals. Efforts are needed to provide women and men with healthy contraceptive alternatives, which they would most likely welcome. Ultimately, the government, health providers, and the community all want the same thing: Few people need to be convinced of the need for high-quality primary care services where effective contraceptive information and methods can be found. The response, however, needs to be multifaceted for both supply to be available and for demand to be generated and met.

Background

Azerbaijan Geopolitics

Azerbaijan, a country of 8 million people, lies in southwestern Asia and is bordered to the north by Russia, to the south by Iran, to the east by the Caspian Sea, and to the west by Armenia and Georgia (Figure 1). More than 90% of its population is Muslim and ethnic Azeri. Since the collapse of the Soviet Union in 1991, Azerbaijan has been independent. An oil-rich nation since the turn of the century, recent investments have enhanced capacity and the potential for increased oil revenue, boosted by the recent construction of new oil and gas pipelines to the Mediterranean. Despite this, the gross domestic product (GDP) per capita in 2005 was estimated at less than \$5,000. The events of the last 15 years and the political and economic transformation have had implications for social services. While such indicators of health and prosperity as life expectancy and literacy remain high, much remains to be done to bring Azerbaijan into line with its neighbors in Europe, particularly in the area of primary health care provision and reproductive health (RH).

Figure 1: Azerbaijan and the Caucasus Region



The Azerbaijan Health Sector

Like many other countries that were formerly part of the Soviet Union, Azerbaijan still has a very centralized financing and management system and a significant imbalance in the urban-rural distribution of human resources. Furthermore, within the health sector, funding priority is given to curative services over preventive care and to hospitals over smaller facilities. Most of smaller health

facilities, such as Doctor Ambulatory Clinics (DACs), Feldsher Action Posts (FAPs),² and Peripheral Hospitals (PHs) are in a dilapidated condition and are unable to fulfill their potential as the basis of first-line health care. While specialists are concentrated in cities and district centers and hospitals and specialized care are used excessively, primary health care services are severely underfunded, poorly managed, and highly fragmented. In addition, many policy directives have limited the range of providers who are authorized to perform certain services, with a heavy reliance on medical specialists to perform many primary health care functions. This results in excessive referral of clients, including those with simple RH needs, to higher level facilities. With the health budget comprising 2% of the GDP (\$7 per capita), the unemployment rate high, and health insurance rare, the system fails to meet the basic health needs of the population, including RH and family planning (FP) needs.

Family Planning Services and Support

Before 1994, Azerbaijan did not have a formal FP program, though some services were sporadically provided by obstetrician-gynecologists (ob-gyns). Starting in 1994, Pathfinder International, with funding from the United Nations Population Fund (UNFPA), implemented a five-year program to improve FP services. In 1999, UNFPA supported establishing the Azerbaijan National Reproductive Health Office, through which all RH/FP activities have been implemented.

In 1998, the U.S. Agency for International Development (USAID) launched the Azerbaijan Humanitarian Assistance Program (AHAP), a program of support to education, health, agriculture, and other sectors. Under this program, a consortium of international nongovernmental organizations (NGOs) supported FP work, including training community peer educators, developing information, education, and communications (IEC) materials, and establishing a cadre of master trainers. Recognizing the need to increase consumer knowledge and use of FP services, USAID also funded the Program for Family Planning and Reproductive Health Initiatives (PFPRHI) Program (under the Mercy Corps umbrella), starting in 2003. In this 14-month project, 28 master trainers were trained and four FP clinic manuals were developed. Additional donor support has been received for research (the 2001 Azerbaijan Reproductive Health Survey [RHS]) and for IEC activities. Also, since 1996, peer educators have been trained in many communities to provide community education and mobilize resources for FP services, with support from UNFPA, the United Nations High Commissioner for Refugees (UNHCR) and USAID. A total of 30 FP centers have been established, equipped, and provided with contraceptives with support from UNFPA.

According to Ministry of Health (MOH) regulations, only ob-gyns can prescribe hormonal methods and can insert IUDs. Midwives are only allowed to provide FP counseling. This severely restricts access to modern contraceptives, as most rural districts have a limited number of ob-gyns. Furthermore, almost all ob-gyns work in the central district hospitals (CDHs) and polyclinics of these rural districts. (For example, in our survey, we found that 35 of 38 ob-gyns worked in these settings—see the Appendix.) In addition, most primary care facilities are not ready to provide FP services, as they lack not only trained personnel, but also equipment, supplies, and adequate infrastructure. Many providers lack knowledge of modern contraception, few have been trained in counseling skills and informed choice, and there are widespread misconceptions about some modern methods.

² FAPs are located in rural areas and are staffed mostly by feldshers, paramedics who are trained in the provision of primarily preventive health services.

Contraceptive supply is an area of concern. For the past 12 years, UNFPA has been the *sole* supplier of FP methods (mostly the pill, IUDs, condoms, and spermicides) in public-sector pilot sites throughout the country. This has been managed on an ad hoc basis, as the country still does not have a system of centralized government procurement and logistics management. UNFPA expects to cease providing these commodities in 2006, after which alternative sources for contraceptives need to be found. In the absence of free distribution, consumers will have to turn exclusively to purchasing contraception in pharmacies (apteks). Thus, in the future, product affordability may become one of the main factors determining contraceptive use, particularly among low-income families.

Fertility and Contraception in Azerbaijan

The 2001 Azerbaijan RHS estimated that 55% of *married* women aged 15–44 in Azerbaijan were using some kind of FP method, the second lowest contraceptive prevalence rate among former Soviet states. Moreover, Azerbaijan has one of the lowest rates of use of *modern* methods (12% of married women), a rate much higher in urban (16%) than in rural (7%) areas and much lower than in neighboring countries. For example, use of modern methods among married women is reported to be 54% in Kazakhstan, 53% in Uzbekistan, and 50% in Moldova. Despite this low level of contraceptive use, the total fertility rate (TFR) is low, at 2.1 lifetime births per woman, which reflects continued use of abortion as a means of fertility control, a legacy of the Soviet health care system. In 2001, the total induced abortion rate (TIAR) in Azerbaijan was estimated to be as high as 3.2 (116 abortions per 1,000 women), the second highest rate in the region after Georgia (3.7) and significantly higher than Moldova (1.3) and Ukraine (1.6).

Low levels of modern contraceptive use, high usage of induced abortion, and low TFR reflect the desires of many couples to have small families: The 2001 Azerbaijan RHS estimated that 77–93% of women with two or more children were ready to terminate childbearing. However, the survey also found that about 40% of currently married women in Azerbaijan rely on withdrawal to protect themselves from pregnancy. As a result, approximately 57% of women surveyed in the RHS reported that their last pregnancy was unintended. Moreover, 84% of those said that the pregnancy was unwanted rather than mistimed.

The combination of low use of modern contraception, high rates of abortion, and low desired fertility means that there is a high level of unmet need for modern contraception in Azerbaijan. The 2001 RHS survey estimated that 45% of married women in Azerbaijan have an unmet need for modern contraception for limiting births and that 8% have an unmet need for contraception for spacing births; thus, 53% of married women have an unmet need for contraception, the highest rate of any country in Eastern Europe, Central Asia, and the Caucasus Region.

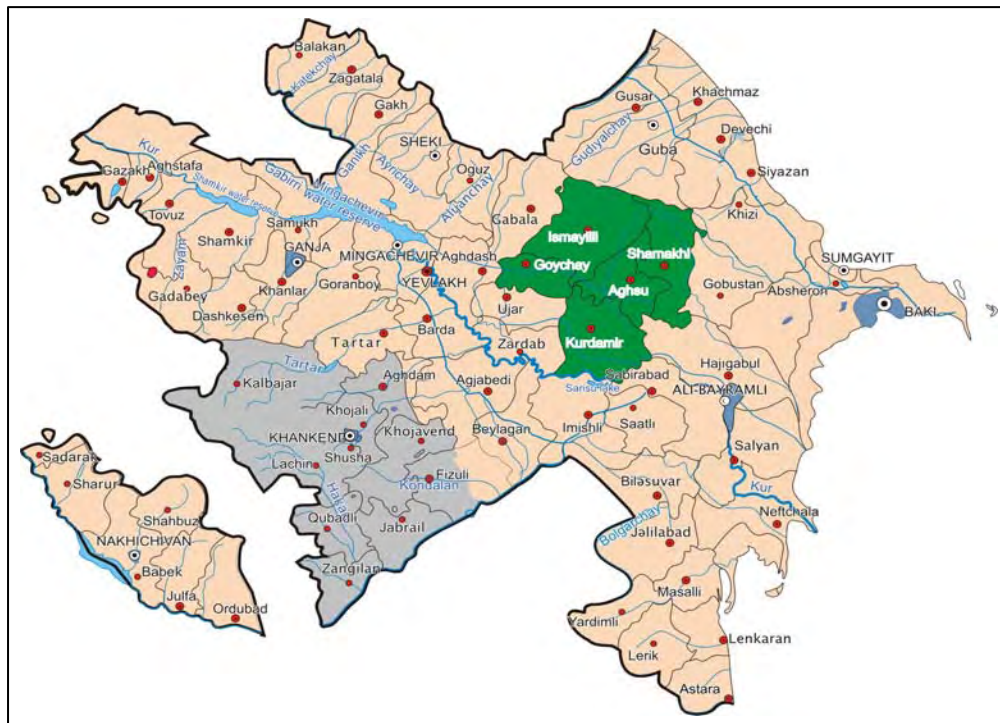
Despite the desire for small families, the considerable lack of knowledge about effective pregnancy prevention and services within most communities is a serious barrier to contraceptive use in Azerbaijan. Among 2001 RHS respondents, only 58% had ever heard of condoms, and 53% had heard about the pill. Furthermore, individuals know little about their rights as consumers and thus tended not to question or demand services. It is clear that men and women in Azerbaijan desire small families, yet rely to a large extent on ineffective traditional FP methods. This results in many unwanted pregnancies that end in induced abortion, despite government efforts to limit the practice and promote pregnancy prevention. The time is clearly now ripe for massive investment in high-quality modern contraceptive programs.

The ACQUIRE Azerbaijan RH/FP Project

The ACQUIRE Project—which stands for Access, Quality, and Use in Reproductive Health—is a global USAID-funded Leader with Associate cooperative agreement that works worldwide to advance and support RH/FP services, with a focus on facility-based and clinical care. EngenderHealth is the lead partner of ACQUIRE overall.³ In October 2004, the USAID Caucasus Azerbaijan Mission awarded the ACQUIRE Project in Azerbaijan a five-year associate award to be the main implementer of RH/FP programming in the country. Unlike all previous programs, the ACQUIRE Azerbaijan Reproductive Health and Family Planning Project is designed with a broad mandate to implement RH/FP strategies that address policy change, contraceptive security, demand creation and service expansion, and quality improvement.

The ACQUIRE Azerbaijan RH/FP Project began in five core districts in 2005 (Aghsu, Goychay, Ismayilli, Kurdemir, and Shamakhi). Later that year, eight new districts (previously part of the ARHI project) were incorporated into the program. Another 5–10 districts, previously not covered by any FP program, will be included during the third year of the project. The criteria used to identify the first five districts included: large population size; good mix of rural cities and rural areas; high abortion rate; low modern contraceptive prevalence rate; high fertility rate among women aged 15–19; high unmet need for FP; expressed support from district administrative and health authorities; the presence of a Family Planning Centre at the CDH; administrative feasibility; and the presence of international and local nongovernmental organizations (NGOs) in the district. The first five districts selected are contiguous and are located in the center of the country (Figure 2). Together, they have a population of almost half a million people, almost one-third of whom live in the five main urban centers and the rest of whom live in a total of 257 small villages in rural areas.

Figure 2: Azerbaijan survey districts



³ EngenderHealth leads ACQUIRE in partnership with the Adventist Development and Relief Agency International (ADRA), CARE, IntraHealth International, Inc., Meridian Group International, Inc., SATELLIFE, and the Society for Women and AIDS in Africa.

To identify problems and barriers to services specific to each district, to provide data that could assist with project implementation, and to allow determination of benchmarks and targets to measure success, the project started with a baseline assessment of facilities, providers, and community members in the five core districts.

The objectives of the assessment were to evaluate factors contributing to the current use of FP services, including:

- a) The supply of FP in the public and private sectors: the availability and quality of facilities providing FP services, including the availability of contraceptive methods, IEC materials, and trained providers; and
- b) The demand for FP: the population's knowledge of, attitudes toward, and practice of pregnancy prevention.

Baseline Methodology

Survey Tools

First, a mapping/census exercise was undertaken to develop a full picture of facilities in the districts and to develop a sampling framework for all aspects of the baseline survey. Project staff visited all districts and collected information on health facilities and registered apteks and on health staff at each facility. The following tools were then used to collect detailed information:

- ◆ Three survey tools were used to evaluate the *supply* side of FP services:
 - ◇ An audit of a sample of public health facilities collected data on services provided, infrastructure, equipment, and FP supplies and services. Surveys were conducted in CDHs, polyclinics, PHs, DACs, and FAPs.
 - ◇ Structured interviews with health care providers in the same health facilities collected data on FP services provided, training, and other RH-related information.
 - ◇ An audit and interview in all apteks evaluated the role played by pharmacists in contraceptive provision.
- ◆ To gain insight into the *demand* side of FP, we interviewed a representative sample of community members. Questions were asked about FP use and intent, use of abortion, utilization of health services, and potential avenues for IEC messages.

The total numbers of facilities sampled and people interviewed are shown in Table 1. Details of each sampling universe and the sampling strategy used for each tool are shown in the Appendix.

Table 1: Data collection tools and sample numbers

Data collection tool	Sample	Sample characteristics
Facility audit	76 facilities	Sample of facilities 5 CDHs 5 polyclinics 25 PHs 19 DACs 22 FAPs
Pharmacy/aptek audit	61 facilities	All registered apteks
Provider interviews	293 providers	Sample of providers 35 ob-gyns 88 doctors 103 midwives 27 nurses 40 feldshers
Community interviews	1,011 respondents	Sample of community members in 35 villages and 5 towns 758 women 253 men

Data Collection

All data collection tools were developed, translated into Azeri and edited, then field tested and revised. All questionnaires were approved by the National Office of Reproductive Health (NHRO) and by the Ministry of Health (MOH). Five supervisors and 20 interviewers, eight of whom were

doctors, were trained as data collectors and were divided into five teams (one per district). Each district team had at least one doctor. Data collection took 20 days between March and June 2005. Verbal informed consent was obtained from all respondents, and interviewers signed that this had been obtained: Every evening, supervisors reviewed all forms to ensure compliance with consent procedures.

Study Findings

Family Planning Services at Public-Sector Facilities

Infrastructure

Overall, physical conditions at the sampled facilities were less than adequate (Table 2). In particular, respondents noted an unreliable supply of electricity, limited availability of piped water, and a lack of telephone contact. DACs and FAPs appeared to be very poorly equipped, and on the day of the visit even the PHs reported a poor supply of electricity, a lack of piped water, and a lack of phone service.

We also asked about toilet facilities in the part of the facility where FP would be or could be provided. Fifty-three health facilities (70%) (and fewer than half of the DACs and FAPs) had a toilet; in all but eight cases, this toilet was shared by staff and clients. At only nine sites did respondents report that the toilet always had water for flushing, and at only seven sites was there soap for handwashing.

Table 2 : Number of health facilities with specified aspects of infrastructure, by type of facility

Infrastructure	CDH (n=5)	Polyclinic (n=5)	PH (n=25)	DAC (n=19)	FAP (n=22)	Total (n=76)
Electricity today	5	4	15	3	4	31 (40.7%)
Electricity always available for services	1	1	2	0	0	4 (5.2%)
Piped water	3	4	7	1	1	16 (21.0%)
Other water sources	3	4	21	17	18	63 (82.8%)
Telephone	5	5	21	5	0	36 (47.3%)
Telephone today	5	5	15	3	0	28 (36.8%)

Interviewers were asked to observe and comment on the condition of the parts of the facilities where FP services were provided or could potentially be provided (n=58). The majority of facilities, but particularly the primary care facilities, needed major repairs to walls, windows, floors, and ceilings (Table 3). Although these were not described, the interviewers reported that the FP areas were fairly representative of the state of repair of the entire facilities.

Table 3: Number of facilities with family planning areas considered to need major repair

	CDH (n=5)	Polyclinic (n=5)	PH (n=22)	DAC (n=14)	FAP (n=12)	Total (n=58)
Walls	1	2	11	11	8	33 (56.8%)
Windows	1	1	11	8	7	28 (48.2%)
Floors	2	1	10	11	10	34 (58.6%)
Ceiling	1	1	11	10	8	31 (53.4%)

Given the unreliable supply of electricity, we were interested in how examination areas were heated in the winter, when outside temperatures can fall well below freezing. About one-third of facilities provided FP services in areas heated by (unreliable) electricity; one-half had wood stoves, and a few others had some kind of stove (gas, kerosene, or diesel). Some reported having no heat source at all. For lighting, half of the facilities had an overhead electric light, but the rest relied mostly on natural light. Only four facilities appeared to have a lamp that could be used during pelvic examinations.

Most of the examination areas had an examination bed or couch (85%), although more than one-quarter of DACs and FAPs that reported providing FP did not have an examination couch. Visual information about FP was also lacking at most facilities visited: Interviewers observed that only nine FP areas had a poster about FP on display, and nine had leaflets or brochures for clients. Our interviewers also noted that only five of the facilities reportedly offering FP services had signs advertising or directing clients to these services.

To determine levels of client comfort and privacy, we also examined site infrastructure in terms of where clients wait for services, where they receive counseling, and where they undergo physical examinations. In the 58 facilities where FP services were reportedly offered, 12 (21%) reported that clients had to wait outside, and six (10%) said that clients waited in an area shared with the examination area. Otherwise, clients waited in corridors or in separate rooms. Staff at 50 of the 58 sites (86%) showed our observers rooms where clients could be counseled with visual and auditory privacy; staff at the other eight sites counseled women in open areas. Forty-four of the 58 sites (76%) had places where women could be examined with visual and auditory privacy; at the other sites, such privacy was not maintained.

Family Planning Services

We examined evidence relating to the provision of FP services from data collected during the mapping exercise, from interviews with key informants, from observations of client records and log books (where they existed), from observations of commodity stocks during the facility audits, and from provider interviews. Initial scans of the data suggested that providers at many facilities were providing FP services, as they are mandated to do. However, triangulation of all data sources suggest that in fact very few facilities and providers were providing counseling, contraceptive methods, or prescriptions to clients in the five districts.

Services offered

Key informants at 58 of the facilities reported that they offered contraceptive services (usually) six days a week. However, when asked if they actually *provide* FP methods or prescriptions, only 29 (38%) sites reported having staff to do this, including only half of the PHs and very few of the DACs and FAPs (Table 4). In reality, contraceptive prescribing and dispensing services were only available at facilities having ob-gyns, and sexually transmitted infection (STI) services were available only where there was a venereologist, a urologist, or a therapist (a medical generalist)

Table 4: Number of facilities with specified infrastructure and services, by type of facility

	CDH (n=5)	Polyclinic (n=5)	PH (n=25)	DAC (n=19)	FAP (n=22)	Total (n=76)
Physical rooms/wards						
Women's consultation area	2	3	20	0	0	25 (32.8%)
Family planning cabinet/room	1	4	1	1	1	8 (10.5%)
Services						
FP information	5	5	22	14	12	58 (76.3%)
FP methods/prescriptions	4	5	13	6	1	29 (38.1%)
Outpatient abortions	3	3	0	0	0	6 (7.8%)
All abortions	2	0	1	0	0	3 (3.9%)
STI treatment	2	4	11	3	0	20 (26.3%)
RH outreach to other facilities	2	1	6	0	0	9 (11.8%)
RH assistance from others	3	1	6	3	3	16 (21.0%)
Community outreach	1	3	12	6	7	29 (38.1%)

(mostly CDHs, polyclinics, and some PHs). Most of the DACs and FAPs were functioning at a very basic level, providing at most antenatal care and child immunizations.

Given the paucity of RH services outside the main centers, we examined whether the central facilities provided outreach services. However, respondents from only nine of the 76 facilities said they offered such assistance to other facilities, while 16 reported receiving such help. Community outreach (explained as involving health providers going out into the community to provide RH services) was reported by key informants at 29 facilities (38%).

Providers' personal experiences of providing FP services

When we asked the 293 providers at these sites whether they provided FP services, 83% of respondents reported that they personally provided FP information, education, or counseling to clients. However, we must assume some level of social acceptability bias here, as when we probed further and asked more specifically about whether they actually *supplied or prescribed* FP methods, only 29% reported doing so (94% of ob-gyns; 28% of doctors; 19% of midwives; no nurses; and 15% of feldshers).

Furthermore, probing about what methods these practitioners had supplied or prescribed in the previous six months revealed that very few had actually prescribed or supplied any methods. Although some of the doctors and nurses reported that they had prescribed or supplied a few methods, most such efforts had been made by ob-gyns, although even then, not by all and not for all methods (Table 5). A clear preference for IUD insertion was observed, which might reflect providers' historical predilection and current product availability, as well as providers' and clients' personal preference for that method (see below).

Table 5: Number of providers reporting supplying FP methods or prescriptions to clients in previous six months

Method	Ob-gyns (n=35)	Doctors (n=88)	Midwives (n=103)	Nurses (n=27)	Feldshers (n=40)	Total (n=293)
Pill (combined)	22	5	15	0	0	42 (14.3%)
IUD	29	3	6	0	0	38 (12.9%)
Condom	12	10	11	0	1	34 (11.6%)
Pill (progestin-only)	6	1	4	0	0	11 (3.7%)
Injectable	3	2	2	0	1	8 (2.7%)
Other	12	9	4	0	1	26 (8.8%)

Utilization data

During the mapping exercise, data were collected from key facility informants about the number of FP clients estimated to be served monthly (Table 6, page 12). (In most places, there was no registration system or attendance registers for FP clients, so the numbers shown are based on interviewees' estimates.) The numbers were extremely low, even in the two districts where UNFPA has provided support in the past (Ismayilli and Shamakhi). Of the total estimated 267 clients per month in the five districts, respondents at facilities in Aghsu reported 170 (64% of the total), while respondents at Ismayilli reported 80 (30%). Hardly any facilities in the other three districts reported having FP clients. In terms of facility type, most clients appear to have been served at CDHs or polyclinics (40% and 29%, respectively), although PHs and DACs in Aghsu also reported a few clients every month.

Table 6: Estimated number of FP clients served per month, by type of facility¹

District	CDH (n=5)	Polyclinic (n=8)	PH (n=32)	DAC (n=54)	FAP (n=142)	Total (n=241)
Aghsu	27	60	45	38	0	170 (63.6%)
Goychay	0	N/A	0	0	0	0 (0.0%)
Ismayilli	80	0	0	0	0	80 (29.9%)
Kurdemir	N/A	10	0	0	0	10 (3.7%)
Shamakhi	0	7	0	0	0	7 (2.6%)
Total	107	77	45	38	0	267
% of total	40.0%	28.8%	16.8%	14.2%	0.0%	
Mean	21.4	15.4	1.8	0.7	0	0.8

¹ These estimates were provided by the head doctors in each district. It is difficult to ascertain whether there were in fact so few clients, since FP clients do not have to register and thus there are no data. However, given the lack of commodities, we believe that these estimates may be accurate. The numbers reported by Aghsu may be overestimates, given that there has been no UNFPA support there and that there are only three ob-gyns in the district.

Family planning commodities and supplies

At the 76 facilities surveyed, only 35 key informants (46%) noted that they had any of the supplies necessary to provide FP services. In fact, when we examined stocks, far fewer than these had the necessary equipment and supplies. Interviewers examined the storage facilities at each health facility and found that few facilities had any FP commodities in stock (Table 7) on the day of the visit. Providers at the majority of sites (including the CDHs) reported that commodities were rarely in stock. IUDs were reportedly most often in stock, but only eight facilities (11%) had them on the day of the visit. Staff at these eight sites reported that IUDs were available at least 80% of the time (data not shown). Also, of the eight facilities that had IUDs in stock, two polyclinics had a stock of more than 500 and one CDH had around 100; the other five sites had fewer than 10 IUDs in stock.

Table 7: Number of facilities with commodities and supplies on day of visit

	CDH (n=5)	Polyclinic (n=5)	PH (n=25)	DAC (n=19)	FAP (n=22)	Total (n=76)
IUD	2	4	2	0	0	8 (10.5%)
Injectable	0	0	0	0	0	0 (0%)
Combined pill	1	1	0	1	0	3 (3.9%)
Progestin-only pill	0	0	0	0	0	0 (0%)
Condom	0	1	0	1	0	2 (2.6%)
Spermicides	2	1	0	1	0	4 (5.2%)
Diaphragm	0	0	0	0	0	0 (0%)
Pregnancy test	0	0	1	0	0	1 (1.3%)
Gloves (recycled)	2	2	8	0	1	13 (17.1%)
Gloves (new)	2	3	12	2	0	19 (25.0%)
Disposable needles	3	3	15	4	3	28 (36.8%)
Soap	3	2	9	2	2	18 (23.7%)
Swab sticks	3	4	3	1	0	11 (14.5%)
Antiseptic	3	2	9	0	1	15 (19.7%)
Chlorine	3	5	9	1	0	18 (23.6%)

Other equipment necessary for performing pelvic exams, taking blood pressure, inserting and removing IUDs, and providing injectable contraceptives was also in short supply (Table 8). Not all sites expected to provide FP methods, particularly the PHs, had the necessary equipment, and where this was available, it was few in number (data not shown). Only half of facilities had equipment

such as stethoscopes, and very few had instruments such as forceps, tenaculums, flashlights, and scissors. Few facilities had the ability to sterilize instruments, other than by boiling: Where sterilizers were available, they were either broken or could not be used because of a lack of electricity.

Table 8: Number of facilities with FP instruments and supplies on day of visit

	CDH (n=5)	Polyclinic (n=5)	PH (n=25)	DAC (n=19)	FAP (n=22)	Total (n=76)
Sphygmomanometer	5	5	24	16	18	68 (89.4%)
IUD kit	4	4	4	0	0	12 (15.7%)
Stethoscope	5	5	21	8	4	43 (56.5%)
Speculum	5	5	17	6	1	34 (44.7%)
Uterine sound	5	4	4	0	0	13 (17.1%)
Tenaculum	5	4	6	1	0	16 (21.0%)
Sponge forceps	3	2	8	0	0	13 (17.1%)
IUD removal hooks	4	2	3	1	0	10 (13.1%)
Scissors	5	9	5	0	1	20 (26.2%)
Flashlight	2	1	4	0	3	10 (13.1%)
Sterilizer (steam)	4	0	8	0	0	12 (15.7%)
Sterilizer (dry)	1	2	3	0	0	6 (7.8%)

Other materials required for attracting clients and providing good-quality services include information materials, teaching materials, protocols and guidelines, client registers, and other data recording mechanisms. At all 76 facilities, only one had any written FP guidelines for staff, five had any infection prevention guidelines, and three had any STI management guidelines. Only nine had any FP posters on the walls, 17 had client leaflets or pamphlets (although these were only seen in the FP areas of nine of the facilities), and nine had FP flipcharts. We found that 36 facilities (47%) had daily client registers, but only 22 (29%) had monthly tally sheets for computing totals. Just 25 facility respondents (33%) noted that individual client record cards were kept in the facility, and even fewer had cards for clients to keep. We also asked about referral cards or forms; only four facilities had such forms.

Government procurement and distribution of FP commodities does not exist, and facilities rely on contraceptives supplied through the MOH from UNFPA. Of the 58 respondents/facilities reporting providing some level of FP services, only 16 said they received supplies from the government, nine reported receiving commodities from humanitarian aid, and two or three said they bought commodities with their own money or directed women to a community pharmacy. Just 12 of these facilities (21%) reported no problems with supplies.

Quality Improvement, Management, and Supervision

In most settings, services improve with good management and supervision. We asked providers what quality improvement initiatives were in place at their facility and what they thought about the way FP services are managed. First we asked providers if they had ever heard of something called “supportive supervision,”⁴ but only 12 respondents answered affirmatively. We also asked how many times any supervisor had visited the facility in the previous six months. Seventy-one percent of respondents said that a supervisor had never visited, 6% said such a visit had occurred once, 13%

⁴ Supportive supervision is an approach to supervision that emphasizes mentoring, joint problem-solving, and two-way communication between a supervisor and those being supervised.

reported more than one supervisory visit, and 10% did not know. There was great variation between types of facilities, with more than 80% of staff in PHs, DACs, and FAPs reporting having received no supervisory visits, compared with 40% of staff at CDHs.

We asked staff whether they had reviewed FP client records or service statistics in the previous six months (for reporting or analysis purposes); only 29 respondents said they had, mostly staff working in the polyclinics. Staff were not familiar with or did not generally participate in quality improvement meetings: Only 26% of staff reported having attended such a meeting in the previous three months, although ob-gyns and staff working in polyclinics, CDHs, and FAPs were more likely than others to have done so. Yet 57% of respondents expressed dissatisfaction with how FP services were organized. When staff were asked how they thought services could be improved, the most commonly noted suggestions were to do home visits (37%); to provide training for staff (30%); to provide equipment (15%); to supply commodities free of charge (9%); to separate FP services from specialist gynecological services (12%); and to produce mass media campaigns (TV, radio, and print media) (13%).

When Clients Cannot Be Served: Absence of Methods and Referral Practices

When conducting the facility audit, it became clear that few facilities actually had contraceptive methods available. We therefore wanted to clarify what providers did, or would do, if a client came asking for a method that they did not have. A total of 174 respondents (59%) responded that they would refer the client to another facility (or to an ob-gyn); 37 (13%) said they would recommend another method that *was* available; and 23 (8%) said they would send the client to a pharmacist/aptek. Referrals were reportedly mostly verbal (63%), with providers merely telling the client where to go; 35% of providers said that they give the client a written referral.

Infection Prevention

International infection prevention guidelines stress the importance of decontamination of instruments, followed by sterilization or high-level disinfection (HLD). Decontamination was reported by staff at 25 facilities (33%), mostly using chlorine (19 sites) or alcohol (four sites). Only 13 of the 19 sites that reported using chlorine had a bucket with a lid. Sterilization of instruments was reported by staff at 55 sites (72%), at 52 of which sterilization was achieved by boiling. Only two sites reported use of a steam sterilizer, and one site reported using chemical methods. Used needles were usually thrown into the general garbage, with staff at only three sites reporting use of special containers. Final disposal of medical waste appeared satisfactory in most cases: At 52 sites (68%), staff reported burning and/or burying waste. Disposal in open areas or in pit latrines appeared to be mainly a practice at the DACs and FAPs. Overall, a shortage of essential supplies (gloves, syringes, needles, sharps containers, and soap) appears to hinder effective infection prevention.

Laboratory Diagnostic Capability and STI Treatment

Respondents at only a few of the sites noted the ability to diagnose or treat STIs; not even every CDH could do so, and only 11 of the 25 PHs. The specific test capabilities are shown in Table 9. In most cases, not even the simplest hemoglobin tests could be performed, nor did staff report taking specimens to be tested elsewhere. Even one-third of the PHs were reportedly unable to do either a hemoglobin or urinalysis test. In most cases, clients were referred elsewhere, although if this was to the CDH, the clients would still not always be able to obtain the needed tests.

Table 9: Number of facilities reporting availability of selected laboratory services

Service	CDH (n=5)	Polyclinic (n=5)	PH (n=25)	DAC (n=19)	FAP (n=22)	Total (n=76)
Syphilis diagnostics	2	2	0	0	0	4 (5.2%)
Specimen-taking only	2	1	11	6	4	24 (31.5%)
Gonorrhea diagnostics	2	2	0	0	0	4 (5.2%)
Specimen-taking only	2	2	8	4	3	19 (25%)
Hemoglobin diagnostics	3	5	15	0	0	23 (30.2%)
Specimen-taking only	1	0	0	1	1	3 (3.9%)
Urinalysis diagnostics	3	5	15	0	0	23 (30.2%)
Specimen-taking only	1	0	0	1	1	3 (3.9%)

FP Providers at Public-Sector Sites

Respondent Characteristics

In total, 293 staff were interviewed: 35 ob-gyns, 88 doctors, 103 midwives, 27 nurses, and 40 feldshers. In all, 221 were women (75%). All ob-gyns, midwives, and nurses were female. All of the men were other physicians or feldshers, representing 60% of the nongynecologist doctors and half of the feldshers. Three-quarters of the feldshers and 40% of the doctors were also the head of the facility at which they worked. As we purposively sought out doctors who might be in contact with potential FP clients or who might deal with other RH issues in their daily work, of the 88 “other” doctors, 55 (63%) were “theraputists” (generalists) and 19 (22%) were pediatricians. In total, we interviewed 90% of the ob-gyns working in the districts and half of the midwives.

Provider Training in FP

One-third of staff interviewed reported having received FP training, including all of the ob-gyns, 35% of the midwives, 37% of the feldshers, but few of the other cadres. About one-quarter of all respondents said they had received training in infection prevention and quality improvement; again, larger numbers of ob-gyns received this training. Most training was reported to have taken place recently: Forty percent had reportedly received the training within the last year, and a further 42% from one to five years before. However, records indicate that some of the “FP” training might actually have been breastfeeding training in which the lactational amenorrhea method (LAM) was briefly mentioned but not covered in detail. As a result, we conclude that other than ob-gyns, few staff had received any FP training. The desire for more training was almost universal, with 85% of respondents interested.

Provider Knowledge: Methods of Pregnancy Prevention

Respondents were asked to name all methods of pregnancy prevention that they knew.⁵ Ob-gyns, doctors, midwives, and feldshers could name the most methods and nurses the fewest (Table 10, page 16). Overall, modern methods such as the pill, the IUD, and condoms were noted by most providers, but the injectable, sterilization, spermicides, the Norplant implant, and the diaphragm were not mentioned much, even by ob-gyns. In fact, several traditional methods (such as withdrawal, rhythm, LAM, and others) were mentioned by respondents more often than some of the modern methods. One-quarter of respondents mentioned abortion as a means of pregnancy prevention, despite this method’s being discouraged by the MOH.⁶ Abortion was more likely to be mentioned by midwives and feldshers, however, than by ob-gyns, doctors, or nurses. One-fifth of

⁵ This was an open-ended question. We did not ask about contraception, but about means of pregnancy prevention. Providers interpreted this in different ways.

⁶ Abortion is legal in Azerbaijan, but it is highly discouraged by the MOH.

respondents, and more than one-quarter of midwives and feldshers, described a range of traditional or folkloric pregnancy prevention methods.

Table 10: Number of providers who mentioned various methods of pregnancy prevention, by type of provider

	Ob-gyns (n=35)	Doctors (n=88)	Midwives (n=103)	Nurses (n=27)	Feldshers (n=40)	Total (n=293)
Pill	33	79	89	18	24	243 (83.2%)
Injectable	18	13	23	10	10	65 (22.3%)
IUD	34	79	100	9	38	275 (94.2%)
Condoms	24	74	78	17	23	216 (74.0%)
Withdrawal	10	19	39	12	12	92 (31.8%)
Rhythm/calendar	20	47	31	8	7	113 (38.7%)
Spermicides	20	25	29	5	9	87 (30.1%)
LAM/breastfeeding	7	5	10	5	1	24 (8.2%)
Abortion	4	19	31	6	17	77 (26.3%)
Emergency contraception	5	7	0	0	1	13 (4.5%)
Sterilization	10	3	1	0	0	14 (4.8%)
Norplant implant	2	1	1	0	0	4 (1.3%)
Diaphragm	2	7	6	1	0	16 (5.4%)
Other traditional method	3	12	27	6	13	61 (20.8%)

Provider Knowledge and Practice

To evaluate aspects of provider knowledge and practice, questions were asked about specific methods, specific client groups, method choices, and side effects.

IUD protection

National training curricula in Azerbaijan stipulate that IUDs can be inserted for a maximum of five years, after which another IUD can be immediately and safely inserted. Providers were asked for how long each IUD can be used to protect against pregnancy, and the vast majority (73% overall, and nearly 90% of ob-gyns) said 3–5 years (Table 11).

Table 11: Percentage distribution of providers, by number of years they believe the IUD can be used to prevent pregnancy

Years	Ob-gyns (n=35)	All respondents (n=293)
1–3	0	49 (16.%)
3–5	29 (85.6%)	215 (73.3%)
6–9	2 (5.6%)	15 (5.1%)
10	3 (8.6%)	17 (5.8%)
Other	1 (0.2%)	12 (4.0%)
Don't know	0	21 (7.2%)

Very few (9% of ob-gyns and 6% of all respondents) were aware of current information from the World Health organization (WHO) that some IUDs (such as the Copper T) are effective for 10 years, after which a new one can be inserted.⁷ We asked respondents what should happen after 3–5

⁷ UNFPA supplies both the Multiload (effective for five years) and the Copper T 380A (effective for 10 years) to the Azerbaijan MOH.

years: Sixty-four percent (and 74% of ob-gyns) said that the woman should take a break from the IUD for a few months, or even for up to three years. Some specified that a treatment such as dilation and curettage was required or that a pregnancy should intervene before another IUD could be inserted.

Postpartum and postabortion contraception

We asked ob-gyns and midwives (n=137) about appropriate methods to prescribe to women postpartum and postabortion. In general, all methods are seen as being appropriate for postabortion women and for postpartum women who were not breastfeeding, yet respondents mentioned very few methods. As expected, given the availability of the method, historical predilection, and providers' personal preferences, the IUD was the most commonly mentioned suitable method (Table 12). For breastfeeding women, all methods are appropriate at six weeks postpartum, with the exception of oral contraceptives that contain estrogen. As an alternative, progesterone-only pills or injectables can be used, though these methods were hardly mentioned by any providers. In fact, 13% of ob-gyns and midwives reported that *no* methods were suitable for women who are six weeks postpartum and breastfeeding. Many providers reported that "other" methods were suitable for postabortion and postpartum clients; of these, withdrawal was as likely to be mentioned, as were some modern contraceptive methods.

Table 12: Number and percentage of ob-gyns and midwives citing various FP methods as appropriate for use postabortion and postpartum (n=137)

	Immediate postabortion	Postpartum, not breastfeeding, after 6 weeks	Postpartum, breastfeeding, after 6 weeks
Pill (any)	38 (27.7%)	46 (33.6%)	8 (5.8%)
Pill (progestin-only)	16 (11.7%)	23 (16.8%)	6 (4.4%)
Injectable	3 (2.2%)	6 (4.4%)	1 (0.7%)
IUD	57 (41.6%)	60 (43.8%)	68 (49.6%)
Condoms	38 (27.7%)	47 (34.3%)	41 (13.1%)
None	3 (5.8%)	3 (2.2%)	18 (12.9%)
Other	21 (15.1%)	28 (20.4%)	31 (22.6%)
Don't know	8 (5.8%)	6 (3.6%)	5 (3.6%)

Abortion was once a common method of fertility control, especially before FP became available. It is now discouraged by the MOH, whose efforts are focused on expanding contraception programs. We asked ob-gyns and midwives for their opinions about this. Of the 137 respondents, 119 (87%) expressed negative feelings about abortion, while 18 (13%) were more positive, saying that they thought it was a good way of preventing pregnancy, especially after one has had 2–3 children.

Warning signs

One indicator of knowledge about the use of modern contraception is knowledge of dangerous side effects that should be discussed with clients so they will know if they need to return for medical care. We asked providers what warning signs (requiring a return to the clinic) would be discussed with clients with respect to IUDs and hormonal methods. (Respondents knew little about injectables, so these were not discussed.) The respondents provided a large number of possible side effects or danger signs, most of which are not regarded as key indicators of problems. Respondents knew more about IUD problems (pain, bleeding, missed period [indicating pregnancy], and expulsion) than about key pill-related problems (headache, menstrual problems, dizziness, and lumps in the leg) (Table 13, page 18).

Table 13. Percentage of all providers mentioning various danger signs for the IUD and pill requiring a client to return to the clinic

	IUD (n=293)	Pill (n=293)
Abdominal pain	51.5	14.7
Severe bleeding	72.7	38.2
Severe vomiting	22.5	57.7
Allergies	10.9	21.1
Severe headache	10.9	16.7
Dizziness	10.9	26.3
Mastitis	6.8	0.6
Menstrual problems/missed period	6.8	3.8
IUD expulsion	8.5	0
Pain/lump in legs	4.1	2.4
General pain	5.1	0
Fever	5.1	0.3
Weight gain	1.4	1.3
Other	25.2	26.2
Don't know	4.4	13.3

Choice

Providers were asked who should make the decision about what FP method a woman should receive. (This is generally regarded internationally as a woman's choice, based on full information and provider guidance.) Among the respondents, 63% said that the provider should choose the method for the client; a further 10% believed that the client's partner should also be included in any decision making. Only 10% said that the client should make her own choice, with the provider's guidance.

Provider Knowledge and Practices: Medical Barriers

Age and parity

In many parts of the world, providers have ideas about who should use certain methods; these views often run contrary to international recommendations and may create medical barriers for women. In particular, several misconceptions abound concerning the use of certain methods with respect to age and parity. In this survey, we asked providers about whether they considered that women had to be above or below certain minimum and maximum ages and whether they had to have had children before they could use the IUD, the pill, and injectables (Table 14).

Generally, there is no minimum or maximum age for offering these three methods to women, as long as the clients are sexually active and not infertile or postmenopausal. However, many providers did not know this, especially with respect to injectables, for which the majority of providers responded that they did not know. Large numbers of providers, including those reporting that they had been trained and including many ob-gyns, responded that the minimum age for offering the IUD, the pill, and injectables should be 21. At the other end of the scale, many providers thought the maximum age for use of these three methods was 40.

With respect to parity, a few providers responded that they did not know what was appropriate. (Again, half did not have any idea about injectables.) At the same time, only a few said there was no parity minimum (17% for the IUD, 24% for the pill, and 13% for injectables). However, a large

number of providers (including those who said they had been trained and including ob-gyns) said that women should have 2–3 children before being offered these three methods.

Table 14: Percentage of all providers citing age and parity criteria for offering clients the IUD, the pill, and the injectable

	IUD (n=293)	Pill (n=293)	Injectable (n=293)
Minimum age			
<18	9.2	6.2	2.7
18–20	24.2	21.2	12.2
21–25	24.2	18.0	10.5
26–30	8.5	6.1	4.1
>30	2.7	2.7	1.3
No minimum	16.4	24.2	12.6
Don't know	14.7	21.2	56.0
Maximum age			
≤30	1.4	1.4	0.3
31–35	5.8	4.1	6.1
36–40	25.6	17.7	9.8
41–45	35.4	34.4	17.0
>45	14.0	9.9	5.4
No maximum	6.5	14.3	7.8
Don't know	11.3	18.1	53.2
Minimum no. of children			
1	9.2	5.4	3.7
2	40.2	35.8	22.5
3	21.8	15.7	9.9
4	3.0	3.1	1.3
No minimum	17.4	23.9	13.3
Don't know	8.2	16.0	49.1

Screening for methods

Sometimes the imposition of unnecessary tests, inappropriate questions or permissions, and excessive screening can cause barriers and disincentives to users. We look at some of these issues with respect to the IUD and the pill. (We also asked about injectables, but this information is not reported here because providers had limited knowledge about this method.) First, we asked what personal questions should be included in counseling women for contraception. Generally, good counseling includes taking a thorough personal history, where details of a client's age, parity, and reproductive intentions are included. Other details, such as marital status, can also be included, particularly when a permanent method of contraception is sought, but marital status and spousal or family permission are not officially required for someone to use a method. In this group of respondents, however, asking about marital status was mentioned more frequently than were asking about age or reproductive intentions, and the need for spousal or family consent was mentioned by several respondents (Table 15, page 20).

Table 15: Percentage of providers mentioning specific personal information that needs to be discussed before clients are prescribed the IUD or the pill

	IUD (n=293)	Pill (n=293)
Age	29.7	22.9
Parity	60.1	46.4
Marital status	35.8	30.7
Reproductive intentions	11.3	9.2
Family consent	18.7	11.9
Number of sexual partners	0.3	0
Financial situation	2.7	1.3
Nothing	3.0	4.7
Other	2.7	2.0
Don't know	8.5	21.8

As important as personal history is the need for providers to take a thorough medical history to rule out contraindications to the use of certain contraceptive methods before they are prescribed. For the IUD, important medical contraindications are an existing STI or a recent STI (in the last three months), high perceived risk of STIs, endometritis, other inflammatory disease or malignant tumors of the genital organs, pregnancy, or bleeding of unknown etiology. However, these issues were mentioned by only a minority of providers, while some appeared to focus on things like blood pressure problems, history of anticonvulsant use, and history of nervous diseases. For the low-dose combined pill, important medical contraindications are pregnancy, breastfeeding (first six months), and serious cardiovascular disease (e.g., complicated valvular disease, hereditary thrombosis, or stroke), yet these were not mentioned by many providers. Instead, providers appeared to focus on other not very relevant medical conditions, such as a history of STIs a history of tuberculosis, and a history of jaundice (Table 16).

Table 16: Percentage of providers mentioning specific medical history issues that need to be discussed before clients are prescribed the IUD or the pill

	IUD (n=293)	Pill (n=293)
Previous pregnancies	8.5	4.1
Chronic diseases	87.0	55.9
History of STIs	39.9	16.7
Blood pressure problems	16.7	18.1
History of smoking	0.7	1.0
Menstrual cycle	41.0	31.1
Allergies	7.2	21.5
Breastfeeding	1.0	1.4
Breast lumps	3.8	2.7
History of anticonvulsants/tuberculosis	7.2	5.8
History of jaundice	5.5	10.9
History of deep-vein thrombosis	1.7	2.7
History of nervous diseases	5.6	10.3
History of anemia	7.9	15.5
Other	6.8	10.9
Don't know	4.8	15.0

Table 17: Percentage of providers mentioning specific tests or examinations that they would need to perform before prescribing the IUD or the pill

	IUD (n=293)	Pill (n=293)
STI test	44.0	28.0
Pelvic exam	43.3	23.5
Urine test	13.2	9.5
Blood test	17.0	13.9
Ultrasound	10.6	7.8
Blood pressure	2.0	1.3
Test for diabetes	2.0	0
Sight test	3.0	0
Allergy test	1.7	0.6
Weight	1.4	1.0
Varicose veins	2.7	1.4
Liver function test	2.0	2.7
Pregnancy test	0	2.7
Nothing needed	0	3.7
Other	5.1	6.8
Don't know	15.7	33.4

In many settings, the imposition of too many tests before a contraceptive is prescribed can be a disincentive for clients. Not only does it add cost (of the laboratory tests), but it can also require the client to make multiple visits, which may be financially or practically difficult. Many respondents did not know what tests should be done, but many offered suggestions. The only tests essential to provision of the IUD are a pelvic exam to assess uterine position or the presence of active STIs and reassurance that the client is not pregnant. However, few providers were able to respond correctly to the question of what tests to perform (Table 17).

For a provider to prescribe oral contraceptives, checking blood pressure is desirable (though not essential, if this is not possible). However, most respondents did not mention this; instead, many providers thought that performing STI tests and pelvic exams was required to prescribe the pill. Many providers thought that STI testing and ultrasound are required to provide the IUD—technologies that are not very available. With these stipulations and the lack of ability to perform the tests that they think are required, it is possible that providers deny many women access to contraception. Ob-gyns mentioned more tests than other respondents. However, we were unable to ascertain whether in fact the responses represented true barriers or whether they were hypothetical and in fact providers would provide methods without such tests.

Number of pill cycles and need for resupply

The need to return to the provider (in this case, a gynecologist in the district center) for resupply can be a major disincentive to women's using the pill. Many respondents did not know how many pill cycles were usually prescribed, and among the others, responses varied (Table 18); generally, they thought that returning clients could have more cycles.

Table 18. Percentage of providers reporting how many pill cycles are given routinely to new or returning pill clients

	New client (n=293)	Returning client (n=293)
1	31.4	11.9
2	6.5	6.8
3	23.9	24.6
More than 3	3.7	16.0
Don't know	34.5	40.6

Among ob-gyns, 65% and 51% reported that new and returning clients, respectively, receive three months' supply, while an additional 28% of ob-gyns reported that returning clients could get a six-month supply. Only two ob-gyns (6%) responded that they would give a returning client more than a six-month supply. In reality, few facilities visited had supplies of pills, so the actual number of cycles that a client gets is more related to how many she can afford to purchase in the pharmacy (apteka)—if indeed they are available there.

Serving Special Groups and the Need for Spousal Consent

We asked providers whether certain types of people ever came to the facility for contraceptive counseling and information. Eighty-nine percent responded that unmarried women never or rarely came for such services. This may reflect providers' need to ask women if they have obtained spousal consent to use contraception (a requirement noted as “always” or “sometimes” by more than 80% of providers) or it may reflect societal norms that unmarried women either should not be sexually active or should not be open about their sexuality.

Eighty-five percent of respondents thought that some women in the community need FP yet do not come for services. When we asked these respondents why such women do not seek services, the reasons they gave were a mixture of client-centered problems or resistance, family resistance, and poor or inadequately staffed services: Clients do not know about family planning (28%), clients have no money (26%), clients are too shy (12%), clients do not have time (4%), women prefer abortion (5%); clients do not like or want FP (7%), husbands do not allow it (26%), the mother-in-law does not allow it (6%), the facility has no commodities or staff with which to provide services (18%), services are poor (5%), the facility has no gynecologist (17%), and others (3%).

Personal Contraception Preferences

When asked what method of pregnancy prevention the providers would choose for themselves or partner (theoretical choice, not actual), the IUD was revealed as the favorite, particularly among ob-gyns (77%) and midwives (54%). (Table 19). Natural methods (or nothing) were also favored by more than one-quarter, especially by doctors and feldshers, 30% of whom said they would choose such methods for themselves or their partners. Gender may have also been a factor in methods chosen: The IUD was mentioned by 54% of female providers and 17% of male providers. Male providers were far more likely than female providers to favor condoms (24% vs. 9%) and natural (or no) methods.

Table 19: Number of providers citing a personal preference for a method of pregnancy prevention, by type of provider

Method	Ob-gyns (n=35)	Doctors (n=88)	Midwives (n=103)	Nurses (n=27)	Feldshers (n=40)	Total (n=293)
Pill	2	9	11	1	1	24 (8.2%)
Injectable	0	1	0	0	0	1 (0.3%)
IUD	27	25	56	10	13	131 (44.7%)
Condom	3	16	7	2	8	36 (12.3%)
Withdrawal	1	8	9	8	5	31 (10.6%)
Rhythm/calendar	1	18	9	3	3	34 (11.6%)
Douching	0	3	5	1	2	11 (3.7%)
Spermicides	2	2	1	0	1	6 (2.0%)
Nothing	0	2	2	0	2	6 (2.0%)
Other	0	2	3	2	1	8 (2.7%)
Don't know	0	2	1	0	4	7 (2.4%)

Family Planning Provided in Apteks

With limited existing commodity availability in public-sector facilities and likely future contraceptive insecurity, provision of FP methods in the private-sector apteks may become increasingly important. The ACQUIRE Project plans to work with this sector to improve contraceptive supply, quality, and pricing. Key informants, usually the aptek manager, were interviewed in 61 apteks.

Access to Apteks

Apteks are principally limited to the main urban centers: In all five districts, only five of the 61 apteks in the survey sample were located outside of the central district towns, in five separate villages. The other 252 villages had no apteks. The main five district towns, which have 28% (120,000) of the total population, have 56 (94%) of all registered apteks (eight in Kurdemir, nine in Shamakhi, nine in Aghsu, 13 in Ismayilli, and 17 in Goychay).

Due to the clustering of apteks in towns, 93% of apteks reported that they were within 1 km of another aptek, with an additional 3% within 1–5 km. However, some apteks (59%) reported that they served people or communities from outside the immediate area. Respondents at 13 apteks (21%) reported serving people from larger catchment areas of at least 10 villages. Apteks generally stay open long hours: Most shops (83% of apteks) were reportedly open 8–12 hours a day. In addition, 80% of apteks sampled reported being open seven days a week, and a further 15% were open for six days.

Aptek Staff

Of the 61 apteks surveyed, three-quarters were small, employing one or two people: Only four of the 61 apteks employed more than three people, yielding a total of 131 aptek employees. (These probably represent almost all aptek employees in the five districts.) Forty-one percent of apteks were staffed by university-trained pharmacists, but less well-trained pharmacists (those trained at technical colleges) were more likely to be working in the apteks. Fifty-one percent of apteks had one such worker, and 21% had two. Only seven apteks (12%) employed a doctor. The total staff employed in the 61 apteks were as follows: 28 university-trained pharmacists; 57 college-educated pharmacists; seven doctors; 11 other health professionals; 11 nonhealth professionals; and 17 others.

The survey respondents were mostly pharmacists (82%), either university-trained (19%) or college-educated (63%). Only one of the 61 respondents had ever received any contraceptive training, but that respondent could not remember the details. Forty-four respondents (72%) expressed an interest in training, and 47 (77%) said they were willing to provide information to clients. Availability for training, however, would be problematic, due to the long working hours and reliance on one or two staff in most apteks. Staffing levels reflect the low numbers of customers. Fifteen percent of apteks reported having fewer than 10 customers a day, and 70% had fewer than 25 customers per day.

Pregnancy Prevention Methods

The majority of apteks (57 of the 61 or 93%) reportedly sold pregnancy prevention methods, with 51 (84%) having done so in the previous month. No aptek sold injectables or diaphragms, and only four sold IUDs (probably because IUDs are more likely than other methods to be available, and provided free, in public health facilities). Almost all apteks sold pregnancy tests, and half also sold what was described as emergency contraception (Table 20, page 24).

Table 20: Number and percentage of apteks where pregnancy prevention methods and related products were sold

Method/product	Number (%) (n=61)
Pill	51 (83.6%)
Injectable	0 (0%)
IUD	4 (6.6%)
Spermicides	17 (27.9%)
Diaphragm	0 (0%)
Condoms	39 (63.9%)
Pregnancy test	58 (95.1%)
Emergency contraception	30 (49.2%)

There was little difference in the types of methods available in each district, with the exception of condoms and pregnancy tests. Only one of the five apteks in rural areas (in Goychay) sold condoms. Also, although the majority of apteks in four of the five main towns sold condoms, only *one* of the nine apteks in Aghsu district sold condoms. Three apteks in total did not sell pregnancy tests, and *two* of these were in Aghsu. Interestingly, Aghsu was also the town with the highest number of apteks selling emergency contraception (six).

Contraceptive Brands Available

At the 51 apteks where oral contraceptives were sold, 23 different brands were for sale. The most commonly available brands were Rigevidon 21 (at 57% of all apteks), Nonovlon (at 39%), and Rigevidon 28 (at 26%). Some apteks (14) carried only one brand, but others (17) sold four or more. Half of the surveyed apteks had three or more brands available. Prices ranged widely from \$0.85 to \$7, with an average price of between \$1 and \$4, depending on type. Emergency contraceptive pills ranged in price from \$1.60 to \$3.50. At the four clinics (in two districts) selling IUDs, two clinics sold “loops” (brand not noted), one sold the Bulever brand, and one sold a type called the California loop, all for less than \$1.

Of the 61 apteks, 17 (28%) sold spermicides; these shops stocked eight brands altogether, although most sold only one brand. Of concern is that only some of the brands named by apteks were true spermicides (Kontraseptin and Pharmatex); others (Osarbon, the Genomet suppository, Terginon, and Klion D-100) have no contraceptive properties and are intended to treat trichomoniasis. The most commonly found spermicide (at 15% of apteks) was Kontraseptin. Spermicide prices varied considerably, ranging from \$0.40 to \$6.50.

Condoms were available at 39 (64%) of all apteks surveyed. A large number of different brands (37) was identified, but Love Baby was most widely found (at 13% of all apteks). One aptek sold six different brands, but most sold only one or two. Condoms prices ranged from \$0.08 to \$2.40. The four most widely available condom types were priced on average at around \$0.30.

Commodity Suppliers and Availability

The apteks appeared to have many different sources of general supply, but mostly their staff have to travel to Baku to obtain commodities. Respondents gave us the names of 45 different commodity distributors or places they purchased stocks. For the most part, aptek staff reported picking up their own supplies from the distributor/supplier (84% for the pill; 75% for the IUD; 82% for spermicides; 74% for condoms).

In general, at most apteks that stocked contraceptives, staff reported having few problems with supplies, and these were mostly associated with personal financial problems (11%) rather than with availability. On the day of the visit, more than 80% of apteks that sold the pill had it available, as did 75% of those that sold the IUD, more than 80% of those that sold spermicides, and more than 90% of those that reported usually selling condoms. However, given the wide variety of suppliers, the range in prices, and the need for aptek staff to personally pick up supplies, we asked respondents if they would be interested in a group purchase/delivery program in which they could buy contraceptives at discounted price. Sixty-four percent responded positively, while 23% did not know whether they would be interested.

Prescription Issues

Family planning commodities in Azerbaijan should be sold only by registered aptek staff, and the pill must have a prescription. We asked aptek respondents which commodities (of those they sold) they required the client to have a prescription for (Table 21). As can be seen in the table, at most apteks contraceptives are sold without a prescription.

Table 21: Number and percentage distribution of apteks, by whether they required a prescription to provide various FP methods

Method	No (%)	Yes (%)	Don't know (%)
Pill (n= 51)	23 (45.1)	28 (54.9)	0
IUD (n=4)	3 (75.0)	1 (25.0)	0
Spermicide (n=17)	11 (64.7)	6 (35.3)	0
Condoms (n=39)	38 (97.5)	0	1 (2.5)
Pregnancy test (n=58)	56 (96.5)	2 (3.5)	0
Emergency contraception (n=30)	18 (60.0)	12 (40.0)	0

We also asked aptek staff how often clients were actually sold pregnancy prevention methods *with* a prescription. Their responses indicated that clients rarely have a prescription: Even for the pill, 40% said that clients had prescriptions never, rarely, or only some of the time (not shown).

Aptek Family Planning Clients

Despite the availability of contraceptives, aptek respondents reported few clients purchasing many FP methods other than condoms and a limited number of pills. Aptek staff reported selling a large number of pregnancy tests every week, however, and some emergency contraception (Table 22). Aptek staff complained that they did not have many FP clients and would like to have more.

Table 22: Estimated numbers (and percentages) of aptek clients obtaining FP methods in a given week (n=61)

Method	0	1-3	4-10	>10	Don't know	Not sold	Approx. total no. of clients per week
Pill	7 (11.4)	38 (62.4)	6 (9.8)	0	0	10 (16.4)	114
Injectable	0	0	0	0	0	0	0
IUD	0	2 (3.3)	0	0	2 (3.3)	57 (93.4)	2
Spermicides	8 (13.1)	8 (13.1)	1 (1.6)	0	0	44 (72.1)	19
Condoms	0	14 (23.0)	15 (24.5)	10 (16.4)	0	22 (36.1)	398
Pregnancy test	1 (1.6)	13 (21.3)	28 (45.9)	16 (26.2)	0	3 (4.9)	705
Emergency contraception	13 (21.5)	15 (24.5)	1 (1.6)	1 (1.6)	0	31 (50.8)	46

On the other hand, respondents at more than half of the apteks (53%) reported that they often had FP clients whom they were unable to serve. The most common reason given for this was not selling that method at all (36%). A few (13%) mentioned that stockouts were a problem, and 8% said they could not serve a client without a prescription. Most (62%) reported that they would refer clients to another pharmacy if they could not help.

Aptek staff also reported that their clients sometimes ask them for information about pregnancy prevention. Despite this, no aptek had any printed materials to show or to give to clients. Also, only one of the 61 apteks had anything (signs, advertisements, a logo) announcing the availability of contraceptive methods at the aptek. Almost half of the respondents reported that they were often asked about emergency contraception, and an even higher proportion reported that women come to them asking about pregnancy termination (62%). When asked about this, most aptek staff responded that they refer the clients to ob-gyns.

Demand Issues: Users and Nonusers of Contraception

Respondents' Characteristics

Of the 1,011 household respondents, the majority (69%) were aged 21–40 (Table 23). The female respondents were significantly younger (mean age, 33.1 years) than the male respondents (mean age, 37.6), with 40% of male respondents older than 40. There was little variation between districts.

Table 23: Number and percentage distribution of household survey respondents, by age, according to gender

Age	Female	Male	Total
15–20	31 (4.1)	0	31 (3.1)
21–30	299 (39.5)	64 (25.3)	363 (35.9)
31–40	251 (33.1)	88 (34.8)	338 (33.5)
Over 40	177 (23.4)	101 (40.0)	278 (27.4)

Eighty-six percent of respondents (86% of females and 88% of males) reported being married at the time of the survey, while 9% reported being single (8% of women and 11% of men); 6% of the women and 1% of the men reported being widowed or divorced. Only a few respondent reported that they were refugees (4%) or internally displaced persons (IDPs) (3%). However, there were significant differences between districts: Whereas Ismayilli, Goychay, and Kurdemir had hardly any refugees or IDPs, these groups made up 23% of respondents in Shamakhi and 9% of respondents in Aghsu.

The respondents were highly educated: Fifty-four percent had completed a secondary education, 20% had a technical education, and 11% had received a postsecondary education (technical college or university). Men and women differed educationally, however, with 22% of males reporting higher education compared with just 7% of females. Conversely, 18% of females had not completed secondary school, compared with 5% of males. There was also a significant educational difference between districts, with higher levels of education reported in Ismayilli and Goychay.

Even though most people in Azerbaijan are well-educated, 39% of respondents reported being unemployed (50% of women and 8% of men). Unemployment varied between districts and was most prevalent in Shamakhi (53%) and least common in Ismayilli (25%). Twenty-eight percent of respondents reported being salaried workers, 1% were farmers, 19% reported working in a family business, and 5% reported living on government support. The remainder (8%) reported being

housewives or working in low-paid, unsalaried jobs. Among the salaried employees, 42% are teachers and 7% nurses. The rest reported being mostly involved in private-sector enterprises and working as sellers, servants, health officers, and drivers.

Family Size, Reproductive Intentions, and Decision Making

Respondents reported having an average of 2.18 children, although this ranged from 2.01 in Ismayilli to 2.36 in Kurdemir. Fifteen percent of respondents reported that they had no children, 13% had one, more than 30% had two, and 28% had three. Among all respondents with children, 58% had a child under five years of age and 17% had a child under age one. Seven percent of women were pregnant at the time of the survey.

We asked women and men about their desires to have more children; the results suggest a strong desire for small families and a huge need for family-limiting contraceptive methods. Sixty-seven percent of women (73% of married women) and 63% of men (70% of married men) reported not wanting any more children, 32% of respondents expressed a desire to have more children, and only 2% (all female) were not sure about their desire for more children. The majority of those wanting children (92%) were those with no children or one or two children at the time of the survey. In fact, of those with no children, 90% wanted to have some. Among respondents with one child, 75% wanted more, and among those with two children, 20% wanted more. Among those with three or more children, in contrast, only 6% wanted to have more children.

Men in these communities appear to want to be very involved in decision making about family size. As well as being similar to women in whether they want more children in the family, most men also appeared to believe that family size should be decided by married couples together (57% among women and 60% among men). However, large proportions of men and women also felt that the man should decide (29% of women and 36% of men). Eleven percent of women and 2% of men felt that women should make this decision alone. Few respondents of either gender felt that anyone else should make this decision.

Knowledge of Pregnancy Prevention Methods

To obtain information on respondents' FP knowledge and practice, we asked an open-ended question about what methods of pregnancy prevention were known to them.

Almost all respondents (98% of women and 89% of men) said that they knew some ways to prevent pregnancy. Three ways to prevent pregnancy dominated the responses. Among women, the IUD was the most-mentioned modern method (79%), followed by condoms (44%) and the pill (41%). Very few women mentioned other modern methods, such as injectables (3%) or spermicides (10%). Men, on the other hand were most likely to mention condoms (70%), although some also mentioned the IUD (52%) and the pill (28%) (Table 24).

Of interest is that both men and women were highly likely to mention traditional methods of pregnancy prevention or abortion.⁸ Among women, 62% mentioned withdrawal and 79% mentioned abortion; these proportions were 57% and 49%, respectively, among men. Others mentioned methods such as LAM and the rhythm method. A large number of women (27%) and some men (7%) also mentioned local herbal preparations or drugs drunk or inserted before or after intercourse (citric fruits, herbs, strong tea, urine, quinine, alum, honey, sunflower oil, alcohol, iodine with milk,

⁸ This was an open-ended question. We did not ask about contraception, but about means of pregnancy prevention. Respondents interpreted this in different ways.

Table 24: Percentage of women and men who knew of methods to prevent pregnancy, who had ever used such methods, and who currently use such methods

	Mentioned method (n=1,011)		Ever used (n=1,011)		Currently using (n=1,011)	
	Women (n=758)	Men (n=253)	Women (n=758)	Men (n=253)	Women (n=758)	Men (n=253)
Pill	41.0	28.0	9.2	5.5	1.0	0.8
IUD	79.1	51.8	12.4	14.2	5.0	5.1
Condoms	44.1	69.9	11.7	32.0	2.5	7.5
Spermicides	10.0	6.7	1.9	3.1	0.2	0.3
Injectable	2.7	1.9	0.5	0.3	0	0
Rhythm	11.6	7.9	7.7	7.1	4.3	5.5
Withdrawal	61.7	56.9	52.5	52.1	32.9	37.1
LAM	4.6	2.7	3.2	2.7	1.1	1.9
Emergency contraception	3.4	3.5	1.1	0.7	0	0
Abortion ¹	78.7	49.4	43.2	23.3	2.5	1.9
Sterilization	0.6	0.4	0.3	0	0.3	0
Other traditional methods	26.9	6.3	10.8	2.4	0	0

¹ This was an open-ended question. We did not ask about abortion, but it was mentioned spontaneously by respondents as a way to prevent pregnancy.

analgesics, and soap) and other unproven techniques (standing up after intercourse, jumping up and down, and stepping on the backbone).

Ever-Use of Pregnancy Prevention Methods

We asked respondents what methods they had ever used to prevent pregnancy (Table 24).⁹ About three-quarters of all men and women reported that they had at some time tried to prevent a pregnancy. The most common way respondents mentioned of preventing pregnancy, mentioned by more than half of the men and women, was withdrawal. This was followed by abortion, reported by 43% of women but only 23% of men. This may reflect abortion's being a covert activity undertaken by women without men's knowledge. Ever-use of traditional methods (excluding withdrawal and rhythm) was also reported by more than 10% of women.

Ever-use of any modern methods (defined as the pill, injectables, sterilization, the IUD, condoms or spermicides) was reported by 28% of all female respondents (212 in all). Forty-two percent of men (106) reported ever-use of modern methods, a difference mostly explained by the larger number of men reporting ever-use of condoms (32%) than of women doing so (12%). This suggests that condoms may not be always used by men with their regular partners. Of all female respondents reporting ever-use, the most commonly used methods were the IUD (12%), the pill (9%), condoms (12%), or sterilization (0.3%). Most ever-users were no longer using a method (i.e., they had discontinued use).

Current Use of Pregnancy Prevention Methods

Current use of methods to prevent pregnancy was reported by 47% of women and 54% of men (Table 24). There appears to be great reliance on withdrawal, which was reportedly being used by 37% of men and 33% of women. Only 9% of women reported currently using modern methods, as

⁹ This was an open-ended question. We did not ask about contraception, but about means of pregnancy prevention. Respondents interpreted this in different ways.

did 14% of men (mostly use of condoms). Very few respondents reported reliance on abortion, but with such a large number of women relying on withdrawal or nothing at all and with low levels of fertility, we feel that there may be significant covert and unreported reliance on abortion.¹⁰

Current use of modern methods varied by district among women, ranging from 13% in Ismayilli (where there is a large FP center) to just 3% in Aghsu (among only three of 112 women interviewed). Among men, reported current use of modern methods ranged from 27% in Ismayilli (mostly condom use) to zero in Aghsu.

Sources of Contraceptive Supply

Respondents were asked if, of the modern methods they mentioned, they knew where they would be able to get these methods. The vast majority (80–90%) of those who mentioned modern methods said that they knew where to get them. Of the sources they mentioned, pharmacies (aptekas) were mentioned almost exclusively for all methods except the IUD: the pill (91%), condoms (98%), spermicides (95%), injectables (100%), and emergency contraception (97%). For the IUD, 77% said they would get it from a physician or a hospital.

Overall Use of Modern Contraception

Table 25 shows that only 31% of respondents (and 37% of married respondents, not shown) reported having ever used a modern contraceptive method (the pill, the IUD, injectables, sterilization, condoms, or spermicides). Further, two thirds of these had discontinued use, with only 10% (and 11% of married respondents) continuing to use a modern method at the time of the survey. The sections below examine reasons why people have never used a modern method or have used one but discontinued it.

Table 25: Number and percentage distribution of all respondents, by whether they knew of or had used modern pregnancy prevention methods

	Women (n=758)	Men (n=253)	Total (n=1,011)
Never heard of methods/DK/no answer	14 (2.0%)	27 (10.6%)	41 (4.1%)
Know but never used	532 (70.2%)	120 (47.5%)	652 (64.5%)
Used but discontinued	144 (18.9%)	71 (28.1%)	215 (21.3%)
Currently using	68 (8.9%)	35 (13.8%)	103 (10.1%)

Never Users of Modern Contraception

There were 652 respondents who said that they knew of at least one modern contraceptive method but had never actually *used* one.¹¹ These respondents were asked why they had never done so; multiple responses were allowed (Table 26, page 30).

¹⁰ Also, the nature of the question “what method are you currently using?” does not elicit abortion as a reasonable response. It may be that women do not plan to use abortion as their fertility control option, but that they may resort to it when they become unintentionally pregnant.

¹¹ Note also the additional 41 respondents who did not mention any methods of pregnancy prevention and who also probably had never used a method.

Table 26: Number and percentage of respondents mentioning various reasons for why they personally (or their partner) had never used modern contraceptives (multiple responses allowed) (n=652)

Reason Given	Women (n= 532)		Men (n=120)	
	n	%	n	%
Side effects	95	17.8	10	8.3
Is not sexually active	93	17.4	6	5
Doesn't know about FP	84	15.8	23	19.1
Is trying to get pregnant	75	14.0	14	11.6
Is infertile	70	13.1	20	16.6
Prefers natural methods	50	9.3	31	25.8
Partner does not approve	31	5.8	0	0
Is currently pregnant	30	5.6	6	5
FP is not recommended by doctors	27	5.0	1	0.8
Costs too much	20	3.7	3	2.5
Is postpartum/breastfeeding	13	2.4	2	1.6
Has concerns about effectiveness	11	2.0	2	1.6
Doesn't need	7	1.3	7	5.8
Access/availability of supply	6	1.1	0	0
Just doesn't like	3	0.5	7	5.8
Finds method difficult to use	1	0.1	6	5
Other	10	1.8	3	2.5
Doesn't know why	2	0.3	0	0

The most commonly given reasons for never having used modern methods were not needing them (e.g., not being sexually active, being pregnant, trying to get pregnant, being infertile, or breastfeeding). Of those whose responses were not related to not *needing* modern methods, a large number said they did not know about contraception (19% of men and 16% of women), many said they preferred natural methods (26% of men and 9% of women), and a few said that doctors did not recommend them. We asked the 105 respondents who mentioned side effects to clarify what concerned them most: Women reported that they were afraid of irregular menses, infertility, weight gain, or other effects, like diseases such as cancer (also mentioned by men) and even death.

We asked the 652 never-users if they would be interested in using a modern method in the future. Almost half (44%) reported that they would not, for reasons similar to why they do not use such methods now.

Discontinuers of Modern Contraception

We were particularly interested in the 144 women and 71 men who had previously used modern contraception but who were no longer doing so; these represented 68% of the 318 ever-users of modern methods. Table 27 shows what modern methods these respondents had ever used and discontinued (Note: The numbers total more than 215, as some respondents had used and discontinued several methods).

Table 27: Number of respondents who had ever used (or whose partners had used) modern contraception, and number and percentage who had then discontinued modern method use (multiple responses to types of methods allowed)

Method	Women		Men	
	Ever used	Discontinued	Ever used	Discontinued
Pill	70	52 (74.2%)	14	7 (50.0%)
IUD	94	51 (54.2%)	36	20 (55.5%)
Condoms	89	64 (71.9%)	81	56 (69.1%)
Injectables	15	11 (73.3%)	8	5 (62.5%)
Spermicides	4	3 (75.0%)	1	0 (0)
Total	212	144 (67.9%)	106	71 (67.0%)

Discontinuation was highest among both men and women who reported ever using condoms. Discontinuation of pill use and injectable use was reported by three-quarters of women who had ever used these methods. Half of all respondents who had ever used the IUD appeared to be still doing so.

The reasons for discontinuation were in many cases related to pregnancy desire, infertility, or sexual inactivity, but side effects were mentioned more often than by never-users (Table 28). One-quarter of women who had discontinued (38) said that they stopped using modern methods because of side effects, but accessibility, cost, and partner disapproval were also mentioned. The side effects most mentioned by women were irregular menses (16 women), overall declining health (10 women), infertility (five women), headaches (seven women), and kidney, heart, liver, or breast problems/worries (nine women).

We also asked these 215 modern method discontinuers if they would they like to use a modern method to prevent pregnancy again in the future; just over half said they would. Of those who responded that they would *not* like to use a modern method again, half said the reason was that they were infertile, some said they feared side effects, others reported they preferred natural methods, and a few said they were not sexually active, reasons similar to those they gave for not currently using a method.

Table 28: Number and percentage of respondents giving various reasons for having personally (or having a partner who) discontinued use of modern contraceptives (multiple responses allowed)

Reason given	Women (n=144)		Men (n=71)	
	n	%	n	%
Side effects	38	26.4	11	15.4
Infertile	35	24.3	15	21.1
Not sexually active	11	7.6	4	5.6
Currently pregnant	10	7.0	3	4.2
Access/availability of supply	9	6.3	4	5.6
Prefers natural methods	9	6.3	5	7.0
Partner does not approve	7	4.9	4	5.6
Just doesn't like	7	4.9	12	16.9
Cost	6	4.2	4	5.6
Trying to get pregnant	5	3.5	7	9.8
Postpartum/breastfeeding	5	3.5	1	1.4
Concern about effectiveness	3	2.1	1	1.4
Not recommended by doctors	3	2.1	0	0
Method difficult to use	2	1.4	2	2.8
Other	0	0.0	4	5.6

Unmet Need for Limiting Births

Unmet need for limiting future births represents the proportion of fertile and sexually active women who report not wanting any more children but who are not using a modern method of contraception. In this population of 758 female respondents, 457 reported that they wanted no more children. Five of these women were currently pregnant or not sexually active, leaving 452 fertile, sexually active women who did not want more children. Of these women, only 53 were currently using a modern method of contraception, indicating an unmet need for limiting of 88%. Of the women who wanted no more children and who *were* using a method, two had been sterilized and 38 were using a long-acting method (the IUD); the others were using condoms, the pill, or spermicides. A further 41% of women who did not want more children were relying on withdrawal to protect them from pregnancy. We did not ask about the unmet need for *spacing* births, but with modern method prevalence of only about 9%, this is also likely to be high.

Current Use of Modern Methods

Method choice

In the sample of 758 women and 253 men, only 103 people (10% of all respondents) were currently using a modern family planning method. Of these, 95 were married; thus, 11% of *married* respondents were current users. Sixty-eight women (9% of all women, 11% of married women) and 35 men (14% of all men, 12% of married men) reported using modern methods. Half of the current users or their partners (51) were using the IUD, one-third (37) were using condoms, and the rest were using either the pill (10) or spermicides or sterilization (five). Modern use was similar in all districts, with the exception of Aghsu, where only three of 151 respondents reported using a modern method.

We asked users what had prompted them to use their current method. Forty-five percent mentioned method effectiveness, followed by doctor's recommendation (21%) and friend's or family's advice (16%). We also asked who made the decision to use this particular method. Around half of all current users (50%) reported that they themselves made the decision to use this particular method (men, 63%; women, 43%); 19% decided together with their spouse (20%, men; 19%, women); nearly 15% reported that their spouse decided (6%, men; 19%, women); 10% reported that the decision was made by the doctor and user together; and 6% reported that the doctor alone decided for them which method to use (Table 29). In Shamakhi and Ismayilli, where FP centers exist, and in Goychay, which is supported more (by UNICEF) than the other districts, respondents were more likely to report that the doctor decided for clients than was the case in the other two districts.

Table 29: Number and percentage of current users of a method reporting who decided on their use of the current method

	Women (n=68)	Men (n=35)	Total (n=103)
Doctor/nurse	5 (7.3%)	1 (2.8%)	6 (5.8%)
Doctor/nurse and me	7 (10.2%)	3 (8.5%)	10 (9.7%)
Me	29 (42.6%)	22 (62.9%)	51 (49.5%)
Spouse/partner	13 (19.1%)	2 (5.7%)	15 (14.5%)
Partner and me together	13 (19.1%)	7 (20.0%)	20 (19.4%)
Mother	1 (1.4%)	0	1 (0.9%)

Accessing methods

Most current users of a modern method (44%) told us that they obtained their method the first time from a pharmacy/aptek (80% of pill users; 84% of condom users; 67% of spermicide users; 8% of

IUD users). Hospitals and polyclinics were used more for first-time accessing of IUDs (70%). No respondents reported obtaining modern methods from DACs or FAPs, nor from general stores or open markets/bazaars. For resupply, almost all current users reported obtaining their methods from apteks.

Concerns and desire to switch

More than 90% of current users reported having no concerns about their current contraceptive method. Of the 11 respondents who had concerns, nine mentioned side effects and two mentioned cost. Although the numbers are small, eight of those expressing concerns were IUD users (of the 51 IUD users in the study). The side effects mentioned were irregular or prolonged menses, spinal pain, vaginal discharge, pain in the legs, kidney pain, and heart pain. Eighteen respondents reported that they would like to use a different method. (Another nine were unsure.) Despite the fact that those with concerns were largely IUD users, those who wanted to switch were more likely to be condom users (10 of 37). Some of these condom users said that they would prefer to use the IUD or pill, but fear of side effects was the main reason for not switching.

Attitudes toward Contraception

Discussing pregnancy prevention

We were interested to know with whom respondents would prefer to discuss pregnancy prevention. We asked all respondents (users and nonusers) several questions on this issue, and multiple responses were allowed. Half (49%) reported that they would prefer to talk about pregnancy prevention with a doctor or gynecologist (Table 30). One-fifth (19%) said they would prefer talking to their spouses, though this response was more common among men (37%) than among women (12%). Instead, women were more likely than men to say they would rather talk with friends (22% vs. 11%) and close relatives (27% vs. 4%). Six percent of respondents (27 men and 35 women) said that they would not like to talk to anyone about pregnancy prevention. Very few respondents mentioned the pharmacist as a person they would talk to, even though the apteks are their main source of supply.

Table 30: Number and percentage of respondents who would prefer discussing pregnancy prevention with various people

	Women (%) (n=758)	Men (%) (n=253)	Total (%) (n=1,011)
Doctor/gynecologist	376 (49.6%)	120 (47.4%)	496 (49.1%)
Close relative	207 (27.3%)	10 (4.0%)	217 (21.5%)
Friend	163 (21.5%)	27 (10.7%)	190 (18.8%)
Spouse/partner	92 (12.1%)	95 (37.5%)	157 (18.5%)
Nobody	36 (4.7%)	27 (10.7%)	63 (6.2%)
Mother/father	28 (3.7%)	3 (1.2%)	31 (3.1%)
Nurse	23 (3.0%)	4 (1.6%)	27 (2.7%)
Aptek	0	6 (2.4%)	6 (0.6%)
Other	6 (0.8%)	1 (0.4%)	7 (0.7%)
Don't know	3 (0.4%)	1 (0.8%)	5 (0.5%)

Respondents also were asked about whether they had *actually* talked to their spouses about pregnancy prevention in the last year. Eleven percent said they did not have a partner. Almost half of the respondents (45%) had not discussed contraception with their partners: Of this group, 49% reported that they wanted more children, 14% said talk was not necessary because they were

already using a method, and 11% said that have enough information and do not need to discuss anything.

Attitudes toward alternative contraceptive suppliers

We asked people whether they would be interested in obtaining contraceptive supplies from local apteks. One-third of all respondents (33%) told us that there was no aptek close to their home. But among those (n=680) with an aptek nearby, 62% (or 42% of *all* respondents) said that they would be happy to get methods at local apteks, even though they had not reported wanting to discuss contraception with aptek staff.

Premarital pregnancy prevention information

Eighty-three percent of respondents were in favor of giving contraceptive information to young people before marriage (with men slightly more favorable than women). We asked who should provide this information, and allowed multiple responses. Among all respondents, the following were seen as the most appropriate: doctors (43%), parents (31%), adult friends (33%), or other relatives (4%). Interestingly, teachers (3%) and religious leaders (0.2%) were not mentioned much as appropriate conduits of information.

Men's attitudes toward pregnancy prevention

We were interested to know men's level of interest in pregnancy prevention and what they felt they could do to help their partners. Of the 253 men interviewed, 64% reported that they would be interested to learn more about contraception; this proportion was higher in some districts (84% in Ismayilli, 71% in Goychay) than in others (39% in Shamakhi). A large percentage of men (80%) said that they would support their wife if she decided to use an FP method, although this proportion also varied by district, from 89% in Aghsu (where, interestingly, contraceptive use is lowest) to 50% in Shamakhi. Men who were unsupportive mostly cited fear of using modern methods as the main reason for not supporting their wife if she wanted to use contraception. Ways in which men thought they could support their wives to use contraceptives included giving permission (58%), giving money (50%), taking her to the clinic (39%), and talking with her about contraception (25%). Five men mentioned that they were willing to go personally to buy contraception for their wife.

General Health-Seeking Behavior

To gain information about suitable avenues for delivering FP services, we asked respondents some general questions about when, why, and where they seek care for health issues, and whether, during their health visits, they are ever exposed to FP information.

Reasons to seek care

In the preceding 12 months, 567 respondents (56%—41% of men and 61% of women) reported visiting a health facility. For the most part, especially for men, the last visit was associated with sickness (88% of men and 52% of women). A further 10% of respondents went for general advice or check-ups. Among women who visited a health facility, 52% went because they were sick, 23% went for a gynecological check-up, 8% went for an abortion, and 7% went for delivery.

Facility use

Large CDHs are clearly used for much of primary care, with 48% of those seeking care going directly to the CDH. A further 17% first sought care at a PH and 14% went to a polyclinic. Very few (less than 1%) reported going to a DAC or FAP for their health need, and less than 1% also mentioned going to a local private doctor. However, several people (15%) said they traveled to Baku for their last medical visit, a few said they went to a regional medical center (4%), and some

even left the country to go to Russia or Ukraine (1%). Anecdotally, our interviewers heard that even where the local hospital has an ob-gyn, women are often advised by these ob-gyns (or they choose themselves) to go to the CDH (where the same ob-gyn often works at different times), because there they will find better conditions, equipment, and supplies.

Missed opportunities for FP advice

We were interested in knowing whether health providers or community educators ever discuss FP with respondents during visits. During the last reported visit (n= 567), no men and only 8% of women reported this happening. When we asked all respondents (n=1,011) whether they had *ever* discussed FP with a health worker, these numbers rose to 27% of women and 7% of men. Only 1% of respondents had ever discussed ways to prevent pregnancy with a health promoter/peer educator in the community.

Community Involvement in Family Planning Programs

The Azerbaijan RH/FP Project will have a large community component, in which staff will work with local humanitarian organizations to create awareness about RH/FP in the community. As part of the baseline, we were interested to know what community members knew about such organizations. The vast majority (96%) did not know of any humanitarian organizations working in their town/village. (The 4% who did lived in Kurdemir and Goychay.) Very few people knew what these humanitarian organizations do in the area of health, but a few suggested that they principally help with renovating facilities or donating drugs and equipment to hospitals and to helping the indigent. Clearly, more work needs to be done to identify organizations for community mobilization, to train them in health education and promotion, and to raise their visibility.

Pregnancy Termination

One of the project's key aims is to help couples in the target districts become able to access and use modern contraception and achieve their desired number of children without the use of abortion. With low total fertility, low use of modern contraception, and traditional reliance on abortion to control fertility, we felt it important to undertake research around women's own experiences with, and current attitudes toward, pregnancy termination, to identify key areas where attitudes and practices need to change.

Only women (758) were asked the following questions, of whom 397 (52%) had previously had an abortion. Among these women, 48% had had 1–2 abortions, 32% had had 3–5, 14% had had 6–10, and 6% (48 women) had had more than 10 (Table 31). In the previous two years, 130 women (35% of all respondents) reported that they had undergone an abortion, 40% of them more than once.

Table 31: Among women who had had an abortion, total number obtained, percentage of women who had an abortion, and percentage of all women

Total number	Number n=397	% of those having abortions n=397	% of all women n=758
1–2 abortions	191	48.1%	25.1%
3–5 abortions	126	31.7%	16.2%
6–10 abortions	55	13.9%	7.2%
11 abortions or more	25	6.3%	3.3%
Any	397		52.4%

We asked women who had experienced an abortion in the last two years to recall the main reason that they had the last abortion. Of those 130 women, the main reasons given were that they did not

want any more children (73%), they wanted to space (6%), that there were pregnancy risks or birth defect risks (11%), and that they could not afford a child (8%). Two women reported that they wanted a boy baby and one woman admitted that her mother-in-law had forbidden her to have more children. Of these 130 women, 69 (52%) were not using any pregnancy prevention method at the time they became pregnant. Of the 61 women who said they had been using contraception when they got pregnant and decided to have an abortion, 87% were using a traditional or natural method (mostly withdrawal). Five of the women having an abortion (4%) reported becoming pregnant while using the pill.

Most of the 130 women who had had abortions in the preceding two years had the procedure at the CDH (81%). Some (10%) said they had obtained the abortion in a polyclinic (mostly reported by respondents in Shamakhi and Goychay). For the 125 women who gave us information on how much they paid (costs included drugs, doctor fees, and transport), the total costs varied widely, from U.S. \$2 to U.S. \$50, with a median price of U.S. \$10. The women who had the greatest costs (for both transport and doctor fees) were those who traveled to Baku. For those who stayed in the districts, the average costs were much lower, with 25% reporting being served free of any charge.

All 758 women who participated in the survey were asked their opinion about abortion. Even though so many women had experienced abortion and clearly were still using it to control fertility, 83% said they thought that abortion negatively affects one's health and that they would like to be able to avoid having abortions. Eight percent of women said they knew that abortion can cause death, and the same number thought that abortion is a sin. However, several women asserted that abortion has no negative consequences (7%) or that it is a good method for poor people to use to control the number of children in the family (1%). Some respondents told us that women often resort to abortion when they are desperate and have no choice (2%).

Respondents' Sources of Information

Respondents were asked about their favorite reading, listening, and viewing media. Watching television was reported to be a popular activity, with 96% of respondents reporting watching an average of 3.5 hours every day. The main difference between men and women was that men watch mostly during the evenings (90%) and at night (15%), while women watch television mostly during the evenings (82%) and afternoons (26%). Only 4% of all respondents reported not watching television at all. With regard to channel choices, men and women had similar preferences, with 41% watching AZ TV 1, a government channel very popular in rural areas and one that has a strong signal and is easy to receive. Also, large proportions of people reported watching Space TV (53%); ANS TV, a channel with lots of news programs (47%, but watched more by men than by women); and Leader TV, a channel with many soap operas that is the most popular TV channel and is reportedly watched by 63% of respondents (more by women than by men).

Radio listening was not popular compared with TV, with 75% of respondents reporting not listening at all. Men were more likely to listen to radio than women. The most popular radio station among those listening to the radio is ANS 102 FM (74%), a station that has a strong signal throughout the five districts. Smaller proportions of respondents reported listening to the government radio station (15%), to Araz (15%), and to Leader 107 FM (14%). There are also local radio stations in three of the survey districts, although very few people (fewer than 5%) reported listening to local radio.

We asked people, if they had the opportunity to watch or listen to a program on pregnancy prevention, when would be the best time? For those who watch television (almost everyone), most (63%) said that evening time is best. However, of those who listen to radio (only one-quarter of respondents), most would prefer the afternoon (36% of radio-listening respondents).

Only 4% of respondents reported reading a newspaper or magazines every day, with men reading more than women (7% vs. 2%). Two-thirds of respondents said they *never* read a newspaper. Eleven percent of respondents reported reading newspapers at least once per week, and 19% did so very occasionally, suggesting that IEC messages in this medium would be largely unnoticed. On the other hand, we noted that women prefer to read magazines like *Aysel* or newspapers like “*Okhu meni*,” “*Krossvord*” (enjoyed by more than half of women in Aghsu), “*Khalg*,” and “*Azerbaijan muallimi*.” Men prefer newspapers more than magazines and noted ones such as “*Khalg*,” “*Republic*,” “*Azadlig*,” “*Azerbaijan*” (more in Ismayilli and Goychay), and “*Krossvord*.” Respondents in different districts appeared to have preferences for different print media, although we do not know whether this represents a true preference or simply reflects differences in availability.

Summary and Recommendations

Summary of Findings

Supply Issues: Public-Sector Health Facilities and Services

- ◆ Most PHs have an inadequate supply of water, electricity, and telephone service. The CDHs are in poor repair, as are the lower level facilities. Some FAPs are barely operational.
- ◆ Few facilities have FP supplies (including commodities, gloves, and antiseptics), including most of the CDHs. Only two of the 76 surveyed sites had condoms, three had oral contraceptives, eight had IUDs, and none had injectable contraceptives. Norplant implants, tubal ligation, and vasectomy are not available anywhere. Few facilities have basic FP IEC materials.
- ◆ FP services are theoretically available at CDHs, but in reality, few clients are served there. Within the CDHs, opportunities for providing FP information to women in postabortion and postpartum settings are often missed. FP services are not really available anywhere other than in the central towns, to a large extent because of the absence of ob-gyns.
- ◆ Outreach and community-based services are very limited. Referral systems appear to be basic, although members of the community probably know not to waste time seeking FP services anywhere other than at CDHs.
- ◆ STI diagnostic capabilities are poor, even at the district level.
- ◆ Quality improvement and facilitative supervision are unfamiliar concepts to management of surveyed health facilities.
- ◆ Infection prevention practices are often inadequate.

Supply Issues: Public-Sector Health Providers

- ◆ There are many ob-gyns in Azerbaijan, but they are concentrated in Baku and other major urban areas. In the five districts, all ob-gyns are posted at CDHs and polyclinics. Also, given the current policy of only allowing ob-gyns to prescribe hormonal contraception and insert IUDs, the number would be insufficient for serving all clients should demand for services increase significantly. There are only three gynecologists in Aghsu, for example, and they manage all pregnancy and RH issues for a population of approximately 22,000 women of reproductive age. Other cadres are very underutilized for providing clients with FP information and referrals.
- ◆ Of all providers surveyed, few are trained to provide FP aside from ob-gyns, and even fewer actually provide services. Among the ob-gyns, only two of the three had prescribed or provided the pill or had provided condoms in the previous six months. Six of the 35 gynecologists had not inserted an IUD in the previous six months.
- ◆ Knowledge of FP methods and how to use them is low among all cadres of providers, including physicians. There is some evidence that previously trained gynecologists may need FP updates to orient them to new contraceptive technology. Knowledge of appropriate postabortion and postpartum contraception is poor.
- ◆ In discussions of pregnancy prevention methods with providers, abortion emerges as a key theme, mentioned by providers more often than some modern contraceptives. Induced abortion clearly is still widely practiced.
- ◆ Provider bias may exist for some methods: Almost half personally prefer the IUD to other methods, and one-quarter have a personal preference for using traditional methods or for not using any method.

- ◆ Counseling and informed choice may need to be enhanced in Azerbaijan. Sixty-three percent of providers thought that the provider should choose an FP method for the client.
- ◆ Considerable medical barriers exist, even among ob-gyns, with respect to eligibility for methods based on age and parity. Sometimes tests (such as ultrasound and diagnostic tests for STIs) are required before contraception can be given. Most gynecologists restrict women to three months of pill supplies, which is inconvenient for clients. Spousal consent often appears to be a requirement of contraceptive provision, which may pose a barrier in some cases. This issue needs to be addressed at the policy and training levels.

Supply Issues: Private-Sector Apteks

- ◆ Apteks are the main suppliers of FP commodities, given the absence of FP supplies from health facilities. Most apteks are small, serving fewer than 25 people a day in total. People in the community reported that they would be happy to purchase supplies from apteks, although most people do not live close to one, as almost all are in the main town of a district.
- ◆ Most apteks reported selling contraceptives, though the range of methods was limited in most. Condoms are the most widely available and commonly purchased method, followed by the pill; access to the IUD and spermicides is very limited, and progesterone-only pills and injectables were not available at all. For most methods, a range of brands were available, at varying prices and supplied by various suppliers.
- ◆ Apteks report a general lack of demand for contraceptives. Nevertheless, clients do ask their staff about pregnancy prevention methods, particularly emergency contraception. This presents a good opportunity to provide further information about modern contraceptive methods to potential clients.
- ◆ Very few aptek staff have had any training in FP; in the meantime, they often sell methods without prescription. Several aptek staff expressed a desire to be trained in FP. Most apteks have only one or two staff, which has implications for the type and duration of FP training the project should adopt.

Demand Issues

- ◆ Most people in these communities are well-educated, yet many are poor, with high levels of unemployment.
- ◆ It appears that very few clients attend health facilities specifically for contraception. Furthermore, few clients appear to purchase contraception at apteks.
- ◆ Most families are small. Men and women clearly want to limit family size, yet they do not use contraception. Men appear to be in consensus with their wives about family size, and most want to share decision making.
- ◆ More than three-quarters of men and women (78% of married men and 85% of married women) reported that they had tried to prevent a pregnancy at some time. The most common method of preventing pregnancy (mentioned by more than half of the men and women) was withdrawal. About one-quarter of respondents had tried modern methods; however, almost two-thirds of these had discontinued use. Fewer than 9% of respondents were currently using a modern method. Many respondents acknowledged that they still use abortion as a key means of fertility control.
- ◆ There is a huge unmet need for contraception in Azerbaijan, with 88% of sexually active, fertile women not wanting another child yet not using a modern method.
- ◆ Reasons given for nonuse of modern contraception (by those who do not desire pregnancy) were fear of side effects, preference for natural methods, or lack of information.

- ◆ There appeared to be general support for the provision of FP information to young people before marriage. There is a need for premarital education for young people through incorporation of FP messages into the health component of the basic school curriculum and through out-of-school peer education programs.
- ◆ Abortion continues to be widely practiced. Most women do not like having abortions, but they seek them as a last resort after having unprotected sex or using inadequate traditional methods of contraception.

Recommendations: Opportunities for Intervention

Family Planning Supply

- ◆ Access to FP is limited by policies that allow only gynecologists to prescribe oral contraceptives. Given clients' limited access to the few gynecologists, there is a need to consider policy changes that would allow other cadres to prescribe this method.
- ◆ Staff are interested in being trained in FP and in providing services. Training at higher levels should include contraceptive technology updates, counseling for informed choice, reduction of medical barriers, quality improvement, and improved management and supervision of those providing FP services (both within the site and in the community). At lower levels, training could include counseling, basic FP knowledge, and infection prevention, as well as how to strengthen linkages for referrals from FAPs and DACs to hospitals.
- ◆ Investments in equipment are needed, as well as improvements in supply mechanisms.
- ◆ Opportunities for improving the supply of commodities in apteks need to be examined. There appears to be a need to rationalize the supply of a limited number of well-priced and effective brands, while possibly discouraging the use of others. FP training is attractive to aptek staff. Given the difficulties of leaving the shop for training, self-study might be an option to consider. Social marketing programs should also be explored as a means to increase demand.
- ◆ More research is needed on individuals' ability to pay for contraceptives in the private sector.
- ◆ Strengthening preservice education on FP in medical universities, medical colleges, and schools would be useful.
- ◆ Contraceptive security is a matter of urgency. Government and the private sector should work jointly to seek viable solutions, without which all other interventions may be wasted.

Demand Creation

- ◆ Both men and women clearly want to limit family size. Abortion remains a key means of fertility control, although most people do not like it and know it is not a healthy choice. To reduce this dependence, effective modern contraception must be made available, and communities should be informed about the availability of services.
- ◆ There are huge opportunities for engaging women and men together in FP counseling. Men share small-family aspirations and want to be involved in decision making.
- ◆ Television programs on FP airing in the evenings would reach the greatest number of people.
- ◆ More research is needed on myths around modern contraception. IEC messages need to focus on providing information and dispelling fears of side effects.
- ◆ Many women reported obtaining contraceptives directly from pharmacies without consulting a health care provider. With the project's emphasis on improving services at health facilities, women need to be encouraged to engage with health workers to receive appropriate counseling and prescriptions. Joint community-facility initiatives would enhance the public's confidence in this kind of partnership between the public and private sectors.

- ◆ Discussions of FP in communities, through community activities, mass media, and local organizations, would build on respondents' assertions that the people with whom they would most prefer to discuss FP are friends and family members. Although women reported not discussing FP much with spouses, interest by men could be exploited by encouraging counseling for couples and by aiming IEC at men.
- ◆ As there appeared to be general support for providing FP information to young people before marriage, efforts should be made to target youth with FP information, either through the Ministry of Education or through other channels.

Women currently face limited choices in their ability to control their fertility, often still resorting to abortion, despite the fact that the dangers of abortion are known in the community and among health professionals. Efforts are needed to provide women and men with healthy contraceptive alternatives, which they would most likely welcome. Ultimately, the government, health providers, and the community all want the same thing: Few people need to be convinced of the need for a high-quality primary care service where effective contraceptive information and methods can be found. The response, however, needs to be multifaceted for both supply to be available and for demand to be generated and met.

Appendix:

Baseline Survey Sampling Strategy

The Mapping/Census Exercise

An essential first step in determining the sampling framework for the other survey tools was to create a universal framework of all health facilities, registered pharmacies, and town or village communities in the five districts of Kurdemir, Shamakhi, Goychay, Aghsu, and Ismayilli. Children’s hospitals, specialist facilities, unregistered apteks, and unstaffed FAPs were excluded. The health facility census data also included information on the number, types, and names of provider positions at the sites (ob-gyns, other doctors, midwives, nurses, and feldshers). The number of vacant positions was also noted. Some details are presented here, as these helped determine samples for all other tools.

Sampling of Health Facilities for Audit

All districts have a large CDH and polyclinic, as well as a number of PHs, DACs, and FAPs (Table A1).

Table A1: Total number and type of facilities per district

	CDHs	Polyclinics	PHs	DACs	FAPs	Total
Aghsu	1	3	5	11	23	43
Goychay	1	1	9	11	31	53
Ismayilli	1	2	6	11	22	42
Kurdemir	1	1	10	5	43	60
Shamakhi	1	1	2	16	23	43
Total	5	8¹	32¹	54	142	241

¹ 10 facilities were excluded, as they were specialist children’s hospitals, mental health facilities, etc..

To sample health facilities, we first used purposive sampling that took into account where we expected the most project interventions to occur. As most of the project’s training activities will target ob-gyns, doctors, and midwives, who primarily work at CDHs, polyclinics, and PHs, we included *all* of these facilities in the sample (with the exception of specialist facilities such as mental hospitals, children’s hospitals). There were also some doctors working in DACs, and so of the total list of DACs, we *randomly* selected one-third of DACs. To obtain some idea of the potential for staff (principally feldshers) working in small villages to provide FP information, we also wanted to sample some FAPs. Due to time and budget constraints and the isolation of many of the FAPs, we limited this to a random sample of one in five FAPs. The total number of facilities sampled is shown in Table A2 (page 44). All audits were completed at the selected sites, with the exception of three FAPs where staff could not be located.

At each sampled facility, either the head of the facility or the person most responsible for FP services was asked to provide information or to accompany the interviewer to parts of the facility where the required information could be obtained. In the main, key informants at the CDHs and polyclinics were ob-gyns; in the PHs, they were usually other physicians or midwives; in the DACs, the respondents were either doctors, midwives, nurses, or feldshers; in the FAPs, respondents were

all either midwives, nurses, or feldshers. In the smaller facilities, the respondent was likely to also be the head of the facility—for example, in 82% of FAPs, the respondent was also the head of the facility.

Table A2: Facility sampling in five districts

Facilities	Number	Sample	Intended sample	Actual sample
CDHs	5	All	5	5
Polyclinics	5	All	5	5
PHs	25	All	25	25
DACs	54	1 in 3	19	19
FAPs	142	1 in 5	25	22
Total	231		79	76

Sampling of Apteks

All registered pharmacies (apteks) within the five districts were included in the aptek survey. In total, 57 apteks were found and surveyed in the five district centers; in addition, four apteks were found outside the main towns. In total, 61 apteks were surveyed. We interviewed the most senior person on duty.

Sampling of Staff for Interview

The mapping exercise showed that total staffing varies by district, from 46 per 10,000 population (in Aghsu) to 71 per 10,000 (in Goychay) (Table A3). Large numbers of staff (40% of the total) work at the five CDHs (though most are employed in the children's hospitals). The CDH (and polyclinics) in Shamakhi and Goychay are particularly large, employing more than 200 clinical staff, double that of the CDH in Aghsu. In fact the CDH in Shamakhi employs more than half of the health workers in the whole district. Kurdemir, Ismayilli, and Goychay also have large numbers of staff working in PHs.

Table A3: Number of staff employed at all sites, by facility type and district

District and population	CDH (n=5)	Polyclinic (n=8)	PH (n=32)	DAC (n=54)	FAP (n=142)	Total n=241 (Staff per 10,000)
Aghsu (65,000)	119	55	64	40	23	301 (46)
Goychay (104,300)	234	104	312	56	42	748 (71)
Ismayilli (75,500)	140	77	160	49	23	449 (59)
Kurdemir (97,000)	178	59	163	18	47	465 (48)
Shamakhi (84,800)	290	138	34	53	25	540 (63)
Total	961	433	733	216	160	2,503

The type of staff, by type of facility, reported during the mapping, is shown in Table A4.¹² The large number of staff in the CDHs includes 24 ob-gyns and 71 midwives. The polyclinics, too, employ large numbers of doctors and nurses, with a total of 11 ob-gyns. PHs, with an average of 23 clinical staff, employ only three ob-gyns at 32 facilities but average 1.8 midwives at each and generally have large numbers of unfilled positions. All but three of the ob-gyns are stationed at the district centers. In all five districts, 38 ob-gyns (a ratio of one per 11,000 population) provide all

¹² We counted staff actually employed. At many sites, there were also designated but unfilled staff positions, especially for doctors at PHs.

obstetric and gynecological care and provide outpatient services such as FP. DACs employ an average of four staff; some have doctors, but many have none. Nurses form the majority of staff at both PHs and DACs. FAPs are generally run by a single staff member, usually a feldsher.

Table A4: Number of staff employed at all sites, by facility type and staff cadre

	CDH (n=5)	Polyclinic (n=8)	PH (n=32)	DAC (n=54)	FAP (n=142)	Total (n=241)
Ob-gyns	24	11	3	0	0	38
Other doctors	164	168	139	38	0	509
Midwives	71	17	59	44	22	213
Nurses	660	227	502	83	21	1,493
Feldshers	42	10	30	51	117	250
Total (mean)	961 (192)	433 (54)	733 (23)	216(4)	160 (1)	2,503

By district, the 38 ob-gyns are unevenly distributed, with higher numbers in Goychay, Shamakhi, and Kurdemir (Table A5). Aghsu has the smallest population of the five districts, but the three ob-gyns for a population of 65,000 people represents one for every 21,666 people, compared with one for every 7,700 people in Shamakhi. There are currently eight open positions for ob-gyns in Aghsu.

Table A5: Number of staff employed, by district and type of health professional

District and population	Ob-gyns	Other doctors	Midwives	Nurses	Feldshers	Total by district
Aghsu (65,000)	3	53	32	185	28	301
Goychay (104,300)	11	170	57	457	53	748
Ismayilli (75,500)	5	94	40	260	50	449
Kurdemir (97,000)	8	90	49	260	58	465
Shamakhi (84,800)	11	102	35	331	61	540
Total, by type of professional	38	509	213	1,493	250	2,503

Staff Sampled for Interview

Staff were interviewed at the same 76 sampled facilities as noted above (all hospitals and polyclinics and a random sample of DACs and FAPs). We purposively sampled all of some types of key staff and randomly sampled others. For example, 38 ob-gyns worked in the five districts, and we aimed to interview all of them. Next, the Azerbaijan RH/FP project aims to train doctors, midwives, nurses, and feldshers to provide FP information and, where appropriate, contraceptive methods. Therefore, we aimed to interview doctors, focusing on those who might be best able to provide FP services, such as general practitioners, pediatricians, and physicians providing STI services. These doctors work in CDHs, polyclinics, PHs, and DACs, and we sought to interview up to three doctors at each of these facilities. Midwives are important allies in the strengthening of FP services: We decided to sample up to three midwives at all sampled facilities. Nurses and feldshers form the backbone of services in DACs and FAPs and are well-placed to provide information and education to the community, as well as condoms. We decided to interview up to three nurses and feldshers in the selected DACs and FAPs. To select the three doctors, midwives, nurses, and feldshers, we took the lists of staff names provided by the chief administrator at any facility and randomly drew the appropriate number of respondents from this list. If the staff person was not on

duty, interviewers visited the staff member at home. In some cases, there were not three working at the facility. Table A6 summarizes the sampling strategy and the intended and actual sample size.

Table A6 : Health worker sampling

Staff	Number in 5 districts	Sample	Intended sample	Actual sample
Ob-gyns	38	All in any facility	38	35 (11.9%)
Other doctors	509	Up to 3 in all sampled facilities	98	88 (30.0%)
Midwives	213	Up to 3 in all sampled facilities	104	103 (35.2%)
Nurses	1,493	Up to 3 in sampled DACs and FAPs	31	27 (9.2%)
Feldshers	250	Up to 3 in sampled DACs and FAPs	41	40 (13.7%)
Total	2,503		312	293

Sampling of Community Members for Interview

Overall Sampling Framework

The sampling framework for surveying household members took into account the fact that most of the project's facility-based or supply-side interventions would take place in hospitals and polyclinics. Demand-side, community interventions will also take place in the communities close to those facilities. In total, we anticipate that around eight communities per district will be the focus of community-based interventions. Therefore, we determined to include in the sampling framework the five towns around the CDH (and polyclinics), plus the 25 villages around the 25 PHs. In addition, we listed all villages within a 10 km radius of the five CDHs and randomly selected two villages per district. Thus, the total sampling frame consisted of 40 communities (five towns and 35 villages), as shown in Table A7.

Table A7: Overall sampling framework—community selection

	Aghsu	Goychay	Ismayilli	Kurdemir	Shamakhi	Total
District center	1	1	1	1	1	5
Villages with PHs	4	7	5	7	2	25
Villages close to CDHs	2	2	2	2	2	10
Total	7	10	8	10	5	40

Number of Interviews per Community

The number of interviews to be conducted totaled 1,000 people in these 40 communities. The number of interviews to be conducted in each district and community was determined by their overall population numbers and by the proportion of people living in rural and urban areas. The steps used to calculate the number of interviews in each of the 40 communities were as follows:

1. The number of interviews in each district was proportional to their populations. Of the 1,000 interviews, most were to be conducted in Goychay, which has the largest population, followed by Kurdemir, and so on (Table A8).
2. For each district, we calculated how many of the interviews would be in the main town and how many would be in villages based on the proportion of the population residing in those areas (Table A8).

Table A8: District populations and sample numbers

District	Total population	Sample proportional to population	Population in district center	Sample number in district town	Sample number in villages
Aghsu	65,000	150	16,800 (1:4)	37	113
Goychay	104,300	240	35,100 (1:3)	80	160
Ismayilli	75,500	180	15,500 (1:5)	36	144
Kurdemir	97,000	230	17,800 (1:5)	46	184
Shamakhi	84,800	200	34,800 (2:5)	80	120
Total	426,600	1,000	120,000	279	721

3. With different numbers of villages in each district, the number of people to be surveyed in each village then also varied (Table A9).
4. The total sample was to comprise 75% women and 25% men in each town and in each village. The final numbers of women and men to be interviewed are shown in Table A10.

Table A9: Final sample numbers per town/village, in each district

District	Sample number in district town	Sample number in villages	Number of villages selected	Sample numbers per village
Aghsu	37	113	6	19
Goychay	80	160	9	18
Ismayilli	36	144	7	21
Kurdemir	46	184	9	21
Shamakhi	80	120	4	30
Total	279	721	35	

Table A10: Community male and female respondents—intended sample

District	Town		Villages		Total	
	Female	Male	Female	Male	Female	Male
Aghsu	28	9	85	28	113	37
Goychay	60	20	120	40	180	60
Ismayilli	27	9	108	36	135	45
Kurdemir	34	12	139	45	173	57
Shamakhi	60	20	90	30	150	50
Total	209	70	542	179	751	249

Sampling Methodology within Communities

Within each of the selected communities, we designed the following sampling strategy:

1. All households in the community were enumerated. Two teams of interviewers worked separately. Using random numbering, two households were selected in each community as starting points. From then, depending on how many interviews were to be conducted, and how many households were in the community, we surveyed every *n*th house after the two starter households. Every third survey was for men. In this way, we never interviewed men and women in the same house. This continued until the required number of respondents had been interviewed.

2. Three contact efforts were made at selected households. If there was nobody at home after this time, or if the household contained no eligible respondent, we moved on to the adjacent house, and then continued with the same household interval designated for that community. If a person refused an interview, this was recorded as a refusal, and we resumed selection with the designated interval for that community.
3. Only one respondent per household was allowed. For each selected household, we listed the eligible respondents, then drew lots to determine who would be interviewed. There was some miscalculation in numbers to be sampled, and thus we ended with slightly more surveys than intended. The actual sample surveyed was 758 women and 253 men (total 1,011)

Eligibility Criteria

Eligible women consisted of all married women aged 15-49 years, plus single women aged 21-49. Eligible men consisted of all married men aged 15-55 years, plus single men aged 21-55 years. Men younger than 55 but married to women older than 49 were excluded.

Populations and Surveyed Areas

People living in the target districts were mostly Azeri, but many nationalities from neighboring areas and countries were also represented (for example, Lezgis, Tats, and Russians). The largest non-Azeri communities are Russian communities in Ismayilli (Ivanovka village has only Russian inhabitants) and in Shamakhi (Chukhuryurd and Gizmeydan villages have mixed-ethnicity populations). Few displaced persons or refugees live in these districts. Being predominantly rural, most people rely on agriculture and farming to make a living.

In total, we completed surveys in 40 communities, the five main towns or district headquarters and 35 villages. Interviewers attempted to interview 1,123 respondents. Eighty-three people were still unavailable after three contact efforts; 29 (2.5%) refused to participate. The most common reasons for refusing to participate were: the respondent did not like the subject matter or did not “need” to be interviewed (13); the respondent was too shy (2); the mother-in-law would not permit it (1); and the respondent was afraid of family repercussions (1). Most respondents were contacted at the first try. In 85% of cases, the household only had one eligible participant, whereas in the others, lots were drawn to determine who would be the respondent. In one case, seven women met the eligibility criteria, of whom one was selected. The final total number of respondents was 1,011, 758 of whom were women and 253 of whom were men. (Table A11).

Table A11: Household survey respondents

District	Communities surveyed (towns/ villages)	Total respondents	Urban/rural respondents	Female/male respondents
Aghsu	1/6	151	37/114	11/36
Goychay	1/9	242	80/162	176/66
Ismayilli	1/7	183	36/147	139/44
Kurdemir	1/9	235	46/189	176/59
Shamakhi	1/4	200	80/120	152/48
Total	5/35	1,011	279/721	758/253