American University of Armenia

Center for Health Services Research

An Assessment of the "Green Path" Campaign

October 2000

Family Planning:

BASELINE
REPRODUCTIVE
HEALTH SURVEY
Armenia, Spring 2000

The right path for your family

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**Ministry of Health
Republic of Armenia**

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Executive Summary

Induced abortion remains the major form of birth control among Armenian women, contributing to high rates of maternal mortality and preventable morbidity. This reliance on abortion can be explained by the lack of information concerning modern methods of contraception and widely held misinformation among women regarding family planning and reproductive health. Previous assessments have documented a need in Armenia for high-quality family planning services in conjunction with a public education campaign. United Nations Population Fund (UNFPA) has addressed the need for quality services by equipping 77 family planning cabinets strategically located throughout the country and training their staff members. In 1999, the Johns Hopkins University Population Communication Services (JHU/PCS) began preparations for a United States Agency for International Development (USAID) funded mass media campaign. The campaign was launched in June 2000 and promotes greater knowledge, acceptance, and adoption of modern contraception through counseling and related services provided at the then underutilized family planning cabinets.

The Center for Health Services Research (CHSR) of the American University of Armenia (AUA) is conducting the process and impact evaluations of the campaign. The evaluation, which utilizes a pre-post panel design, tests the overall impact of the campaign. Household surveys were conducted with 1,212 women among the target population (married, age 18-35) in April and May of 2000. A modified cluster sampling technique was used in selecting participants, which provides for a representative sample from the selected regions (*marzes*); however, care must be taken in extrapolating findings to a national level. Reproductive health/family planning knowledge, attitudes, and practices were assessed at the baseline. In the fall of 2000, following the implementation of the national and regional campaigns, the same women will be re-interviewed using a similar instrument. Program impact will also be assessed by the JHU/PCS team through monitoring clinic visits in selected areas several months prior to and after the launch of the campaign.

The baseline data support previous findings of the need among Armenian couples for information regarding family planning and reproductive health options. Virtually all couples are practicing family planning; unfortunately reliance is on ineffective traditional methods supported by abortion.

The data show that, during the past 5 years among the respondents, one in two pregnancies ended in abortion. Extrapolation of these data estimates a lifetime abortion rate of 4.3 per woman. This estimate supports the trend for high number of abortions found in earlier studies conducted in Armenia, but is alarmingly higher. The main reasons women cited for having abortions were "not wanting children at the time" (60.5%) and economic reasons (24.6%), indicating a need for more effective methods of birth control. Among women pregnant during the baseline assessment, few wanted to be pregnant at that time.

Only 24.3% of the respondents currently use a modern method of contraception. The most frequently used modern method of contraception is the Intrauterine Device (IUD) (9.4% of all respondents), followed by condoms (8.3%). Perceived safety /few side effects were the main reasons for choosing the current method of contraception (modern or traditional). In most cases, the primary reasons for not using a modern method are the cost and the fear of side effects. The modern methods women most expressed a preference for using were the IUD and pills (48.9% and 33.7% respectively).

Use of Family Planning Cabinets is low; only 5.3% of the respondents had received family planning care/counseling services within the past year. Those attending, however, were generally satisfied with the care and services received. Similarly distressing is the fact that 49% of the respondents had never visited a gynecological cabinet for non-pregnancy-related care.

Responses revealed that doctors are the most trusted source of information about family planning and contraceptives. Family and friends also provide information that is valued by the respondents. Interestingly, the respondents perceived that about 75% of their friends use modern contraceptives, a number 3 times higher than reality.

In summary, the baseline survey results show the need for information regarding quality family planning services. Overwhelmingly, women realize that abortion is the least safe and effective method to rely on, however, the current use of modern methods, which would protect women from unwanted pregnancies is low. The perception of friends as a valuable source of information, combined with a positive peer environment regarding the use of modern contraceptives, suggests a strong foundation for the proposed program to achieve its objectives in increasing utilization of family planning clinics and ultimately modifying contraceptive use behavior.

1. Background

1.1 Overview of the Program

Located in the southern Caucasus (see map, Figure 1), Armenia, like the other newly independent former Soviet Republics, is far behind its West European neighbors in family planning: in 1997, modern method use was estimated at 36% (1). Abortion remains the major form of birth control among Armenian women (2). Armenian women as well as other Eastern European women who undergo induced abortion are almost totally without information on alternative methods of birth control. This is cited by specialists as the primary reason for their heavy reliance on abortion (2). While a recent UNFPA program has assured that the country has sufficient contraceptive supplies and trained professionals, the availability of reproductive health information and education is extremely limited. Much of what women do know is misconception and myth. Adding to this environment are negative physician attitudes towards (certain) modern methods of contraception, possibly based on their own misinformation, the financial gains reaped from payments for abortions, and/or attitudes about the status of women.

Recognizing the need for information on modern contraception, a number of international agencies are working to improve women's health in Armenia. In 1997, a UNFPA-funded program trained and equipped doctors at 77 family planning cabinets strategically located throughout the country. The challenge remains to make women aware of these new services and to increase the utilization of the cabinets. Several USAID assessments have recommended mass media campaigns to promote greater knowledge, acceptance, and adoption of modern contraception. In June 2000, JHU/PCS launched a national Information-Education-Communication (IEC) campaign funded by USAID to support USAID's Population Health and Nutrition Center's Strategic Objective of improving women's health (3).

The national campaign uses television, radio, and print media to encourage women to visit family planning cabinets and to use modern contraceptive methods. In two pilot *marzes*, the

national media campaign is supplemented with a combination of regional media and community events. A family health logo (displayed on the report cover) was developed to unify the campaign and provide a symbol for easy identification of the participating family planning cabinets and pharmacies by prospective clients. The logo is prominently promoted in the media. The campaign also promotes select Yerevan pharmacies as a source of information and supplies. The program trained Non-Governmental Organizations (NGOs) and community members in community mobilization and assisted them in developing and implementing community events supporting the regional mass media campaigns.

JHU/PCS provided additional counseling/interpersonal communication skills training to doctors from family planning cabinets throughout the country. The program also trained pharmacists and pharmacy managers in selected pharmacies in Yerevan in quality customer service and contraceptive technology. The program provided family planning providers nationwide with print and reference materials to assist them in their work.

In 1999, JHU/PCS contracted the Center for Health Services Research in collaboration with the Center for Policy Analysis (CPA) of the American University of Armenia to conduct the formative research utilized in the underlying design/approach to the campaign. The results of this research phase are reported elsewhere (4). In spring of 2000, the CHSR was contracted to conduct the process and impact evaluations of the campaign itself.

1.2 Evaluation goals and objectives
The CHSR, in coordination with JHU/PCS, is conducting an evaluation of the impact and outcome of the IEC campaign. While the ultimate campaign objective is an increase in the use of modern contraceptive methods and a corresponding decrease in abortions, other measures more sensitive to change within the evaluation period should also be measured. These concurrent measures include visits to family planning cabinets, informal assessments of media coverage, and pharmacy sales. These measures will support the findings of the panel survey that

measures pre-and post levels of knowledge, attitudes, and practices related to family planning and reproductive health. A concern in program evaluation is attributing changes to a program as opposed to other influences within a community. The panel design used in this study provides the most robust assessment of the program's true impact. Unlike a simple cross-sectional study, the panel design permits the determination of temporal relationships at an individual level, strengthening causal inferences drawn from the data. The mix of national and national supplemented by local program activities also strengthens the program evaluation by allowing for assessments of dose-response relationships. If the program fails to demonstrate an impact, this design may lend insight into where the program failed to achieve the intermediary goals necessary for the attainment of the overall goals. Such analysis can lead to improvements in the design and/or implementation of future programs rather than the wholesale dismissal of an otherwise sound approach.

The current report summarizes the findings of the initial (baseline) survey. The survey assessed pre-campaign knowledge, attitudes, and practices among the selected respondents. These data serve three purposes: first, to provide demographic information, second, to detail the current status of various indicators and, third, to provide a reference against which to measure changes subsequent to the launch of the campaign.

2. Methods

2.1 Concept

A group of 1212 married women, aged 18-35, was enrolled at baseline – 504 from Yerevan, 504 from the Lori & Vayots Dzor *marzes* where community mobilization activities and local media supplemented the mass media campaign, and 204 from a comparison *marz* (Armavir) [see map, Figure 2]. During the follow-up, the same women will be re-interviewed. An additional 236 women will be enrolled from these *marzes* to assess if participation in the baseline survey sensitized women to more vigorously respond to the campaign. Baseline knowledge, attitudes,

and practices were assessed using survey instruments and methods developed in cooperation with JHU/PCS.

2.2 Sampling

The sample size of 1212 is comparable to similar studies and supported by simple sample size calculations, which indicate a minimum of 200 observations for each comparison unit (5) for the level of precision and expected frequency of the key characteristics being investigated.

> *Inclusion criteria*: Married women (registered or unregistered marriage) of reproductive age, 18-35.
>
> *Exclusion criteria*: Single, widowed, divorced women and women married, but living apart form their husbands for at least 30 days were considered to be ineligible for the survey as well as those declining to participate, women of other age categories, and women lost to follow-up.

These criteria mirror the target population defined for the program: married women 18-35 years of age. Women living apart from their husbands for more than 30 days were excluded as their contraceptive behaviors were considered to be more like unmarried women.

Respondents were selected using a probability proportional to size cluster sampling technique. This process gives every potential respondent an equal probability of being included in the sample while allowing for an efficient enumeration process. While this method was seen as the most rigorous method feasible, it is based on several assumptions: 1) Patterns of emigration are uniform across Armenia; 2) a cluster size of 6 coupled with skipping adjacent households effectively minimizes heterogeneity bias; and 3) the population is uniformly distributed across geographic areas with respect to key socio-demographic variables. Extant data and prior research indicate that these assumptions are reasonable for Armenia at this time. As detailed in Appendix 1, which includes a summary of all of the baseline survey procedures, the sample is

representative of the *marzes* from which the sample is drawn and should reasonably reflect all of Armenia.

2.3 Baseline Instrument

The baseline instrument was collaboratively developed by JHU/PCS and AUA/CHSR staff from previous surveys on the topic and adapted for use in Armenia and to the specific objectives of the project. Information from the formative research phase was invaluable in this development process. Input was solicited from the Ministry of Health (MOH) and several key groups. The instrument was subject to expert review and several iterations of pre-testing in its Armenian, Russian, and English formats. The final interviewer-administered instrument (Appendix 2) was 30 pages in length and required approximately 30 minutes to complete. All the interviews were conducted in separate rooms where the respondent and the interviewer were alone during the interview. Interviews were conducted in Armenian unless the respondent expressed a preference for Russian. In addition to completing a cluster of 6 interviews per day, interviewers completed journal forms (see Appendix 3), where information was logged on compliance with the sampling protocol and response patterns.

Listed below are the specific domains that were addressed in the baseline survey.
1. Awareness, usage, attitude and knowledge of different modern contraception methods
2. Knowledge of sources to obtain modern contraception methods
3. Attendance of Family Planning Cabinets
4. Five year pregnancy history
5. Perception of the quality of contraceptive counseling delivered by Family Planning Cabinet physicians
6. Satisfaction with Family Planning Services
7. Exposure to the information about modern contraceptives
8. Perception of partner's awareness, usage, knowledge and attitude towards modern contraceptive methods

9. Knowledge of reproductive health concerns

10. Knowledge of Sexually Transmitted Diseases (STD) transmission and manifestation

11. Key demographic and socio-cultural factors

2.4 Training/pre-testing/data collection

Interviewer training (2 days) and pre-testing (2 days) took place the week of 17 April 2000 with a final retraining on the revised instrument/protocol occurring on 25 April (see Appendix 4 for the Training Manual). A total of 17 interviewers, all women, were utilized. Data collection started on 26 April and ended on 16 May. A senior member of the CHSR or JHU/PCS staff observed each interviewer at least three times during the pre-testing phase and once during the implementation phase to assure compliance with the survey protocol and proper interviewer techniques.

3. Results

The baseline survey conducted as phase one of the evaluation of the "Green Path" campaign provided valuable information of the respondents' reproductive health/family planning knowledge, attitude and practices. The results of the baseline survey were consistent in most aspects with similar studies previously conducted on this topic in Armenia (1, 2, 4) and show a crucial need for information delivery and quality family planning services for Armenian women.

3.1 Administrative

A total of 1212 women from Yerevan (n=504), Lori & Vayots Dzor (n=504) and Armavir *marzes* (n=204) responded to the baseline survey. On average, it required 7.5 door knocks to complete one survey. Surveys generally took 26 minutes to complete. Virtually all (96.2 %) of the surveys were conducted in Armenian with 3.8 % in Russian. The primary reason for non-response was the absence of an eligible female residing in the household (48.8%), followed by no one being home at the time of the interview/vacant house (43.1%). The explicit refusal rate

(either the selected respondent refused or someone refused on behalf of the entire household) was 3.4%.

3.2 Socio-Demographics

The mean age of the respondents was 27.9 years (Table 1), with the distribution spanning the entire targeted age range. Table 1 also indicates that 38.8% of all respondents had completed a professional/technical education and 21.1% had graduated from an institute/university. Of the remainder, 34.8% had a basic school (10 year) education, and 5.1 % had less than a basic10-year education. These data resemble the data obtained from the 1997 Reproductive Health (RH) Survey in Armenia (1), where women from 17 to 44 years old were surveyed. In that survey the education categories were broader (primary, secondary, tertiary), but the distribution among these categories was similar.

Only 11.9% of all respondents were currently employed.

The mean number of children per woman was 1.94, less than that identified in the 1997 RH Survey where the mean was 2.1. Given the fact that the RH Survey sample was drawn from all women of reproductive age (up to 49), this lower average among the current study population is to be expected.

The presence of the luxury/convenience items in the household, used as a proxy for socio-economic status, varied across the marzes. The most common convenience item was an indoor/bathroom toilet, which was present in 72.5 % of all households (73% in 1997 Survey); the least common item was a personal computer, found in only 1.8% of the respondent households (Table 1) (1% according to the 1997 Survey). Overall it can be noted, that, as one would expect, Yerevan households had the highest percentage of almost all these convenience items. With respect to monthly expenditures, only 2% of all the respondents spent more than $500 monthly. The highest percentage of people (38.7%) reported monthly expenditures less than $50. These

data differ from what was obtained in the 1997 RH Survey (1), where the corresponding figure was 20.7%, and the highest percentage of the respondents (35.8%) reported spending $50-100 per month. This increase may be indicative of improving economic conditions. Only 12.8 % of the respondents were satisfied with their monthly income.

3.3 Knowledge of Modern Contraceptive Methods

Information was gathered concerning the respondent's knowledge of modern contraceptive methods. Among those respondents indicating familiarity with the method, the information regarding the use and availability was obtained (Table 2, a-d, Figure 3). Pills, IUDs, and condoms were well known, with use (at any time) below 20% for all but condoms.

With respect to **pills**, 83.1% of the respondents reported awareness of this method, 84.6% of those familiar with this method knew where to get pills; however, only 15% reported ever using pills. For the **IUD,** 99.7% of the surveyed women were aware of this method; of them, 21.3% had used one at some point. **Depo-Provera** was least well-known modern method, with only 15.6% of the respondents reporting awareness of the method. This is consistent with only 3.2% reporting ever having used that method of contraception. Virtually all women (96.3%) were aware of **condoms** and roughly half of those (46.4%) reported ever having used them. Less well-known/available modern methods are also presented in the tables.

3.4 Knowledge of Traditional Contraceptive Methods

Information was obtained regarding respondents' knowledge of traditional contraceptive methods (Tables 2 a-d). For the **Lactational Amenhorrhoea Method [LAM]**, most (80.3%) knew how to use it and 44.8% of them had ever used it. Most respondents (82.3%) had heard of the **Safe Period** method and almost half (43.9%) of them have ever used it. **Withdrawal** was the most widely known traditional method with 92.4% of the respondents having heard of it and 72.2% reporting having ever used it. Similar high knowledge and use were found for **douching** where 80.5% of the respondents were aware of the method and 49.9% had ever used it.

3.5 Contraceptive image

Table 3 describes women's perceptions of safety, effectiveness, cost and general image of different contraceptive methods. A 5-point Likert-type scale was used where a score of 5 was strongly favorable/positive. Among the respondents, the method perceived as the safest and the most effective was condoms (means are 4.18 and 3.99 respectively), followed by Spermicides/Creams as the next safest and the IUD as the next most effective methods (Table 3a and 3b). With respect to cost, abortion is considered the most expensive method (4.61), followed by the IUD. In general, the most disliked method is abortion (1.22), and the most 'positive' attitude was towards the IUD (3.15), though this is only slightly above the neutral mark of 3.0.

Current traditional method users' perceptions of the effectiveness of traditional methods compared with modern ones are summarized in Table 5. Among traditional method users, 31.8% of respondents considered modern methods to be more effective, whereas only 29.0% considered modern and traditional methods to be equally effective, and 24.5% considered modern methods to be less effective. A woman's decision to use a traditional method instead of a modern one, was lead by fear of side effects, husband's preference, and cost (56.9%, 54.8%, and 45.4% respectively, Table 6).

3.6 Reproductive Health/Family Planning Practices

As detailed in Table 7a, the mean age of the respondents at first sexual intercourse was 19.8 years, presumably the honeymoon, with no significant variation across marzes. Only 3.2% of respondents used contraceptive methods during the first sexual intercourse. Currently, 24.3 % of women report regular use of a modern contraceptive method, with the Yerevan rate being significantly higher (31.3%).   Approximately 59% of the respondents reported having ever used a modern contraceptive method. With respect to routine gynecological exams, 48.8% of the respondents reported that they have never had a non-pregnancy related gynecological exam. This latter measurement serves to indicate the low utilization level of primary care/preventive visits and missed opportunities for counseling/patient education.

A complete five-year pregnancy history (for pregnancies ending after January 1996) was taken on each respondent. The mean number of **pregnancies** was 1.43 per woman (range = 0-20) [2.04 among women having at least one pregnancy], with the highest number of pregnancies per woman reported in Armavir (1.72) and the lowest in Lori/Vayots Dzor (1.30) (Table 7a). The mean number of **abortions** was 0.71 (range = 0-20) [1.04 among women having at least one pregnancy, 2.02 among those ever having an abortion] with significant differences observed between marzes. **This translates into 1 in 2 pregnancies over the past five years ending in abortion.** A majority (60.5%) of the respondents had abortion(s), because they did not want to have children at that time, and 24.6% of women mentioned socio-economic factors as the primary reasons.

Extrapolating these findings across a typical reproductive life yields several distressing estimates. For them, a woman's reproductive life was estimated at 30 years (a slight underestimate). The fact that many women in the study had not been married for 5 years (i.e. were under 23 years old) will also lead to an underestimate. It is also believed that women outside the target population (over 35) will more likely utilize abortion, as their family size will be complete but will experience fewer pregnancies due to declining fertility (overestimate). With these caveats in mind, it was estimated that the annual pregnancy rate is 286 per 1,000 women with an annual abortion rate of 142 per thousand women. Lifetime rates are estimated at 8.6 pregnancies per woman and 4.3 abortions. These estimates are similar to, but appreciable higher than that reported in previous surveys. For the reasons outlined above, these figures are likely to slightly overstate the true magnitude of the problem. Nonetheless the findings strongly indicate the urgent need for the family planning/reproductive health information/services targeted by the "Green Path" campaign.

At the time of the baseline 9.2% of the respondents reported they were actively trying to get pregnant. A similar number of respondents (8.8%) were pregnant. Of those pregnant women,

only 58% wanted to be pregnant at that time. Of the remainder, 29% would have preferred to be pregnant at some point in the future and 12% did not want to be pregnant at all. This again underlines the need for effective family planning methods.

One of the important findings of the study is that very few women have received FP care/counseling services during the past year (5.3%). However, among these women, those satisfied with the services, were the majority: 52.5% were very satisfied and 39.3% were somewhat satisfied with the services received (Table 7a). Once again this supports the hypothesis that the main reason FP cabinets are underutilized in Armenia is not their poor quality, but the absence of information about their services and charges, and the reluctance of women to take charge of their health behavior and visit a cabinet.

Tables 7j – 7l describe the FP and Reproductive Health Practices of surveyed women according to several socio-demographic characteristics of interest. In general, it can be noticed that higher educated, and employed women and women with higher economic status are more likely to use family planning and utilize FP facilities. Women with higher education have gynecologic exams more frequently (34.4% of women with Institute/ University/ Postgraduate education had gynecologic exam less than 1 year ago compared to 17.7% and 18.2% of women with incomplete and complete school education respectively) (Table 7l). As expected due to their longer exposure time, a higher percentage of older women have ever used modern contraceptive methods (65.7% versus 47.1%). Notably, a higher percentage of older women currently use modern contraceptives (27.5% versus 18.9%, Table 7j), perhaps reflecting that their family size is indeed complete or greater reluctance to face an abortion.

Withdrawal is the predominant contraceptive method.
Virtually every couple not pregnant or actively seeking to become pregnant are employing some method of birth control, but not necessarily effective means as evidenced by the frequency of abortion. The distribution of the respondents' current primary contraceptive method is presented

in Table 7c and Figure 4. The overwhelming majority of users report traditional (and less effective) methods as their primary means of contraception. This inevitably leads to unwanted pregnancies and, correspondingly, to the use of abortions to control family size and birth spacing. By far, the most common method currently used was withdrawal (32.2%). The next most used traditional method was the safe period method (4.5%) followed by douching (2.5%). Among the modern methods in use were IUDs, and male condoms (9.4% and 8.3% respectively). Pills (2.1%) and spermicides (0.5%) were infrequently cited. No method was cited by roughly one-third (33.9%) of the respondents. While high, this figure does correspond to the proportion of the respondents reporting they are pregnant, trying to get pregnant or believe they are infertile.

Perceived safety and cost are key determinants of method use.
Safety was the most often cited reason for method selection followed by perceived effectiveness and ease of usage, 32.6%, 32.3% and 21.5% respectively (Table 7e). Similarly, fear of side effects (29.7%) was a primary barrier to using the preferred modern method (Table 7i). Cost was the most cited reason for not currently using the preferred modern method (37.0%). This may mean that while the FP cabinets continue to provide contraceptives free of charge, women will be eager to visit the cabinets and use the available modern methods, but the practice may not continue once the free supplies are exhausted.

Pills are an acceptable method to many women.
Women viewed the IUD (48.9%) and, surprisingly, pills (33.7%) as the most preferable modern method to use (Table 7h). During the Soviet period, pills, mostly high dose varieties, were viewed with trepidation due to their side effects, both real and exaggerated. Focus group discussions in the formative research phase suggested these negative attitudes towards pills still persisted. These results may indicate a softening of those beliefs.

Contraceptive use is stable though cost and perceived efficacy seem to be factors in altering behavior.

Roughly 40% of the respondents, higher among users of nontraditional methods, would prefer to use a different contraceptive method (Table 5). However, the majority of women seldom change their pattern of contraception – in the past 6 months only 5.2% of women reported a change. In most cases the primary reason for change was the ineffectiveness of the currently used method or the desire to get pregnant. A different question elicited responses that financial issues also played an important role (roughly 30%) in that change.

Doctors are a trusted conduit of information.

Women reported that doctors were their most trusted source of information about their current contraceptive methods (38.8%) followed by their husband and by books at 29.2% and 10.8% respectively (Table 7d). This hierarchy is similarly repeated with the more general question about the most trusted source of information for reproductive health and family planning (Table 7f). This may imply that if a woman is motivated to attend a FP cabinet, she is likely to be receptive to the information provided and ready to make an informed decision with respect to her reproductive health practices.

3.7 Exposure to information about contraceptives

Exposure to media messages about contraception/family planning during the past year was assessed. Most exposure to messages came from television where 49% of the women reported seeing at least one ad or news segment on family planning during the past year. (Table 4)

3.8 Reproductive Health/Family Planning Perceptions/Attitude

The results obtained regarding Reproductive Health/ Family Planning perceptions/attitudes indicate that there are certain prerequisites for the success of the program, which are present in Armenia.

The target audience should be broadened.

The overwhelming majority of the respondents consider both husband and wife responsible for making decisions about family size and contraception use (70.3% and 60.0% correspondingly) (Table 7b). Encouragingly, 41.2% of respondents had discussed contraceptive methods with their husbands three times or more in the past year and 31.6% one or two times. Still, 27.3% had never had such discussions in the past year. Other family members, especially the mother-in-law, also participate in such decisions. These other stakeholders, especially husbands and mothers-in-law should be explicitly included in the target audiences of the campaign.

Perceived peer norms support modern method use.

On average, women estimated that 7.5 of their 10 closest friends used modern methods, a figure nearly 3 times the rate observed in the sample (Table 7b). A fundamental tenet of behavior change theory is the influence of perceived normative values. Consequently, perceived norms of high modern method use will facilitate the adoption of modern method use among non-users.

4. Observations

The information obtained in the baseline survey can be used not only as a reference for the post-intervention program evaluation, but it also provides additional cross-sectional detail and support to similar studies of reproductive health practices in Armenia.

The key findings of the survey lead to the conclusion that Armenian couples do practice family planning and use some form of contraceptives. However the methods they use are typically traditional and less effective than modern methods. This leads to the high rate of induced abortion, which continues to be excessively utilized. The accessibility, effectiveness and safety of alternative methods of birth control should be made available for Armenian women.

The "Green Path" campaign is expected to result in Family Planning/Reproductive Health – related behavior change among women of reproductive age. A follow-up survey in fall 2000 will assess the program's impact.

Until those results are available, the Green Path Campaign organizers have every reason to be optimistic as the baseline findings indicate that the target population is ideally positioned to absorb the message and to respond to the campaign by seeking information and services from the Family Planning cabinets. Hopefully this anticipated information seeking will result in increased use of modern contraceptive methods among the target population and, ultimately, to improvement in the health of Armenian women and their families.

5. References

1. Sayadian, A.; Abrahamian, R.; Brandrup-Lukanow, A.; Akunts, K.; Ketting, E.; Dolian, G.;   Khachikian, M.; Davidyants, D.; Thatevosian, A.; Gatrijian, P.   Reproductive Health Survey, Armenia 1997. 1998

2. Dolyan, G; Ludicke, F; Katchatrian, N; Morabia A; Contraception and Induced Abortion in Armenia: A Critical Need for Family Planning Programs in Eastern Europe. American Journal of Public Health, 1998, Vol.88, #5

3. USAID Population, Health & Nutrition. 7-30-1999. (GENERIC) Ref Type: Internet Communication

4. Salvador, S.; Danelian, L.   Report on Qualitative Research: JHU/PCS Project on Reproductive Health in Armenia. 1999

5. Fisher, A.A.; Laing, J.E.; Stoeckel, J.E.; Townsend, J.W. Handbook for Family Planning Operations Research Design; Population Council: New York, 1991;

6. Results of a Public Opinion Survey: Green Path Campaign for Family Health. JHU/PCS report, Yerevan 2000

Acronyms Used

AUA	American University of Armenia
CPA	Center for Policy Analysis (AUA)
CHSR	Center for Health Services Research (AUA)
FP	Family Planning
IEC	Information-Education-Communication Campaign
IUD	Intrauterine Device
JHU/PCS	Johns Hopkins University/Population Communication Services
MOH	Ministry of Health
NGO	Non-Governmental Organization
RH	Reproductive Health
SRS	Simple Random Sampling
STD	Sexually Transmitted Disease
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development

6. Figures

Figure1. Regional Map Showing the Republic of Armenia and its Neighbors

Figure 2. Map of the Republic of Armenia, by Marz

Figure 3. Knowledge and ever use of Family Planning methods

Percent of women aware of specific FP methods
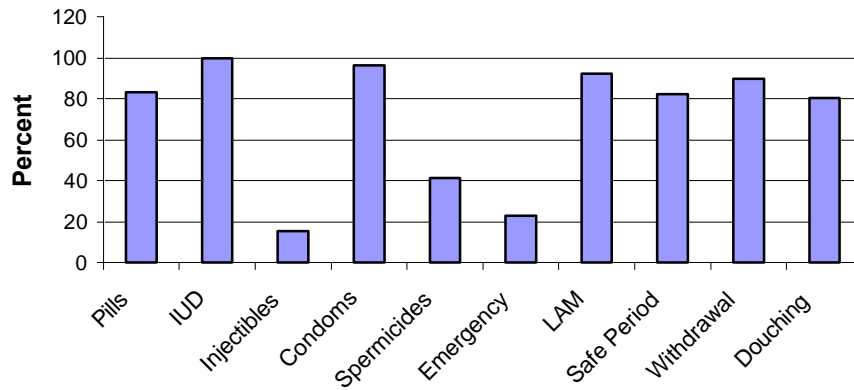
Percent of women aware of how to use each method, among those who know about a specific method
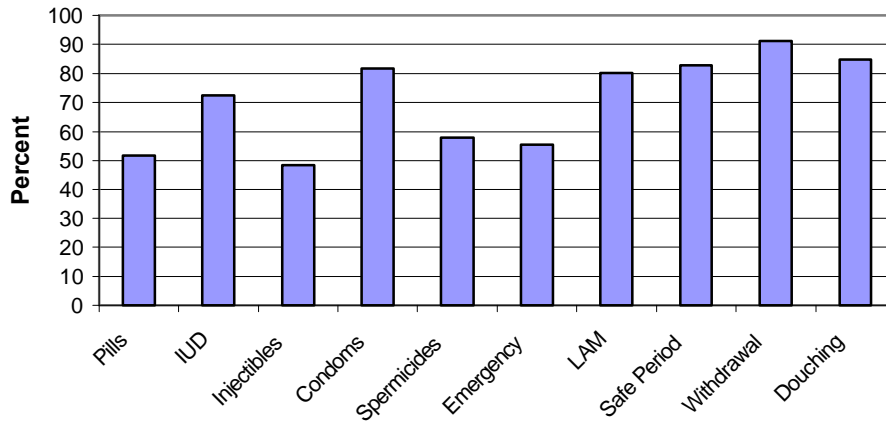
Percent of women reporting ever use of each method, among those who know about a specific method
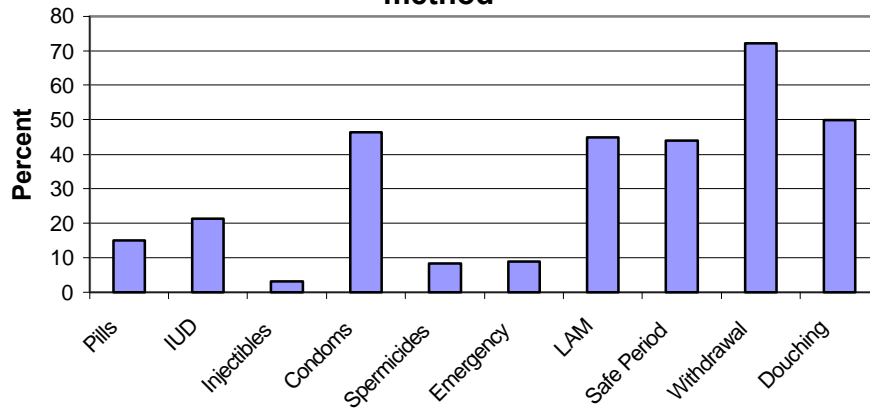
Figure 4

Percent of women currently using each contraceptive method
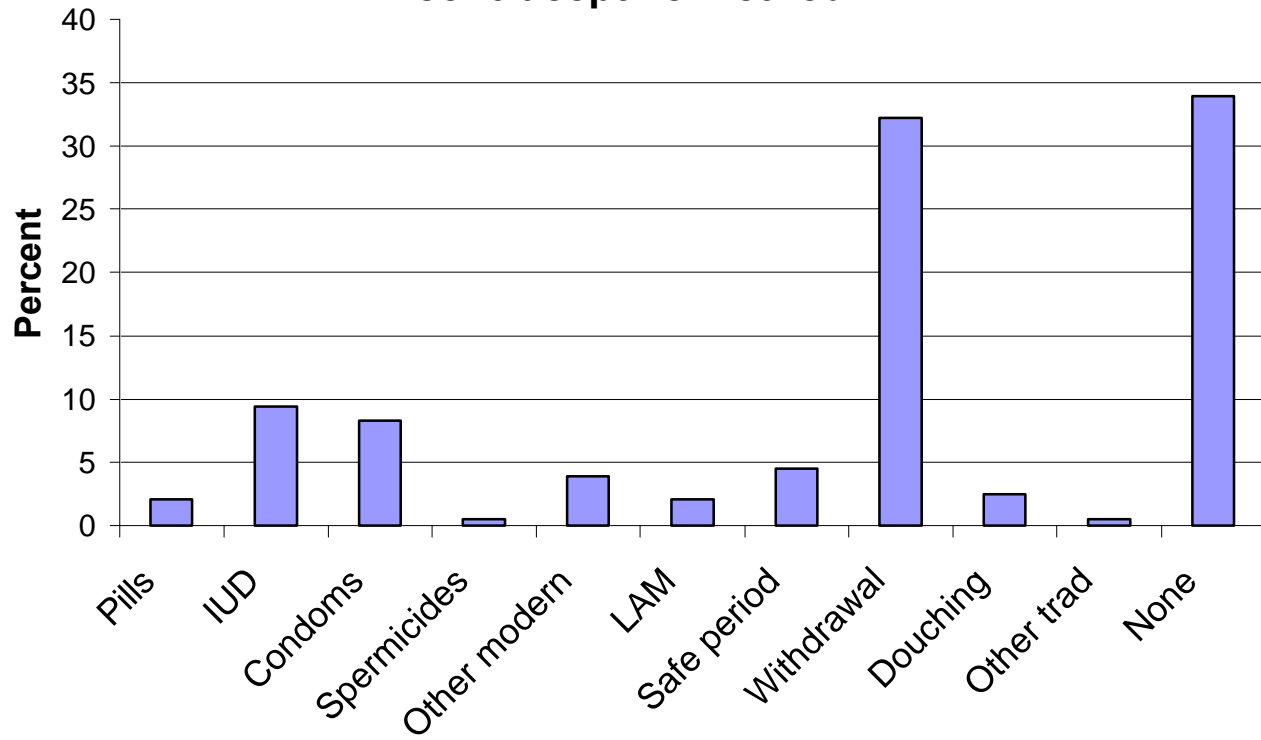
7. Tables

Table 1. Demographic description of the baseline sample by marz.

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Measures	**Values**			
Mean age	27.87 (1210)	28.15 (503)	27.67 (504)	27.67 (203)
Level of education % (n) *	(1211)	(504)	(504)	(203)
1. School (less than 10 years)	5.1	2.4	5.8	10.3
2. School (10 years)	34.8	31.0	40.5	30.0
3. Professional technical education (10 – 13 years)	38.8	38.3	36.9	44.8
4. Institute / University	21.1	27.8	16.9	14.8
5. Postgraduate	0.2	0.6	-	-
Spouse's level of education % (n) *	(1212)	(504)	(504)	(204)
1. School (less than 10 years)	5.4	5.0	4.2	9.8
2. School (10 years)	36.9	28.8	42.9	42.2
3. Professional technical education (10 – 13 years)	34.4	34.1	35.9	31.4
4. Institute / University	22.3	30.6	16.7	15.7
5. Postgraduate	0.7	1.2	0.4	0.5
Currently employed % (n)	11.9 (1210)	11.3 (504)	11.9 (503)	13.3 (203)
Conveniences in household % (n)				
A. Indoor bathroom/toilet	72.5 (1209)	90.8 (502)	63.0 (503)	51.0 (204)
B. Hot water tank	19.0 (1210)	25.8 (503)	15.5 (503)	18.8 (204)
C. Color television	76.7 (1209)	89.7 (503)	63.8 (503)	76.4 (203)
D. VCR	39.4 (1210)	50.5 (503)	30.4 (503)	34.3 (204)
E. Automobile	36.0 (1210)	39.8 (503)	29.2 (503)	43.1 (204)
F. Auto Washing machine	76.7 (1209)	85.1 (503)	68.0 (503)	77.3 (203)
G. Telephone	64.1 (1208)	77.0 (501)	56.9 (503)	50.0 (204)
H. Personal computer	1.8 (1208)	3.6 (502)	0.6 (502)	0.5 (204)
I. Cable aerial/satellite	8.3 (1207)	13.1 (502)	3.4 (501)	8.3 (204)
J. Cellular phone	2.3 (1189)	3.9 (493)	0.6 (495)	2.5 (201)
K. Vacation home/villa	10.2 (1200)	14.7 (498)	8.6 (499)	3.0 (203)
Mean number of convenience items*	4.06	4.92	3.39	3.56
Monthly expenditures % (n) *	(1040)	(416)	(456)	(168)
1. Less than $50 (< 25)	38.7	22.1	54.6	36.3
2. From $50 – 99 (25)	33.1	33.9	31.8	84.5
3. From $100 – 500 (51)	26.3	39.7	13.2	28.6
4. Above $500 (>250)	2.0	4.3	0.4	0.6
Satisfaction with monthly income % (n) *	12.8 (1182)	13.2 (492)	9.8 (489)	18.9 (201)

* - the differences are statistically significant , $p < 0.05$

Table 2. Knowledge and ever use of specific contraceptive methods, by study site
2a

Awareness % (n)	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Pills*	83.1 (1208)	91 (500)	77.5 (504)	77.4 (204)
IUD	99.7 (1207)	99.6 (501)	99.8 (502)	100 (204)
Depo-Provera/ Injections	15.6 (1200)	14.2 (500)	17.5 (497)	14.3 (203)
Condoms*	96.3 (1207)	99.4 (499)	94.9 (504)	92.6 (204)
Spermicides/ Cream	41.3 (1210)	44 (504)	38.6 (503)	41.4 (203)
Female Sterilization*	54.8 (1211)	59.7 (504)	50.1 (503)	54.4 (204)
Male Sterilization*	21.6 (1210)	27.4 (503)	19.9 (503)	11.8 (204)
Emergency Contraception*	22.9 (1210)	28.2 (504)	20.3 (502)	16.2 (204)
Lactational Amenhorrhoea Method*	92.4 (1208)	89.7 (503)	95.4 (501)	92.1 (204)
Safe period methods*	82.3 (1208)	86.8 (501)	80 (503)	77 (204)
Withdrawal	89.8 (1210)	89.2 (504)	88.5 (502)	94.1 (204)
Douching*	80.5 (1210)	88.4 (503)	77.2 (503)	69.1 (204)

2b

Knowledge of how to use % (n)	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Pills	51.7 (1003)	54.9 (455)	47.3 (391)	53.5 (157)
IUD*	72.6 (1193)	22.5 (493)	66.5 (498)	75.7 (202)
Depo-Provera/ Injections	48.4 (190)	47.9 (73)	50.6 (87)	43.3 (30)
Condoms*	81.7 (1150)	87.3 (497)	76.9 (468)	78.9 (185)
Spermicides/ Cream	57.8 (495)	58.9 (219)	53.2 (190)	65.1 (86)
Emergency Contraception	55.5 (272)	58.3 (139)	51.0 (102)	58.1 (31)
Lactational Amenhorrhoea Method	80.3 (113)	78.3 (451)	80.9 (476)	83.9 (186)
Safe period methods*	83.0 (993)	87.6 (436)	78.4 (402)	81.9 (155)
Withdrawal	91.3 (1084)	90.4 (449)	91.4 (444)	93.2 (191)
Douching*	84.8 (968)	88.3 (443)	81.8 (385)	82.1 (140)

* - the differences are statistically significant , p < 0.05
  – among women aware of method

2c

Ever used % (n)	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Pills	15.0 (1007)	16.6 (459)	14.1 (391)	12.7 (157)
IUD	21.3 (1198)	20.5 (497)	23.5 (498)	17.7 (203)
Depo-Provera/ Injections	3.2 (190)	2.7 (73)	1.1 (87)	10.0 (30)
Condoms*	46.4 (1153)	58.1 (496)	37.4 (470)	38.0 (187)
Spermicides/ Cream	8.4 (500)	8.6 (220)	6.2 (193)	12.6 (87)
Female Sterilization	4.1 (659)	3.7 (300)	5.2 (250)	2.8 (109)
Male Sterilization	3.5 (259)	3.7 (136)	4.0 (99)	- (24)
Emergency Contraception	8.8 (274)	10.6 (141)	4.9 (102)	12.9 (31)
Lactational Amenhorrhoea Method	44.8 (1115)	42.8 (451)	46.0 (478)	46.2 (186)
Safe period methods*	43.9 (994)	49.7 (437)	40.0 (402)	37.4 (155)
Withdrawal*	72.2 (1086)	67.9 (449)	75.7 (445)	74.0 (192)
Douching	49.9 (972)	50.8 (445)	48.3 (387)	51.4 (140)

– among women aware of method

2d

Knowledge of where to get % (n)	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Pills*	84.6 (996)	89.9 (454)	79.6 (388)	81.8 (154)
IUD*	88.5 (1187)	91.9 (496)	85.8 (492)	86.9 (199)
Depo-Provera/ Injections	20.4 (189)	15.0 (72)	67.8 (87)	66.7 (30)
Condoms*	92.1 (1147)	98 (494)	85.7 (467)	91.4 (186)
Spermicides/ Cream*	85.0 (494)	89.9 (217)	78.8 (189)	86.4 (88)
Female Sterilization*	76.3 (655)	84.1 (296)	70.0 (250)	69.7 (109)
Male Sterilization	78.5 (256)	83.0 (135)	70.1 (97)	81.5 (24)
Emergency Contraception	85.3 (272)	87.1 (140)	82.4 (102)	86.7 (30)

* - the differences are statistically significant , p < 0.05

– among women aware of method

Table 3. Women's perceptions of safety, effectiveness, cost and general image of different contraceptive methods according to the scale from 1 to 5.

3a. 1 - extremely unsafe, 5 - completely safe

Safety	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Method means (n)	**Values**			
Pills	2.71 (986)	2.68 (425)	2.75 (404)	2.68 (157)
IUD	3.00 (1115)	2.97 (459)	3.00 (474)	3.08 (182)
Condoms	4.18 (988)	4.18 (437)	4.11 (395)	4.34 (156)
Spermicide / Creams	3.68 (347)	3.57 (171)	3.69 (124)	4.02 (52)
Abortion*	1.48 (1167)	1.37 (488)	1.57 (482)	1.53 (197)
Withdrawal	3.07 (1041)	2.94 (436)	3.16 (433)	3.13 (172)

 – excluding "don't know" responses

3b. 1 – completely ineffective, 5 – completely effective

Effectiveness	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Method means (n)	**Values**			
Pills	3.66 (855)	3.62 (371)	3.71 (359)	3.66 (125)
IUD*	3.97 (1086)	3.85 (450)	4.03 (466)	4.14 (170)
Condoms*	3.99 (1019)	3.91 (450)	4.01 (416)	4.16 (153)
Spermicide / Creams	3.54 (326)	3.46 (170)	3.56 (115)	3.80 (41)
Withdrawal*	3.77 (1060)	3.58 (439)	3.90 (436)	3.92 (185)

 – excluding "don't know" responses

3c. 1 – very inexpensive, 5 – very expensive

Cost	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Method means (n)	**Values**			
Pills	3.80 (688)	3.82 (290)	3.75 (307)	3.89 (91)
IUD*	4.02 (956)	3.81 (381)	4.17 (419)	4.14 (156)
Condoms*	2.66 (802)	2.55 (379)	2.69 (312)	2.97 (111)
Spermicide / Creams	3.53 (247)	3.55 (137)	3.53 (81)	3.45 (29)
Abortion*	4.61 (1082)	4.44 (445)	4.73 (458)	4.72 (179)
Withdrawal	1.32 (1057)	1.25 (445)	1.39 (428)	1.35 (184)

* - the differences are statistically significant , $p < 0.05$

 – excluding "don't know" responses

3d. 1 – dislike very much, 5 – like very much

Like/dislike	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison)*
Method means (n)	**Values**			
Pills	2.65 (900)	2.62 (375)	2.70 (385)	2.61 (140)
IUD*	3.15 (1027)	3.00 (416)	3.24 (440)	3.33 (171)
Condoms	3.05 (982)	3.07 (424)	3.04 (398)	2.98 (160)
Spermicide / Creams	2.83 (334)	2.84 (168)	2.77 (115)	2.94 (51)
Abortion	1.22 (1151)	1.19 (483)	1.25 (474)	1.23 (194)
Withdrawal*	2.89 (1074)	2.48 (443)	3.19 (446)	3.15 (185)

 – excluding "don't know" responses

Table 4. Women's exposure to the information about modern contraceptive methods

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison)*
Exposure in the last 6 months % (n)	**Values**			
Seen anything on TV	48.9 (1205)	49.5 (501)	49.2 (502)	46.5 (202)
Heard anything on radio	7.5 (1206)	7.0 (501)	9.0 (502)	4.9 (203)
Read anything in newspapers*	38.3 (1210)	46.5 (503)	37.6 (503)	19.6 (204)

* - the differences are statistically significant , $p < 0.05$

Table 5. Women's perceptions/attitude towards contraceptive methods

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*compari-son)*	Modern method users	Traditional method users
Measures		**Values**				
Problems/concerns with current method % (n)	8.1 (793)	8.6 (336)	8.9 (326)	4.6 (131)	9.4 (287)	7.3 (505)
Prefer different contraceptive method % (n)	38.8 (770)	39.9 (323)	39.0 (318)	35.7 (129)	26.5 (283)	45.9 (486)*
Drams women are willing to pay for contraceptives/ month mean (n)	2,642 (147)	2,903 (62)	2,899 (60)	1,379 (25)		
Changed pattern of contraception use in the last 6 months % (n)	5.2 (1203)	5.8 (502)	3.8 (499)	6.9 (202)	8.1 (295)	3.4 (505)*
Best description of change % (n)	(62)	(29)	(19)	(14)	(24)	(17)
Switched method	41.9	31.0	52.6	50.0	66.7	41.2
Started using a method	22.6	24.1	21.1	21.4	16.7	52.9
Stopped using altogether	32.3	41.4	26.3	21.4	12.5	5.9
Medical procedure	3.2	3.4		7.1	4.2	-
Primary reason for change % (n)	(59)	(27)	(18)	(14)	(23)	(16)
Usual method not effective	25.4	29.6	16.7	28.6	34.8	12.5
Wanted to try new method	13.6	14.8	16.7	7.1	17.4	18.8
Respondent/partner did not like usual method	5.1	7.4	5.6	-	13.0	-
Could not obtain usual method	1.7	3.7	-	-	-	-
Could not afford usual method	3.4	-	11.1	-	4.3	6.3
Wanted to get pregnant	25.4	22.2	22.2	35.7	13.0	25.0
Side effects	13.6	7.4	16.7	21.4	8.7	25.0
Medical procedure	8.5	7.4	11.1	7.1	8.7	6.3
Not sexually active	3.4	7.4			-	6.3
The role of finances in the change % (n)	30.6 (62)	37.9 (29)	31.6 (19)	14.3 (14)	33.3	29.4
Effectiveness of traditional methods versus modern (among traditional method users) % (n)	(497)	(175)	(221)	(101)		
Modern method more effective	31.8	28.0	35.7	29.7		
About equally effective	29.0	33.1	23.5	33.7		
Modern method less effective	24.5	22.3	27.1	22.8		
Not sure	14.7	16.6	13.6	13.9		

* - the differences are statistically significant , p < 0.05

Table 6. Importance of specific reasons for using a traditional FP method instead of a modern method, among current users of traditional methods

6a.

Little knowledge*	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(500)	(179)	(221)	(100)
Importance % (n)		Values		
Very important	16.8	11.2	20.4	19.0
Somewhat important	37.2	27.9	41.2	45.0
Not important	46.0	60.9	38.5	36.0

6b.

Difficult to obtain*	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(492)	(176)	(217)	(99)
Importance % (n)		Values		
Very important	22.2	14.8	26.7	25.3
Somewhat important	33.3	27.8	34.1	41.4
Not important	44.5	57.4	39.2	33.3

6c.

Cost*	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(496)	(176)	(220)	(100)
Importance % (n)		Values		
Very important	45.4	33.5	54.1	47.0
Somewhat important	24.0	31.8	20.5	18.0
Not important	30.6	34.7	25.5	35.0

6d.

Side effects (*)	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(497)	(177)	(220)	(100)
Importance % (n)		Values		
Very important	56.9	56.5	58.2	55.0
Somewhat important	23.1	20.9	27.3	18.0
Not important	19.9	22.6	14.5	27.0

* - the differences are statistically significant , $p < 0.05$

(*) – marginal significance, $p=0.05$

6e

Husband's preference*	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(498)	**(180)**	**(219)**	**(99)**
Importance % (n)		**Values**		
Very important	54.8	51.7	61.2	46.5
Somewhat important	25.5	18.3	27.9	33.3
Not important	19.7	30.0	11.0	20.2

6f

Religious beliefs	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(496)	**(181)**	**(218)**	**(97)**
Importance % (n)		**Values**		
Very important	3.4	2.8	4.1	3.1
Somewhat important	7.7	3.3	10.6	9.3
Not important	88.9	93.9	85.3	87.6

6g

Doctor's recommendation*	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(496)	**(175)**	**(220)**	**(101)**
Importance % (n)		**Values**		
Very important	15.1	8.6	17.3	21.8
Somewhat important	21.8	16.0	27.7	18.8
Not important	63.1	75.4	55.0	59.4

6h

Other person's advice*	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(488)	**(173)**	**(217)**	**(98)**
Importance % (n)		**Values**		
Very important	6.1	4.6	7.4	6.1
Somewhat important	20.3	10.4	23.5	30.6
Not important	73.6	85.0	69.1	63.3

- - the differences are statistically significant , $p < 0.05$

Table 7a. Family Planning and Reproductive Health Practices

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison)*
Measures		**Values**		
Mean age at first sexual intercourse (n) *	19.8 (1209)	20.1 (503)	19.6 (502)	19.5(204)
Usage of contraceptives at first sexual intercourse % (n)	3.2 (1209)	4.6 (502)	2.4 (503)	2.0 (204)
Modern method use				
Current use % (n) *	24.3 (1212)	31.3 (504)	20.8 (504)	15.7 (204)
Ever use % (n) *	59.1(1212)	68.7 (504)	53.2 (504)	50.0 (204)
Frequency of gynecologic exam % (n) *	(1203)	(496)	(503)	(204)
1. Never had gynecologic exam	48.8	37.7	57.9	53.4
2. Less than 1 year ago	24.2	31.3	18.3	21.6
3. 1-2 years ago	9.8	12.1	8.5	7.4
4. More than 2 years ago	17.2	19.0	15.3	17.4
Mean # [5 years] (range) of pregnancies*	(1125)	(469)	(470)	(186)
	1.43	1.45	1.30	1.72
	(0-20)	(0-10)	(0-7)	(0-20)
·Pregnancies given at least one pregnancy*	2.04	2.09	1.85	2.34
Mean # [5 years] (range) of abortions*	0.71	0.76	0.56	0.93
	(0-20)	(0-10)	(0-7)	(0-20)
·Abortions given 1 pregnancy*	1.04	1.12	0.84	1.28
·Abortions given 1 abortion*	2.02	2.07	1.78	2.37
Mean # of children (n)	1.94 (1125)	1.80 (464)	2.03 (470)	2.08 (191)
Extrapolated Estimates				
Annual pregnancy rate (per 1,000)	286	290	260	344
Annual abortion rate (per 1,000)	142	152	112	186
Lifetime pregnancies (per woman)	8.6	8.7	7.8	10.3
Lifetime abortions (per woman)	4.3	4.6	3.4	5.6
Reasons for having an abortion % (n) *	(410)	(173)	(157)	(80)
1. Did not want children	60.5	50.3	65.0	73.8
2. Socio-economic reasons	24.6	27.7	25.5	16.3
Ever received FP care/counseling services last year % (n)	5.3 (1208)	5.6 (504)	4.8 (502)	5.9 (202)
Satisfaction with FP services among users % (n)	(61)	(26)	(24)	(11)
1. Very satisfied	52.5	57.7	54.2	36.4
2. Somewhat satisfied	39.3	34.6	37.5	54.5
3. Not at all satisfied	8.2	7.7	8.3	9.1

* - the differences are statistically significant , $p < 0.05$

7b. Family Planning and Reproductive Health Decision-making Practices

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
Measures		**Values**		
Responsible for making the decision about family size* **% (n)**	(1208)	(504)	(500)	(204)
1. Husband	17.4	12.7	20.8	20.6
2. Wife	7.7	8.3	7.8	5.9
3. Husband and Wife	70.3	75.8	66.8	65.2
4. Neither	1.6	1.2	2.2	1.0
5. Mother-in law	2.3	1.4	1.6	6.4
6. Family	0.7	0.6	0.8	1.0
Responsible for making the decision about contraception % (n)	(1186)	(489)	(496)	(201)
1. Husband	15.7	13.1	17.1	18.4
2. Wife	19.2	18.4	20.8	17.4
3. Husband and Wife	60.0	61.6	58.1	61.2
4. Neither	4.4	6.1	3.6	2.0
5. Mother-in-law	0.5	0.4	0.4	1.0
6. Decision making with MD	0.1	0.2	-	-
Frequency of discussions about contraceptives with husband % (n) * **[past year]**	(1163)	(483)	(487)	(193)
Never	27.3	31.1	25.9	21.2
One or two times	31.6	30.8	29.4	38.9
Three times or more	41.2	38.1	44.8	39.9
Perception of modern methods usage among 10 women acquaintances mean (n)	(1193) 7.5	(491) 6.9	(500) 7.7	(202) 8.2

* - the differences are statistically significant , p < 0.05

7c. Current, primary means of contraception

	Total (1211)	Yerevan (503)	Lori/Vayots Dzor (*intervention*) (504)	Armavir (*comparison)* (204)
Method % (n)		**Values**		
1. No method	33.9	32.8	34.7	34.3
2. Withdrawal	32.2	24.9	36.5	39.7
3. IUD	9.4	8.3	11.5	6.9
4. Condoms	8.3	14.7	4.0	3.4
5. Safe period method (calendar/ mucous check)	4.5	5.6	3.6	3.9
6. Condoms + spermicide	3.2	4.0	3.0	2.0
7. Douching	2.5	3.2	2.0	2.0
8. Pills	2.1	2.8	1.6	2.0
9. Lactational Amenorrhea Method	2.1	1.4	2.2	3.9
10. Tubal ligation	0.7	0.6	0.8	1.0
11. Spermicide / Cream / Jelly	0.5	1.0	-	0.5
12. Other traditional methods	0.5	0.8	0.2	0.5

7d. Most trusted source of information about the currently used primary method of contraception among current users of any method

Source % (n)	Total (778)	Yerevan (326)	Lori/Vayots Dzor (*intervention*) (326)	Armavir (*comparison)* (126)
			Values	
1. Doctor	38.8	47.9	27.6	37.3
2. Partner / husband	29.2	18.4	36.5	38.1
3. Books	10.8	11.0	12.6	5.6
4. Own experience	7.7	9.5	6.4	6.3
5. Friend	4.8	3.4	6.7	3.2
6. Mother	2.7	2.8	3.4	0.8
7. TV	2.3	2.8	1.2	4.0
8. Relative	2.2	1.5	3.1	1.6
9. Brochures	0.5	0.4	0.3	-
10. Nurse/ Midwife	0.4	-	0.9	-
11. Newspapers	0.4	0.6	0.3	-
12. Acquaintance	0.4	0.6	-	0.8
13. Pharmacist	0.3	0.3	-	0.8
14. Radio	0.3	0.3	0.3	-
15. Magazines	0.3	-	0.3	0.8
16. Classes/professional training	0.1	-	-	0.8
17. Other	0.1	-	0.3	-

7e. Reasons for choosing the primary method of contraception among current users of any method

Reason % (n)	Total (797)	Yerevan (336)	Lori/Vayots Dzor (*intervention*) (329)	Armavir (*comparison*) (132)
			Values	
1. Very safe (few side effects)	32.6	37.1	28.3	32.0
2. Very effective*	32.3	43.3	26.2	20.0
3. Easy to use*	21.5	14.3	26.8	26.4
4. Partner prefers it	11.9	10.0	14.2	11.3
5. Cost*	11.7	8.1	13.8	15.2
6. Doctor recommended	9.2	7.5	10.5	10.4
7. Convenience	2.3	3.3	1.2	2.3
8. Knows somebody who uses it	2.1	2.2	1.8	2.4
9. Medical concerns	2.0	1.8	2.1	2.3
10. Allows spontaneity during intercourse	1.7	2.2	1.8	-
11. Know only available option	1.1	1.5	0.9	0.8
12. Curiosity / wanted to try it	0.5	0.6	0.3	0.8
13. Avoid abortion	0.1	0.3	-	-
14. Religious	0.1	-	0.3	-

* - the differences are statistically significant , $p < 0.05$

7f. Most trusted source of information about the family planning and contraceptives in general

Source % (n)	Total (1167)	Yerevan (476)	Lori/Vayots Dzor (*intervention*) (491)	Armavir (*comparison*) (200)
1. Doctor	56.7	63.2	49.9	58.0
2. Books	10.5	11.8	11.2	6.0
3. Partner / husband	8.7	6.3	11.2	8.5
4. TV	7.0	2.7	8.6	13.5
5. Newspapers	3.9	3.4	4.7	3.5
6. Mother	3.7	3.6	3.7	4.0
7. Friend	2.2	1.5	3.1	2.0
8. Own experience	2.1	2.9	1.8	1.0
9. Relative	1.9	1.3	2.9	1.0
10. Nurse/ Midwife	0.9	0.2	1.4	1.5
11. No one	0.9	1.7	0.4	0.5
12. Magazines	0.4	0.6	0.4	-
13. Brochures	0.3	0.4	0.2	-
14. Acquaintance	0.2	-	0.2	0.5
15. Pharmacist	0.2	0.2	0.2	-
16. Radio	0.2	0.2	-	0.2

7g. Reasons for not using modern methods of contraception

Reason % (n)	Total (620)	Yerevan (245)	Lori/Vayots Dzor (*intervention*) (267)	Armavir (*comparison)* (108)
		Values		
1. Trying to get pregnant	18.1	20.4	17.2	14.8
2. Currently pregnant	15.3	14.3	12.4	25.0
3. Cannot afford birth control (costs too much)	14.5	11.8	18.7	10.2
4. Fear of side effects	14.0	11.8	17.6	10.2
5. Respondent does not think she can get pregnant	10.3	13.1	7.1	12.0
6. Postpartum/ breastfeeding	5.0	4.9	5.6	3.7
7. Didn't think about it / neglected	4.4	4.9	3.4	5.6
8. Not sexually active in the last month	3.2	2.9	3.4	3.7
9. Respondent does not want to use a method	3.2	2.9	3.4	3.7
10. Does not know how to use birth control methods	2.7	2.4	3.0	2.8
11. Partner objects to using method	2.6	2.9	1.9	3.7
12. Hysterectomy / menopause	2.1	3.7	1.5	-
13. Does not know where to get modern method	1.6	0.8	1.5	3.7
14. Birth control is not (very) effective	0.6	0.8	0.7	-
15. Objects due to religious reasons	0.3	0.8		
16. Lovemaking would be interrupted	0.2	0.4	-	-
17. Birth control is the partner's responsibility	0.2	-	0.4	-
18. Other	11.7	1.2	2.3	0.9

7h. Preferred Modern Contraceptive Method among current users of modern methods

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(282)	(119)	(117)	(46)
Method % (n)		Values		
1. IUD	48.9	44.5	47.9	63.0
2. Pills	33.7	34.5	35.6	28.3
3. Male Condoms	4.6	5.9	2.6	6.5
4. Spermicide / Cream / Jelly	3.9	3.4	5.1	2.2
5. DepoProvera/Injections	3.5	5.0	3.4	-
6. Emergency contraception, "Morning-after" pill	1.8	3.4	0.9	-
7. Tubal ligation	1.4	0.8	2.6	-
8. Condoms + spermicide	1.1	0.8	1.7	-

7i. Reasons for not using preferred modern method of contraception

	Total	Yerevan	Lori/Vayots Dzor (*intervention*)	Armavir (*comparison*)
	(316)	(135)	(133)	(48)
Reason % (n)		Values		
1. Cost*	37.0	30.4	45.1	33.3
2. Fear of side effects	29.7	31.1	27.1	33.3
3. Has not yet made up her mind	15.5	15.6	15.0	16.7
4. Do not know how / where to obtain it	6.3	3.7	9.0	6.3
5. Husband / partner objects to it	6.0	4.4	6.8	8.3
6. Doctor does not prescribe it	5.7	7.4	3.8	6.3
7. Fear of surgical procedure (IUD, etc.)	3.5	3.7	3.8	2.1
8. Difficult to use	3.2	2.2	4.5	2.1
9. Too far away from the place where she lives	1.6	0.7	1.5	4.2
10. Unreliable supplies / difficult to obtain	1.3	-	1.5	4.2

* - the differences are statistically significant , $p < 0.05$

7j. Family Planning and Reproductive Health Practices According to Age Categories and Employment

	Age		Employment	
	18-25	**26-35**	**Employed**	**Not employed**
Measures				
Ever use of modern contraceptives % (n)	47.1 (435)	65.7 (775)*	66 (197)	57.7 (1013)*
Current use of modern contraceptives % (n)	18.9 (435)	27.5 (775)*	34.0 (197)	22.5 (1013)*
Ever received FP care/counseling services last year % (n)	5.8 (433)	5.0 (773)	9.6 (197)	4.5 (1010)*
Responsible for making the decision about family size % (n)	(432)	(774)*	(197)	(1010)
1. Husband	18.8	16.7	15.2	17.8
2. Wife	5.6	8.9	11.2	7.0
3. Husband and Wife	67.6	71.7	71.6	70.0
4. Neither	1.4	1.7	1.5	1.6
5. Mother-in law	5.3	0.6	0.5	2.7
6. Family	1.4	0.4		0.9
Responsible for making the decision about contraception % (n)	(421)	(763)	(193)	(992)
1. Husband	15.9	15.6	15.0	15.7
2. Wife	17.3	20.3	20.2	19.1
3. Husband and Wife	60.3	59.8	64.2	59.3
4. Neither	4.8	4.2	0.5	5.1
5. Mother-in-law	1.2	0.1	-	0.6
6. Decision making with MD	0.2	-	-	0.1
Frequency of discussions about contraceptives with husband % (n) [past year]	(420)	(741)*	(191)	(971)
Never	23.3	29.6	22.5	28.2
One or two times	30.5	32.3	33.5	31.1
Three times or more	46.2	38.2	44.0	40.7
Frequency of gynecologic exam % (n)	(432)	(769)*	(196)	(1005)*
1. Never had gynecologic exam	58.3	43.4	41.3	50.3
2. Less than 1 year ago	24.5	24.1	31.6	22.8
3. 1-2 years ago	8.8	10.3	8.2	10.0
4. More than 2 years ago	8.3	22.2	18.9	16.8

* - the differences are statistically significant , p < 0.05

7k. Family Planning and Reproductive Health Practices According to Household Expenditures

	Household expenditures		
	Less than $50	**From $50-99**	**Above 100**
Measures			
Ever use of modern contraceptives % (n) *	50.5 (402)	64.0 (344)	67.3 (294)
Current use of modern contraceptives % (n) *	16.4 (402)	27.3 (344)	31.6 (294)
Ever received FP care/counseling services last year % (n)	3.5 (401)	7.0 (344)	5.8 (292)
Responsible for making the decision about family size % (n) *	(401)	(344)	(294)
1. Husband	22.2	18.3	14.3
2. Wife	7.2	5.8	10.9
3. Husband and Wife	66.3	70.9	71.8
4. Neither	1.7	2.3	1.0
5. Mother-in law	1.5	2.6	1.4
6. Family	1.0	-	0.7
Responsible for making the decision about contraception % (n) *	(398)	(338)	(286)
1. Husband	20.4	16.0	10.5
2. Wife	17.8	20.4	21.3
3. Husband and Wife	55.5	59.2	64.3
4. Neither	6.3	3.8	2.4
5. Mother-in-law	-	0.3	1.0
6. Decision making with MD	-	-	0.3
Frequency of discussions about contraceptives with husband % (n) [past year]	(388)	(335)	(286)
Never	26.8	23.9	26.9
One or two times	33.2	32.2	29.0
Three times or more	39.9	43.9	44.1
Frequency of gynecologic exam % (n) *	(400)	(344)	(290)
1. Never had gynecologic exam	55.3	48.8	38.6
2. Less than 1 year ago	16.5	26.5	35.5
3. 1-2 years ago	8.5	8.7	12.8
4. More than 2 years ago	19.8	16.0	13.1

- - the differences are statistically significant , p < 0.05

7l. Family Planning and Reproductive Health Practices By Education Levels

	Education			
	School (< than 10 years)	School (10 years)	Professional Technical education	Institute/ University /Postgraduate
Measures				
Ever use of modern contraceptives % (n) *	40.3 (62)	52.5 (421)	61.1 (470)	70.9 (258)
Current use of modern contraceptives % (n) *	6.5 (62)	17.3 (421)	25.1 (470)	38.8 (258)
Ever received FP care/counseling services last year % (n) *	8.1 (62)	3.1 (419)	4.7 (469)	9.3 (257)
Responsible for making the decision about family size % (n)	(61)	(418)	(470)	(258)
1. Husband	29.5	21.3	17.7	7.8
2. Wife	4.9	6.5	7.7	10.5
3. Husband and Wife	50.8	66.3	71.1	80.2
4. Neither	1.6	2.2	1.5	0.8
5. Mother-in law	9.8	2.6	1.7	0.8
6. Family	3.3	1.2	0.4	-
Responsible for making the decision about contraception % (n) *	(62)	(414)	(455)	(254)
1. Husband	17.7	18.1	16.0	10.2
2. Wife	21.0	19.1	19.3	18.9
3. Husband and Wife	53.2	57.2	59.6	67.3
4. Neither	8.1	5.1	4.2	2.8
5. Mother-in-law	-	0.5	0.4	0.8
6. Decision making with MD	-	-	0.2	-
Frequency of discussions about contraceptives with husband % (n) [past year]	(60)	(397)	(454)	(252)
Never	28.3	30.0	28.0	21.4
One or two times	35.0	31.2	32.6	29.4
Three times or more	36.7	38.8	39.4	49.2
Frequency of gynecologic exam % (n) *	(62)	(418)	(466)	(256)
1. Never had gynecologic exam	59.7	56.5	45.1	40.6
2. Less than 1 year ago	17.7	18.2	24.9	34.4
3. 1-2 years ago	6.5	10.0	8.8	12.1
4. More than 2 years ago	16.1	15.3	21.2	12.9

* - the differences are statistically significant , p < 0.05

8. Appendices