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A Pre-Post Panel Evaluation of the *Green Path* Campaign for Family Health, Armenia 2000

Family Planning:



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**A Pre-Post Panel Evaluation of the *Green Path* Campaign for Family Health,
Armenia 2000**

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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 access to 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. The 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 “Green Path” campaign was launched in June 2000 and promoted greater awareness, knowledge, acceptance, and adoption of modern contraception through increased utilization of 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) conducted the process and impact evaluation of the campaign. The evaluation, which utilized a pre-post panel design, tested 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 provided for a representative sample from the selected *marzes* (region comparable to a county); 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 were re-interviewed using a similar instrument. A total of 1,088 women were involved in the follow-up survey. Program impact was also separately 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 supported 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 traditional methods supported by abortion.

The baseline data showed that among the respondents, one in two pregnancies that occurred during the past 5 years ended in abortion. Extrapolation of these data estimated a lifetime abortion rate of 4.3 per woman. This estimate supports the high prevalence of abortions found in earlier studies conducted in Armenia. The main reasons women cited for having abortions were “not wanting children at the time” (60.5%) and economic reasons (24.6%), demonstrating a need for more effective methods of birth control. The baseline survey results indicated a need for information regarding quality family planning services and suggested a strong foundation for the proposed program to achieve its objectives in increasing utilization of family planning clinics and ultimately modifying contraceptive use behavior.

The campaign reached its target audience, with over 90% exposed to the campaign logo and 65% recalling the slogan. Exposure to the core television spots ranged from 65-92%, with exposure to posters, radio spots, and brochures ranging from 15-30%.

The evaluation results indicate that the campaign was well liked by the vast majority of women exposed to them, as demonstrated by their mainly positive opinions about and attitudes towards the campaign materials and messages. Overall, the concept of family planning was perceived positively by 93.0% of the study sample.

There was a significant association between exposure to the *Green Path* Campaign and the use of family planning services. Visits to the Family Planning Cabinets increased, with 7.7% of women visiting in 6 months since the launch of the campaign versus 5.0% visiting in the year prior to the baseline. Most (61.4%) women were prompted to visit Family Planning Cabinets by media messages, indicating that the campaign reached its target.

Women exposed to the campaign (TV and radio advertisements) were more likely to use family planning services and to adopt modern contraceptive methods. A significant change in the use of modern methods of contraception among panel women was observed, with a net gain of 4.6%. Of the panel respondents, 10.3% adopted a modern method of contraception by the time of the follow-up, with a significantly higher percentage of adopters among women using family planning services. Another positive finding, which speaks well for the services provided at the family planning cabinets, is that the majority (67.9%) of the women visiting the cabinets recommended the services to others.

The panel results demonstrated significant gains in the target women's use of modern family planning methods and family planning services at the individual level, demonstrating the effectiveness of the *Green Path* campaign in promoting family planning use in Armenia.

The evaluation findings document the effectiveness of the first large-scale mass media IEC campaign in Armenia. *Green Path* campaign succeeded in promoting the use of family planning services and modern family planning methods:

- The campaign reached its target population;
- The target population favorably viewed the messages and concurred on the need for family planning services in Armenia;
- Attitudes towards modern contraceptives improved;
- Women were prompted by media messages to visit Family Planning Cabinets;
- Women were generally pleased with the services and received a modern method of contraception;
- A net gain of 4.6% was observed in the use of modern contraceptive methods;
- Most (68%) women visiting a Family Planning Cabinet advocated their services to others.

Acronyms

AUA	American University of Armenia
CHSR	Center for Health Services Research (of AUA)
CPA	Center for Policy Analysis (of AUA)
FP	Family Planning
JHU	Johns Hopkins University
JHU/PCS	Population Communications Services (of JHU)
IEC	Information-Education-Communication campaign
LAM	Lactational Amenorrhea Method
NGO	Non-governmental Organization
RH	Reproductive Health
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development

1. Background

1.1 Introduction

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].

Figure 1. Regional Map showing the Republic of Armenia and its neighbors



Abortion remains the major form of birth control among Armenian women [1-3]. 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 the heavy reliance on abortion [2]. While a recent UNFPA program assured that the country has

sufficient contraceptive supplies and trained professionals, access to 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 “under the table” payments for abortions, and/or attitudes about the status of women.

Recognizing the need, 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 convince them that most of the services are indeed provided free of charge. Several USAID assessments have recommended mass media campaigns to promote greater knowledge, acceptance, and adoption of modern contraception. In June 2000, the Johns Hopkins University Population Communications Services (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].

In 1999, JHU/PCS contracted the Center for Health Services Research (CHSR) 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 qualitative 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. The evaluation utilized a pre-post panel design (the same women were interviewed before and after the campaign) to measure individual and aggregate level changes in family planning related knowledge, attitudes, and practices. Baseline household surveys were conducted in April and May of 2000 with 1,212 women within the target population of married women aged 18-35. The baseline survey assessed pre-campaign knowledge, attitudes, and practices in the selected population and provided a reference against which the changes subsequent to the launch of the campaign were measured. A detailed analysis of the baseline population is reported elsewhere [5]. The follow-up survey was conducted in November and December 2000. Several attempts were made to reach each baseline respondent. The resulting panel sample constituted 89.8% of the baseline. To rule out any reactive effects from

involvement in the baseline interview, an additional group of post-intervention only respondents were interviewed in the fall.

The results of the panel study are presented in this report. Where necessary to assess potential biases and limitations of the study findings, comparisons are made to the entire baseline sample, to those lost to follow-up, and to those included as post-intervention only respondents.

1.2 Green Path campaign

The Green Path Campaign for Family Health, funded by the United States Agency for International Development and implemented by JHU/PCS, was launched in Armenia on June 2, 2000. The purpose of the campaign was to promote utilization of a network of government family planning services throughout the country as well as pharmacies located in the capital, Yerevan, to married women of reproductive age (18-35). This campaign was the first large-scale, multi-media campaign for health conducted in Armenia. The comprehensive campaign included television and radio spots, community events, and print materials.

Building upon the formative research report [4], qualitative research methods were used to ensure the appropriateness and consistency of the campaign's messages from development through pre-testing and implementation efforts. Through this collaborative, community-empowering process, the campaign produced a number of products in several media. All of the materials were coordinated in content and design, prominently displaying the campaign logo and slogan.

- A family health logo and slogan were developed to easily identify participating family planning cabinets and pharmacies to prospective clients. The logo was prominently promoted in the media.
- Six television spots promoting family planning services were produced. Broadcasting began on June 5, 2000 and ended on August 31, 2000. Three additional television spots focusing on safe motherhood were broadcast from October 15, 2000 until November 15, 2000. The spots were broadcast on five TV channels: three local channels, including the "National TV" channel, and two "Russian" channels.

- Five radio spots promoting family planning services and select Yerevan pharmacies were developed. These spots were broadcast from August 1, 2000 through November 15, 2000 on five radio stations, including the “National Radio” station.
- Brochures on the family planning topics of *Oral Contraceptives: Questions and Answers*, *Modern Methods of Contraception*, *What is Family Planning?* and *Family Planning Cabinet Locations* were developed; 100,000 copies were printed and distributed to health facilities and the target population in May 2000.
- A poster promoting family planning was developed; 2000 copies were printed and distributed to health facilities, pharmacies, and other public institutions in May 2000.
- Sets of laminated Family Planning Counseling Cue Cards (2000 sets) were printed in January 2000 and distributed to Family Planning Cabinets nationwide.

In the *marzes* of Lori and Vayots Dzor, the national-level media campaign was supplemented with a combination of regional media and community events. The campaign staff trained NGOs and community members in community mobilization and assisted them in developing and implementing community events to support the regional mass media campaigns. Community mobilization events began on June 15, 2000 and continued through November 30, 2000.

It should be noted that the *Green Path* campaign received a great deal of critical media attention (press and TV), which also drew public attention to the campaign.

1.3 Evaluation Design

The CHSR, in coordination with JHU/PCS, conducted an evaluation of the impact and outcome of the IEC campaign. While the ultimate campaign objective was 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 were also measured. These concurrent measures included visits to family planning cabinets, informal assessments of media coverage, and pharmacy sales.

The evaluation of the IEC campaign utilized a panel design, measuring pre and post levels of self-reported family planning-related attitudes and practices at the individual level. The main outcomes of interest were the change in demand for family planning services and use of modern contraceptive

methods. Panelists were selected from Yerevan, Lori and Vayots Dzor *marzes*, and Armavir *marz*. Yerevan was included as it represents a significant fraction of the population. It is the single largest metropolitan center and its residents considered to differ from other urban areas. Lori and Vayots Dzor represent the two *marzes* receiving the supplemental regional campaign in addition to the national campaign. Armavir represents a *marz* similar to Lori and Vayots Dzor receiving only the national campaign. In addition to the panelists, a post-intervention only group of respondents was recruited from these *marzes* using the baseline cluster structure. These respondents served to identify whether any bias was introduced into the evaluation process by the panel design (e.g., did participation in the baseline survey influence receptivity to the campaign).

A concern in program evaluation is attributing changes to the program as opposed to other influences within a community. The panel design used in this study provides a robust assessment of the program's true impact. Unlike a simple pre-post group comparison study, the panel design permits the determination of temporal relationships at an individual level, strengthening causal inferences drawn from the data. Had the program failed to demonstrate an impact, this design would lend insight into where the program failed to achieve the intermediary goals predicted by the Steps to Behavior Change model [6] as necessary for the attainment of the overall goals. The addition of a post-intervention only respondent group further strengthens the design by allowing an assessment for reactive effects, such as participation in the baseline enhancing receptivity to the campaign. Such framework-based analyses can lead to improvements in the design and/or implementation of future programs rather than the wholesale dismissal of an otherwise sound approach.

2. Methods

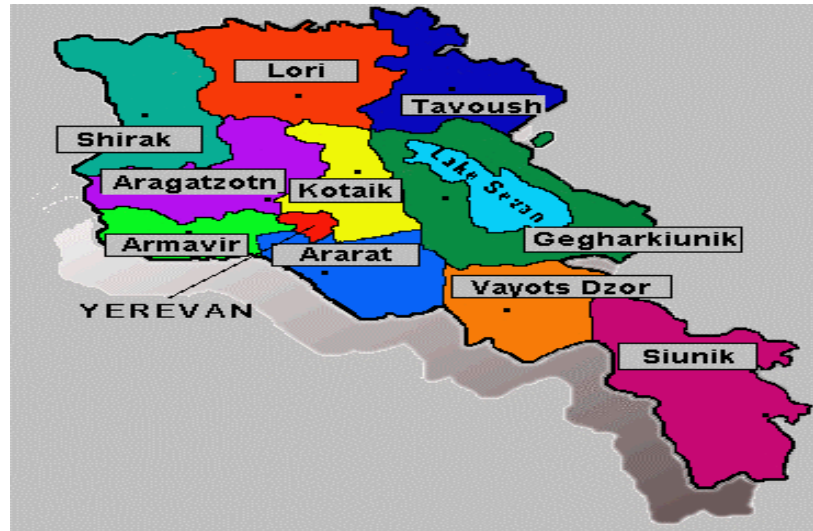
2.1 Sampling

Respondents were selected using a probability proportional to size cluster sampling technique. This process gives every potential respondent in the target population 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 homogeneity bias to a design effect of 20.0%; 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 the baseline survey procedures, the sample is representative of the *marzes* from which the sample was drawn and should reasonably reflect all of Armenia.

Baseline enrollment occurred in April/May 2000. Sufficient numbers were selected to adjust for the potential cluster design effect and losses to follow-up so as to detect a change of 3% or more in use of modern contraceptives. At the baseline, 504 respondents from Yerevan, 504 from the enhanced intervention *marzes* of Lori and Vayots Dzor, and 204 from the comparison *marz* of Armavir were enrolled [see map, Figure 2]. In November and December 2000, approximately six months following the implementation of the *Green Path* campaign, 1,088 women still meeting the inclusion criteria were re-interviewed. These 1,088 respondents constitute the panel used in the statistical analysis.

An additional 236 women were enrolled during the follow-up to assess for any reactive/instrumentation effects. Eighty-four women from Yerevan, 84 women from Lori/Vayots Dzor, and 68 women from Armavir comprised this group. Participants in this group were selected using an extension of the clusters identified through the probability proportional to size cluster sampling used in the baseline survey.

Figure 2. Map of the Republic of Armenia, by *marz*



2.2 Instruments

JHU/PCS and the CHSR staff collaboratively developed the baseline and follow-up survey instruments. The baseline and final questionnaires for panel participants (Appendix 2) were 29 and 25 pages in length, respectively, and required approximately 26 minutes (baseline) and 22 minutes (follow-up) to complete. The content for both surveys was similar. Redundant information was removed from the follow-up instrument while program exposure specific items were added. The post-intervention only group received a composite survey covering material from both surveys so as to provide comparable information. Listed below are the specific domains that were addressed in the panel survey. Domains are noted as either common to both instruments or specific to one.

1. Awareness, information seeking, and attitude toward various contraceptive methods (both)
2. Knowledge of various contraceptive methods (baseline)
3. Sources used by respondents to obtain information on contraceptive methods (both)
4. Five year pregnancy history (baseline)
5. Pregnancy history since June 2000 (follow-up)
6. Patterns of respondents' contraceptive method use (both)
7. Changes in respondents' family planning method use since June 2000 (follow-up)
8. Visits to Family Planning Cabinets (both)

9. Respondents' perception of the quality of contraceptive counseling provided by Family Planning Cabinet physicians (both)
10. Respondents' satisfaction with family planning services (both)
11. Components of the family planning care provided at the cabinets (both)
12. Exposure to information about modern contraceptives (baseline)
13. Respondents' exposure to the *Green Path* Campaign (follow-up)
14. Respondents' perception of the quality of the *Green Path* Campaign materials (follow-up)
15. Respondents' attitude towards the campaign, Family Planning Cabinets, and the concept of family planning in Armenia (follow-up)
16. Perception of modern method use among peers (both)
17. Change in the respondents' family planning-related practices and attitudes since the launch of the *Green Path* Campaign (follow-up)
18. Knowledge of reproductive health (baseline)
19. Knowledge of sexually transmitted diseases (STD) transmission and manifestation (baseline)
20. Key demographic and socio-cultural factors (baseline)

All interviews were conducted in a room separate from other household members. The respondent and the interviewer were alone during the interview. Roughly 97% of the interviews were conducted in Armenian with the balance conducted in Russian. In addition to completing the assigned interviews, the interviewers completed journal forms (Appendix 3) where information regarding the interview and selection processes was recorded to document compliance with the sampling protocol and response patterns.

2.3 Training/pre-testing/data collection

Baseline interviewer training (2 days) and pre-testing (2 days) took place the week of April 17, 2000, with a final retraining on the revised instrument/protocol occurring on April 25, 2000 (Appendix 4). A total of 17 interviewers, all women, were utilized. Data collection started on April 26, 2000 and ended on May 16, 2000. 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.

Follow-up interviewer training (1 day) and pre-testing (1 day) took place on November 18 and 20, 2000, with a final retraining of the revised instrument/protocol occurring on November 24 (Appendix 4). A total of 10 full-time interviewers, all with baseline experience, was utilized. Data collection started on November 25 and ended on December 22, 2000. A senior member of the CHSR or JHU/PCS staff observed each interviewer during the pre-testing phase.

2.4 Data entry/analysis

Data were entered into a computer database and analyzed using SPSS 10.0 software. Double entry was used to ensure the accuracy of the data entry. The Chi-square test, paired t-test, one-way ANOVA, and McNemar and Wilcoxon non-parametric tests were used for the analysis. Stata 6.0 was used to assess the level of the cluster design effect. The observed design effect was consistent with the cluster design and within the limits taken into consideration when setting the sample size. The rudimentary analysis using Stata 6.0 suggested that further adjustments for the design effect were not needed in this analysis.

Table 3.2.1. Family planning and reproductive health practices in panelists according to age, employment, expenditures and education (@baseline)

	Age		Employed		Monthly Expenditures			Respondent Education			
	18-25 (383)	26-35 (703)	Yes (175)	No (911)	Less than \$50 (364)	From \$50-99 (311)	Above \$100 (256)	< 10 years (52)	10 years (374)	Professional/ Technical (430)	Institute/ University/ Postgraduate (231)
Ever use of modern contraceptives	46.2	65.4*	65.1	57.5	50.8	63.3	67.2*	36.5	51.9	60.2	72.3*
Current use of modern contraceptives	18.0	27.0*	33.1	22.1*	16.2	26.0	31.3*	5.8	16.6	24.4	39.0*
Received FP care/ counseling services, past year %	5.5	4.7	10.3	4.0*	3.0	7.1	5.5	7.7	2.7	4.0	10.0 *
Responsible for making decision: family size		*									*
Husband	18.9	16.2	16.6	17.3	20.7	18.3	16.0	31.4	21.6	16.5	8.2
Wife	5.5	8.3	10.3	6.7	8.0	5.1	8.6	5.9	6.5	7.7	8.2
Husband and Wife	67.4	72.6	71.4	70.7	66.7	72.0	72.3	49.0	65.5	72.1	82.3
Neither	1.6	1.7	1.7	1.7	1.9	2.3	1.2	2.0	2.2	1.6	0.9
Mother-in-law	5.3	0.7	-	2.8	1.7	2.3	1.2	9.8	3.0	1.6	0.4
Family	1.3	0.4	-	0.9	1.1	-	0.8	2.0	1.3	0.5	-
Responsible for making decision: contraception							*				
Husband	17.3	15.5	15.2	16.2	21.1	16.0	10.9	21.2	19.1	15.6	10.6
Wife	16.5	19.4	18.7	18.3	16.9	19.9	19.8	19.2	18.5	18.8	17.2
Husband and Wife	59.6	60.7	65.5	59.5	55.6	59.5	64.9	53.8	56.7	60.1	68.7
Neither	4.6	4.3	0.6	5.2	6.4	3.9	2.8	5.8	5.2	4.6	2.6
Mother-in-law	1.4	0.1	-	0.7	-	0.3	1.2	-	0.5	0.5	0.9
With MD	0.3	-	-	0.1	-	-	0.4	-	-	0.2	-

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

Knowledge

Information was gathered concerning respondents' awareness and knowledge of modern contraceptive methods (Tables 3.3.1, 3.3.2). Pills, IUDs, and condoms were well known by the majority of women. Among the 8 modern methods queried the mean number of methods spontaneously recalled by the panelists at baseline was 1.87, with Yerevan women recalling significantly more than women from the other *marzes*. This pattern was repeated with respect to cued recall and for self-reported knowledge of how to use these modern contraceptive methods. Knowledge of traditional methods was considerably higher, with knowledge of each of the four queried traditional methods exceeding 80% and self-reported knowledge of their use similarly high.

In this case, the panel design limited the ability to assess changes in knowledge as the cued recall questions in the baseline prevented assessing knowledge gains at follow-up.

Table 3.3.1. Awareness of contraceptive methods among panelists, by study site (@baseline)

Location (n)	Total (1088)	Yerevan (441)	Lori/ Vayots Dzor (459)	Armavir (188)
% of women who recalled each method (spontaneously or cued)				
Modern methods				
Pills*	82.6	90.6	76.9	77.7
IUD	99.7	99.5	99.8	100
Depo-Provera/ Injections	15.5	14.0	17.7	13.9
Condoms*	96.3	99.5	94.8	92.6
Spermicides/Cream	40.4	43.1	37.6	41.2
Female Sterilization*	54.8	59.2	50.2	55.9
Male Sterilization*	21.2	27.0	19.2	12.2
Emergency Contraception*	22.6	27.9	20.1	16.0
Natural/traditional methods				
LAM*	93.0	91.1	95.2	92.0
Safe period methods*	81.6	86.5	79.0	76.6
Withdrawal	89.6	89.3	88.0	94.1
Douching*	80.8	89.3	76.9	70.2
Mean number of modern contraceptives recalled by women (spontaneously) mean (n)*	1.87	2.20	1.66	1.64
Mean number of modern contraceptives recalled by women (spontaneously or cued) mean (n)*	4.32	4.58	4.15	4.09

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

Table 3.3.2. Knowledge of how to use specific contraceptive method among panelists, by study site @baseline

Location (n)	Total (1088)	Yerevan (441)	Lori/ Vayots Dzor (459)	Armavir (188)
% of women reporting knowledge of how to use each method				
Modern methods				
Pills*	42.4	49.3	35.9	42.2
IUD*	72.3	77.6	65.4	76.9
Depo-Provera/ Injections	7.8	7.7	8.4	6.4
Condoms*	78.4	87.4	71.7	73.4
Spermicides/ Cream*	23.5	25.6	19.8	27.8
Emergency Contraception*	12.6	16.4	10.5	8.6
Traditional methods				
LAM	75.3	72.3	77.3	77.4
Safe period methods*	68.2	76.3	62.9	62.4
Withdrawal*	81.9	80.2	81.0	88.2
Douching	68.4	78.5	63.1	57.8
Mean number of modern contraceptives, which women know how to use mean (n)*	1.39	1.40	1.35	1.34

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

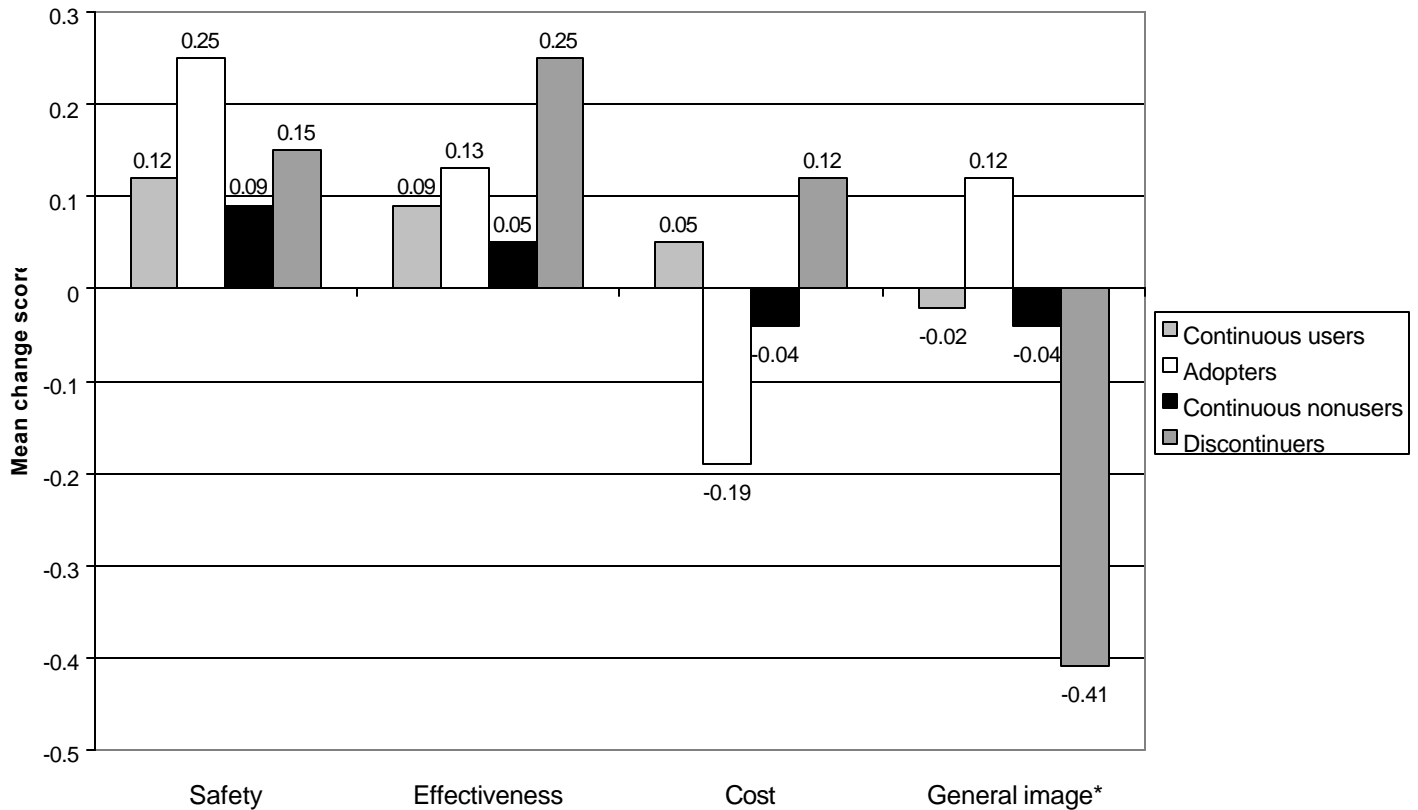
At both the baseline and follow-up, the majority of the respondents cited doctors as the most trusted information source about their current contraceptive method (36.3% at the baseline and 43.1% at the follow-up). While not mentioned at the baseline, at the follow-up women cited Family Planning Cabinets as the second most trusted source of information (12.2%). The next most frequently cited sources were the partner/husband, followed by books/printed materials and television. These latter two categories showed large relative increases in importance between the baseline and follow-up assessments. These emergence of the Family Planning Cabinet as an important information source, even among those not visiting the cabinet is likely related to the Green Path campaign messages, but that assertion cannot be tested with the available data.

Attitudes/Approval – Family Planning

Information was obtained regarding the change in the panelists’ perceptions of safety, effectiveness, cost, and general image of different contraceptives since the campaign launch.

A 5-point Likert-type scale was used both at the baseline and follow-up, where a score of 5 was strongly favorable/positive. Figure 4 indicates the shifts in women’s perceptions of modern contraceptive methods consistent with the themes raised by the *Green Path* Campaign. Overall,

Figure 4. Mean change in the perceptions of the safety, effectiveness, cost and general image of the modern contraceptives among panelists



*- the difference is statistically significant, $p \leq 0.05$

perceptions of safety, effectiveness, cost, and general acceptance of modern methods improved. Among discontinuers of a modern method, however, the general image of modern methods declined significantly, while increasing among adopters.

Respondents’ perceptions of abortion safety and image declined while cost increased (Figure 5). These changes were not significantly different by method use category. A similar pattern of decline was noted for withdrawal with discontinuers of modern methods perceiving significantly higher levels of effectiveness for withdrawal by the follow-up (Figure 6). Surprisingly, the perception of

modern contraceptive methods use among 10 women acquaintances was significantly lower at the follow-up (4.57 in the follow-up versus 4.90 in the baseline), with adopters perceiving an increase and discontinuers a decrease (Figure 7). Despite the low prevalence of modern method use, over 93% of the panelists felt family planning was necessary/beneficial to Armenia.

Figure 5. Mean change in the perceptions of the safety, cost and general image of abortion among panelists

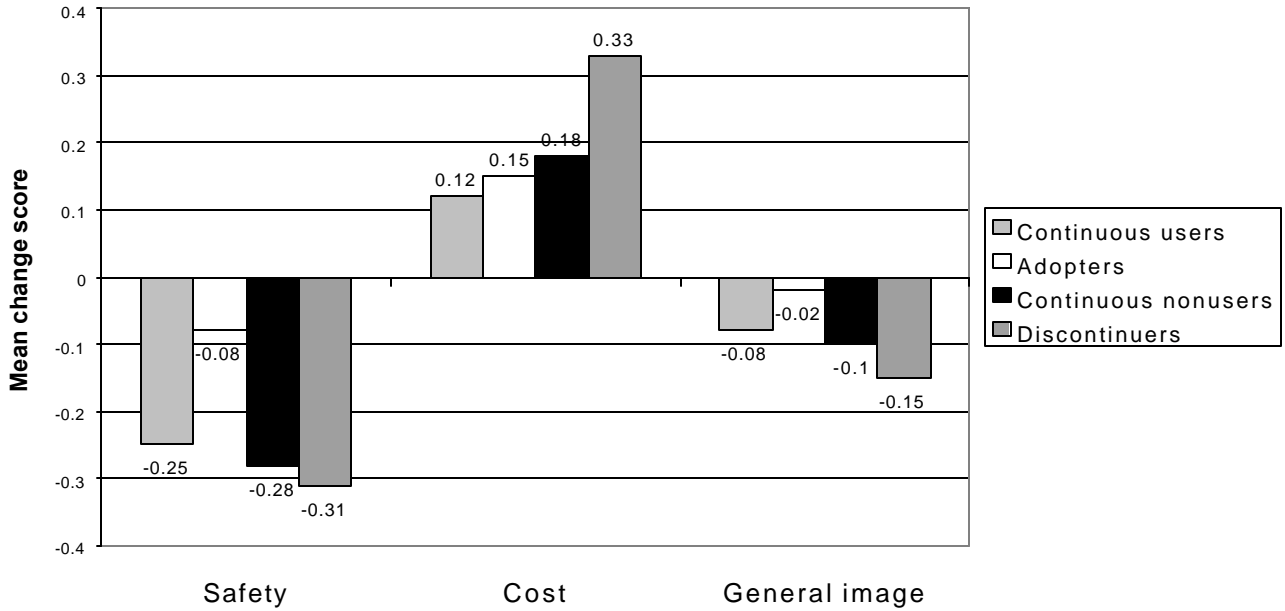
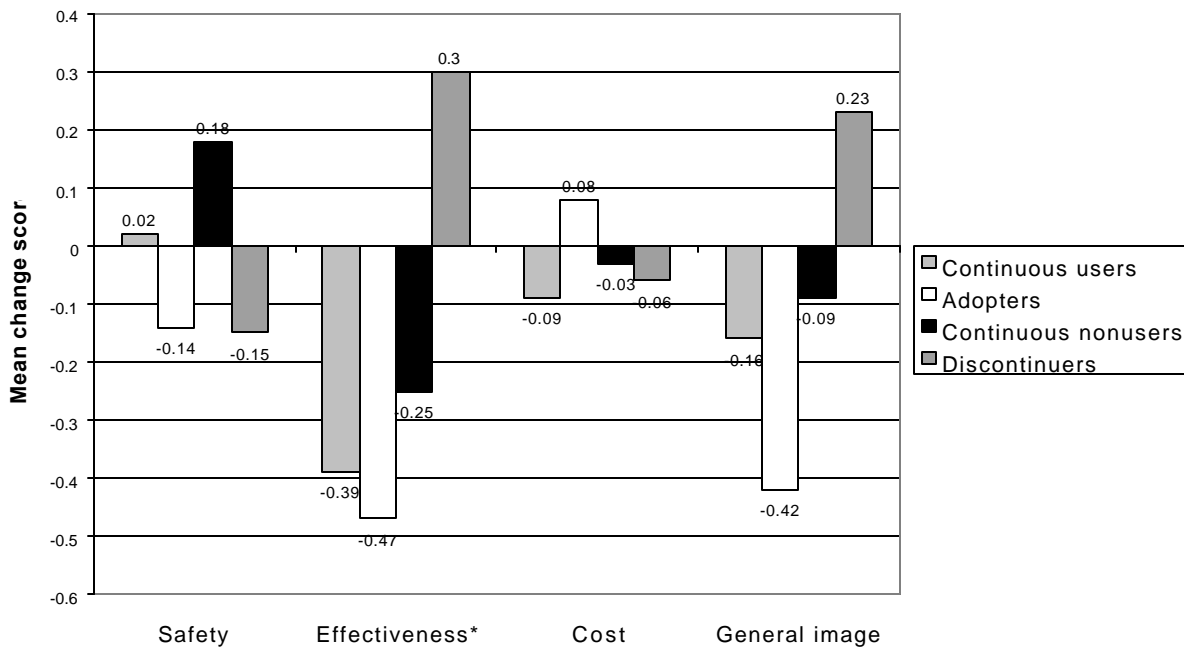
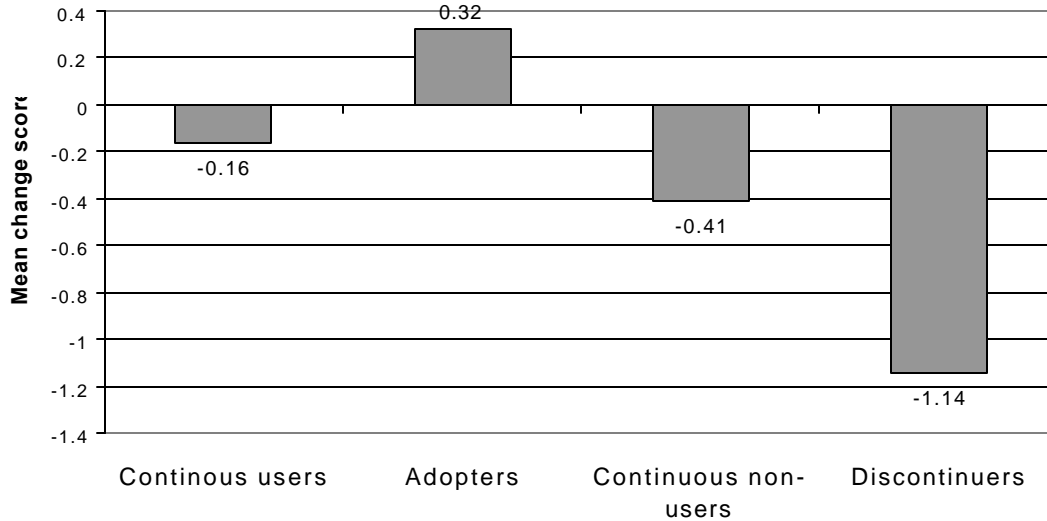


Figure 6. Mean change in the perceptions of the safety, effectiveness, cost and general image of withdrawal among panelists



* - the differences are statistically significant, $p \leq 0.05$

Figure 7. Mean change in the mean number of women (among 10 women acquaintances) perceived to be using modern method of FP



Attitudes/Approval – *Green Path* Campaign

The *Green Path* Campaign and FP Cabinets evoked positive attitudes through the campaign materials and activities. As shown in Table 3.3.3, the TV advertisements created positive attitudes in 78.2% of the exposed respondents, radio advertisements in 77.2%, brochures in 87.8%; and local events in 96.6%.

Table 3.3.3. Attitude evoked by campaign materials among those exposed

Attitude towards the <i>Green Path</i> Campaign and FP Cabinets evoked by...	Positive (%)	Neutral (%)	Negative (%)
TV advertisements (n=922)	78.2	16.3	5.5
Radio advertisements (n=167)	77.2	18.0	4.8
<i>Green Path</i> brochures (n = 147)	87.8	11.6	0.7
Local events (in Lori/Vayots Dzor) (n=29)	96.6	3.4	

Attitudes towards the campaign created by the criticism of the *Green Path* Campaign in the press were also investigated (Table 3.3.4). Of the women who read an article in the press about the *Green Path*, 65.9% were left with a positive attitude towards the campaign; one-third of the time even a negative article elicited a favorable opinion. This finding, as well as the fact that the vast majority (93%) of the respondents consider Family Planning as necessary/ beneficial for Armenia, indicates

that the campaign messages addressed a need. Given the negative press coverage and pejorative intent linked to the term “family planning,” these are encouraging results.

Table 3.3.4. Attitude evoked by the criticism of the *Green Path* in the press

	n	Provoked attitude*		
		Positive (%)	Neutral (%)	Negative (%)
The article(s) perceived as				
Positive	30	100.0	-	-
Neutral	2	50.0	50.0	-
Negative	33	33.3	36.4	30.3
Mixed	16	68.8	18.8	12.5
OVERALL	82	65.9	19.5	14.6

* - the differences are statistically significant, $p \leq 0.05$

Also of note was the finding that the sponsorship of the *Green Path* Campaign played a positive role in women’s assessment of the credibility of the messages delivered by the campaign. For roughly 70% of the respondents, the sponsorship of any of the organizations involved (USAID, JHU, MOH) increased the credibility of the campaign messages (Table 3.3.5), with little distinction made among the credibility of the sponsors.

Table 3.3.5. The assessment of the credibility of the messages in connection with the sponsorship of the campaign

	USAID	JHU	MOH
	(928)	(897)	(930)
Increases credibility of the message	72.8	72.2	74.6
Has no effect	24.6	25.2	22.5
Decreases credibility of the message	2.6	2.6	2.9

Intention

Data were obtained regarding patterns of contraceptive method information seeking between June 1, 2000 and the follow-up interview (Table 3.3.6). Of the panel respondents, 20.2% reported seeking information about any modern contraceptive following the launch of the campaign. The modern method most frequently cited by women in this respect was **pills** (13.5% of respondents) followed by **IUDs** (10.8%) and **condoms** (6.8%). This pattern varied by *marz* with a higher percentage of Yerevan respondents seeking information about the **IUD**.

Information seeking regarding traditional methods during this period was significantly lower (less than 5%). Women from Lori and Vayots Dzor sought out information regarding **LAM** and **withdrawal** more frequently while Yerevan respondents were more active in seeking information about the **safe period** method.

Table 3.3.6. Information seeking about contraceptive methods since June 1, 2000

Information seeking % (n)	Total (1088)	Yerevan (441)	Lori/Vayots Dzor (459)	Armavir (188)
Pills	13.5	12.0	15.0	13.3
IUD*	10.8	13.9	9.6	6.5
Depo-Provera/ Injections*	2.2	0.9	4.1	0.5
Condoms	6.8	6.4	7.4	6.4
Spermicides/ Cream*	2.1	1.8	3.3	-
Female Sterilization*	1.5	0.7	2.8	-
Male Sterilization*	1.2	0.5	2.4	-
Emergency Contraception	1.3	0.9	2.0	0.5
ANY modern contraceptive method	20.2	20.7	20.0	19.6
LAM*	1.8	1.1	3.1	-
Safe period methods*	2.7	3.7	2.8	-
Withdrawal*	1.7	0.5	3.1	1.1
Douching	1.4	1.4	2.0	-
Abstinence	0.4	0.5	0.4	-

* - the differences are statistically significant, $p \leq 0.05$

The percentage of women discussing contraceptive issues with their husbands three or more times since June 1, 2000, was significantly higher among adopters (55.6%) than in other method use categories (37.0% in continuous users, 29.4% in continuous non-users and 25.0% in discontinuers). Of note is that 25% of the women who had not discussed contraceptive issues with their husbands in the year prior to the baseline had had at least one discussion subsequent to the campaign launch, with most having several discussions (Table 3.3.7). These discussions may indicate developing intent that has not yet resulted in behavior change.

Table 3.3.7. Frequency of discussions about contraception among couples

Frequency of discussions about contraceptives with husband since campaign launch % *	Continuous users (189)	Adopters (108)	Continuous nonusers (693)	Discontinuers (60)
Never	49.2	30.6	59.6	60.0
1-2 times	13.8	13.9	11.0	15.0
3 or more times	37.0	55.6	29.4	25.0

*- the differences are statistically significant, $p \leq 0.05$

Nearly 70% of the adopters of modern method use by the follow-up were women using traditional contraceptive measures at baseline who expressed a desire to use a modern method in the near future. This indicates the importance of intention as a key step to behavior change.

Behavior - Use of Family Planning Services since June 1, 2000

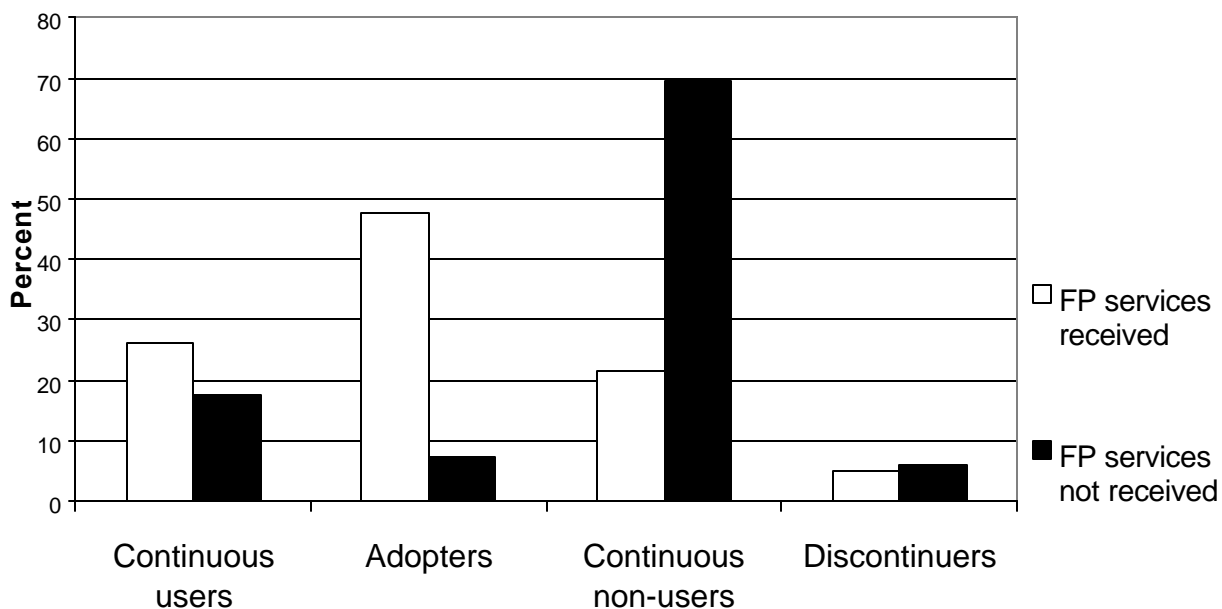
Further analysis revealed that having ever received family planning care/counseling services by women was positively associated with modern method use. As shown in Table 3.3.8 and Figure 8, 47.6% of those receiving FP services went on to adopt a modern method, as compared to an adoption rate of only 7.2% among those not receiving services. Furthermore, those receiving counseling services were more likely to make a change in method use, indicating the important role of provider counseling in facilitating a clients' progression from intention to practice. It can be inferred that if a woman visits the cabinet, her further adoption and use of a modern method is very likely.

Table 3.3.8. Change in method type among women using any FP method (modern or traditional) by having received family planning care/counseling services since June 1, 2000

Change % (n)*	Received (65)	Not received (567)
Traditional to modern	46.2	7.4
No change	49.2	87.1
Modern to traditional	4.6	5.5

* - the differences are statistically significant, $p \leq 0.05$

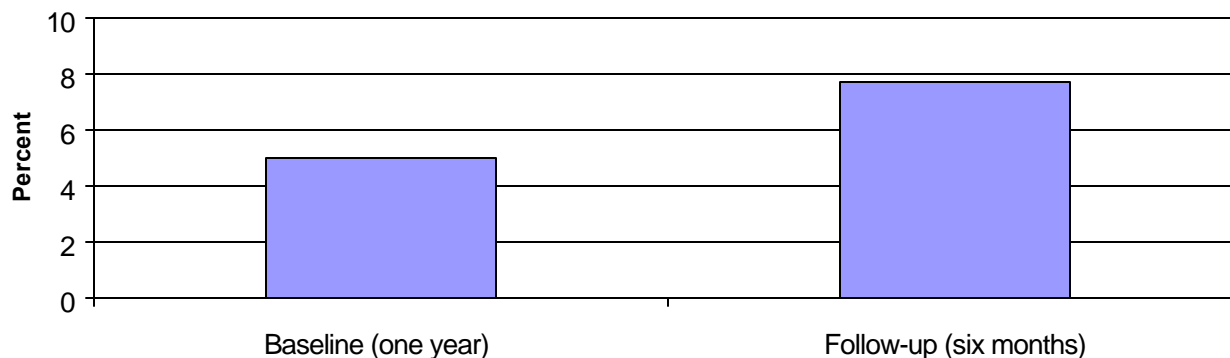
Figure 8. Change in modern FP method use in panelists in relation to use of FP services



The percentage of women receiving family planning care/counseling services also increased significantly at the follow-up, although the time periods for this variable at the baseline and the follow-up were different (in the baseline, women were asked about whether they had received FP care/counseling services during the past year, whereas in the follow-up they were asked about the time period since June 1, 2000). Of the panel women, 5.0% had received family planning care/counseling services in the year prior to the baseline versus 7.7% in the six months prior to the follow-up (Table 3.3.9, Figure 9). The fact that the shorter period of time still yielded a higher percentage of women visiting a cabinet indicates a strong response to the campaign. Still, overall utilization remains quite low.

As expected, the factor that most prompted women to seek services was media messages (61.4%), followed by doctors (26.5%) and friend/family's recommendations (22.9%). The recommendation of someone who already visited a Family Planning Cabinet prompted 4.8% of the women visiting a Cabinet. One woman was prompted by the baseline interview.

Figure 9. Use of family planning care/counseling services at the baseline (past year) and follow-up (past six months)



A set of questions addressed the care received by women in FP Cabinets (Table 3.3.10). Family planning-related counseling was received by 84.4% of the respondents visiting cabinets; 83.1% of those women received an explanation of the benefits of contraceptive methods, and 72.3% were consulted on side effects. Among respondents who received FP care, 84.2% received a contraceptive method. The predominant methods received were condoms (44.4%) and pills (42.9%). Approximately 6% of the respondents received an IUD, 3.2% received a combination of pills and condoms, 1.6% of the respondents received Depo-Provera/injectibles, and 1.6% a combination of pills and IUD.

While some charges were expected for receiving counseling and certain methods, unfortunately, 25% of those receiving condoms and 11.1% of the women receiving pills were charged. These items were to be provided free of charge.

Reported satisfaction with family planning services remained almost unchanged with roughly 82% reporting that they were very/somewhat satisfied at follow-up. The high rate of these women (68%) referring friends/family to a Family Planning Cabinet is more telling (Table 3.3.12).

Table 3.3.9. Family planning practice in baseline and follow-up samples

	@Baseline	@Follow-up
Modern method use	n=1088	
Current use %*	23.8	28.4
Ever use %	58.8	
Ever received FP care/counseling services % *	5.0 ¹	7.7 ²
Satisfaction with FP services among users %	(n=52)	(n=76)
Very satisfied	50.0	40.8
Somewhat satisfied	40.4	40.8
Not at all satisfied	9.6	18.4

* - the differences are statistically significant, $p \leq 0.05$

¹ - in the last year

² - since June 1, 2000

Behavior - Use of contraceptive methods since June 1, 2000

Overall, 33.5% of respondents reported using modern contraceptives at least once since June 1, 2000 (Table 3.3.11). It should be noticed that a higher percentage of Yerevan women used modern methods of contraception in comparison with the Lori/Vayots Dzor and Armavir women (39.3% versus 28.2% and 33.0% respectively). **Condoms** were used by 18.9% of the total sample of women. The **IUD** was used by 9.5% of the respondents and pills by 5.8% of the respondents. Among traditional methods, **withdrawal** was the most frequently used (45.6%), followed by the **safe period** method and **LAM** (10.3% and 5.3% respectively).

Table 3.3.10. Use of family planning services/quality of services received

What prompted seeking out FP services % (n)	(83)	
Media messages	61.4	
Recommended by a doctor	26.5	
Recommended by a pharmacist	-	
Recommended by a friend/family	22.9	
Recommended by someone who visited FP Cabinet	4.8	
Previous interview	1.2	
Other	3.6	
Counseling received % (n)	84.4	
Benefits of contraceptive methods explained % (n)	83.1	
Side-effects of contraceptive methods explained % (n)	72.3	
Charged for counseling % (n)	30.8	
Received a method % (n)	84.2	
Charged for a method % (n)	18.8	
	Received	Charged
Method received (n=63)	(%)	(%)
Pills	42.9	11.1
IUD	6.3	33.3
Depo-Provera/injectibles	1.6	100.0
Condoms	44.4	25.0
Pills and condoms	3.2	-
Pills and IUD	1.6	-

Information was gathered regarding the types of contraceptive methods currently used by women (Figure 10). About 26% of the panel respondents do not use any contraceptive method, which signifies a decrease since the baseline (33.2%). This is related to the increased use of withdrawal (37.1% in comparison with 33.5% in the baseline), condoms (12.1% at the follow-up versus 8.5% in the baseline) and pills (3.6% in the follow-up versus 2.0% in the baseline). There was also a slight increase in the percentage of women using LAM and tubal ligation. There was a slight decrease in the use of IUD, safe period method, the combination of condoms and spermicides, douching, and spermicide/cream/jelly.

Figure 10. Current primary means of contraception at the baseline and follow-up (panel)

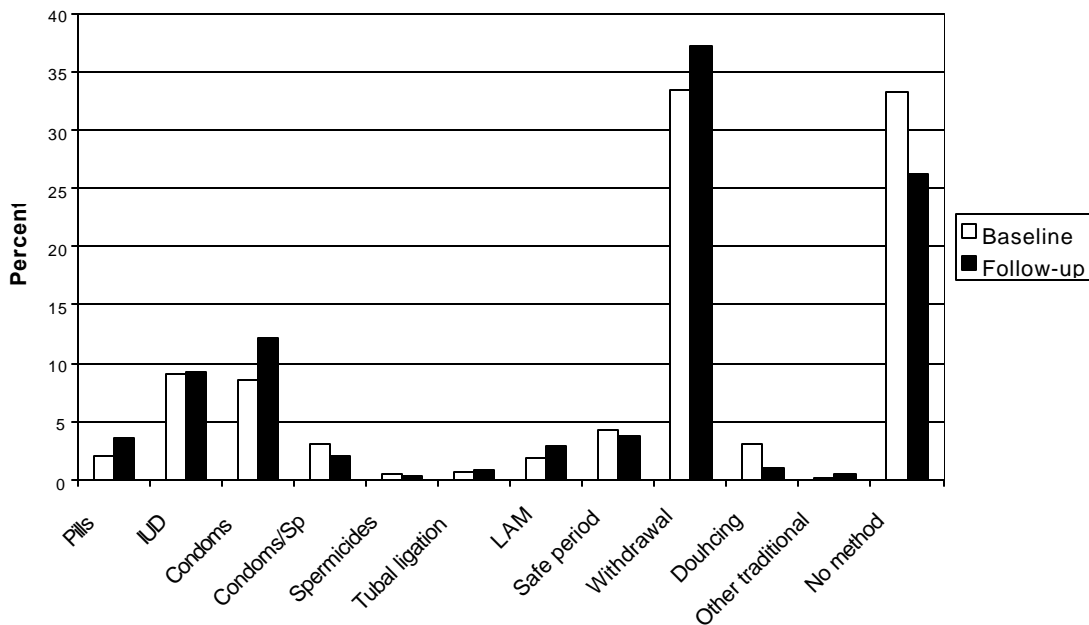


Table 3.3.11. Use of contraceptive method since June 1, 2000

Method Use %	Total (1088)	Yerevan (441)	Lori/ Vayots Dzor (459)	Armavir (188)
Pills	5.8	5.2	5.5	8.0
IUD	9.5	8.5	10.8	8.6
Depo-Provera/ Injectibles	0.1	-	0.2	-
Condoms*	18.9	27.6	11.8	15.4
Spermicides/Cream	0.6	0.5	0.7	0.5
Female Sterilization	1.0	0.9	0.7	2.1
Male Sterilization	-	-	-	-
Emergency Contraception	0.3	0.2	0.2	0.5
ANY Modern Method*	33.5	39.3	28.2	33.0
LAM	5.3	4.4	5.9	5.9
Safe period methods*	10.3	14.9	7.4	6.4
Withdrawal*	45.6	39.2	49.6	50.5
Douching	4.5	5.3	3.5	4.8
Abstinence	1.4	1.4	1.5	1.1

* - the differences are statistically significant, $p \leq 0.05$

In total, 10.3% of the respondents adopted a modern method of contraception by the time of the follow-up (the highest percentage in this category was in Armavir), a striking result. However, 65.8% of the respondents still continue to not use modern contraceptives and 5.8% discontinued the use of modern methods during the campaign.

The data obtained from the panel indicates that there was a statistically and practically significant positive change in family planning practices: a net gain of 4.6%: from 23.8% at baseline to 28.4% at follow-up. This change exceeds the projected 3% increase based upon the results of similar campaigns in other countries.

Advocacy

Women were asked at the follow-up if anyone had advocated Family Planning Cabinets to them and if the respondents had advocated the cabinets to anyone: 17.2% of the respondents had someone advocate the Family Planning Cabinets to them and 16.6% had advocated FP Cabinets to other women (Table 3.3.12). Of the women visiting the cabinets, 68% had referred a friend. Of note are two facts: 1) considerably more women than those visiting since the campaign launch advocated using the cabinets and 2) over two-thirds of the women visiting cabinets become advocates of the cabinets.

Table 3.3.12. Family planning related advocacy in follow-up sample

	@Follow-up
FP Cabinets advocated/recommended to respondent %	17.2
Respondent advocated/recommended FP Cabinets to someone %	16.6
Respondent visiting the Cabinet advocating/recommending FP Cabinets to anyone	67.9 (84)

3.4 Effects of exposure to the *Green Path* Campaign

As detailed in Table 3.4.1, the campaign messages reached virtually all of the study population. The campaign logo and slogan were seen/heard by 90.2% and 65.0% of women respectively.

Approximately 87% of the women were exposed to TV advertisements of family planning cabinets, 14.9% were exposed to a TV catalog show, and 15.2% and 5.8% to radio advertisements of family planning cabinets and pharmacies respectively. The campaign poster and brochures were seen by the 30.1% and 25.5% of the respondents respectively. Among the four brochures issued within the

framework of the campaign, *Modern Methods of Contraception* and *The Addresses of Family Planning Cabinets* were seen by the highest percentage of the participants (69.4% and 68.3% respectively). As mentioned previously, local events related to the campaign were implemented in Lori and Vayots Dzor *marzes*. Only 5.9% of the Lori/Vayots Dzor respondents were exposed to/participated in these events.

There were significant inter-regional differences detected in the exposure of women to TV advertisements of Family Planning Cabinets and radio advertisements of Family Planning Cabinets and pharmacies. The highest percentage of women exposed to the TV ads was in Armavir (92.5% in Armavir versus 86.3 in Lori/Vayots Dzor and 85.6% in Yerevan), whereas Yerevan respondents mostly heard the radio advertisements.

Table 3.4.1. Women’s exposure to the *Green Path* campaign, by *marz*

Exposure since June 1, 2000	Total	Yerevan	Lori/ Vayots Dzor	Armavir
%	(1088)	(441)	(459)	(188)
Logo	90.2	92.3	88.9	88.8
Slogan	65.0	65.1	67.3	59.4
TV advertisements of FP Cabinets *	87.1	85.6	86.3	92.5
TV catalog show	14.9	12.0	16.4	18.2
Radio advertisements of FP Cabinets*	15.2	20.3	12.1	11.2
Radio advertisements of pharmacies*	5.8	8.3	4.2	3.8
Poster	30.1	34.0	27.5	27.3
Brochures (any)	25.5	28.7	26.1	16.5
<i>The Addresses of FP Cabinet</i>	68.3	69.4	68.8	62.1
<i>Oral Contraceptives</i>	57.5	55.9	58.9	58.6
<i>Modern Methods of Contraception</i>	69.4	64.0	70.5	86.2
<i>What is Family Planning</i>	46.8	40.5	51.8	51.7
Local events related to campaign	5.9	-	5.9	-

* - the differences are statistically significant, $p \leq 0.05$

- among those exposed to any brochures

Overall, there were nine TV advertisements of Family Planning Cabinets broadcast within the framework of the *Green Path* campaign. Table 3.4.2 describes the patterns of women’s exposure to each spot and their opinions regarding their frequency and quality. In sum, the ads were seen, their frequency was considered appropriate, and their quality was assessed as acceptable or good. The distribution of values is similar for each of the spots.

Table 3.4.2. Exposure to and opinion of TV spots

	Spot A	Spot B	Spot C	Spot D	Spot E	Spot F	Spot G	Spot H	Spot J
The frequency of exposure to the spot % (n)	(1060)	(1042)	(1035)	(1045)	(1021)	(1058)	(1047)	(1003)	(981)
Never	20.8	27.7	39.9	41.3	38.7	43.8	44.0	70.8	73.8
1-10 times	31.7	31.9	29.1	35.1	34.9	30.3	36.7	21.8	19.3
11-20 times	22.9	20.4	17.2	13.8	12.7	13.6	10.1	4.6	4.3
21-30 times	11.4	9.9	7.2	4.2	7.4	6.2	3.7	1.3	1.4
31-40 times	5.5	4.4	2.6	3.1	3.0	2.9	1.8	0.8	0.7
41-50 times	2.1	1.8	1.4	0.9	1.3	1.8	1.2	0.3	-
More than 50	5.7	3.8	2.6	1.6	2.0	1.3	2.4	0.4	0.5
Opinion about the frequency of broadcasting	(823)	(751)	(622)	(611)	(626)	(590)	(585)	(293)	(256)
More than necessary	27.7	24.0	19.3	13.9	14.9	17.5	8.9	6.1	7.4
As often as necessary	61.6	64.3	64.5	69.4	68.7	67.1	65.3	75.4	76.2
Less than necessary	10.7	11.7	16.2	16.7	16.5	15.4	25.8	18.4	16.4
Opinion about the quality of the spot	(841)	(754)	(622)	(613)	(631)	(595)	(586)	(296)	(260)
Excellent	2.9	2.4	1.8	2.8	2.2	4.2	3.1	6.8	5.4
Good	28.5	30.1	31.0	39.8	30.1	36.8	36.3	43.6	50.8
Normal	58.4	56.6	61.6	53.3	61.0	50.6	58.7	48.0	40.8
Poor	8.4	9.0	4.7	3.9	5.2	6.9	1.7	1.4	2.3
Very poor	1.8	1.9	1.0	0.2	1.4	1.5	0.2	0.3	0.8

The association between the exposure to the main components of the *Green Path* Campaign (TV and radio advertisements of cabinets and pharmacies) and the use of modern contraceptives and family planning services was investigated. Table 3.4.3 shows that there was a significant association between exposure to any of these components and the use of family planning services, with a higher percentage of exposed respondents using family planning services. Change in family planning use status and exposure to the *Green Path* Campaign was also explored and a significant association between these two variables was found. Table 3.4.4 shows that the proportion of adopters was significantly higher (3 fold) among women exposed to the campaign. Table 3.4.5 shows that the exposure to *Green Path* was significantly associated with the frequent spousal communication and seeking out information about modern contraceptives.

Table 3.4.3. Family planning practices and exposure to *Green Path*

Exposed to TV <u>or</u> radio ads	Yes (956)	No (124)
Current Use of modern contraceptives %	29.3	21.8
Use of Family Planning services since June 1 %*	8.7	-

* - the differences are statistically significant, $p \leq 0.05$

Table 3.4.4 Change in family planning use status and exposure to the *Green Path*

Exposed to TV <u>or</u> radio ads	Yes (956)	No (124)
Change in family planning use status *		
Continuous user	18.1	18.5
Adopter	11.2	3.2
Continuous nonusers	65.1	71.0
Discontinuers	5.6	7.3

* - the differences are statistically significant, $p \leq 0.05$

Table 3.4.5 Spousal communication and information seeking about modern contraceptives and exposure to the *Green Path*

Exposed to TV <u>or</u> radio ads	Yes (956)	No (124)
Seeking info about modern contraceptives *	21.2	13.2
Frequency of discussions about contraceptives with husband since campaign launch % *		
Never	53.3	67.6
1-2 times	12.7	5.4
3 or more times	34.0	27.0

* - the differences are statistically significant, $p \leq 0.05$

In sum, the evaluation results show a clear progression of improvements at each transition in the Steps to Behavior Change resulting in a net increase of 4.6% in modern method use by the end of the campaign: already high knowledge levels were built upon to evoke favorable attitudes toward modern method use, additional information and services were sought, especially among those expressing a prior desire for modern method use, behavior was changed, and use of the cabinets advocated.

4. Conclusions and Recommendations

The results presented in this report provide compelling evidence that *Green Path* Campaign led to statistically and practically significant improvements in family planning related attitudes and practices of the target population. The *Green Path* campaign messages were designed and delivered in conformity with the target women's needs and requirements as indicated by the overwhelming positive opinions of surveyed women regarding the campaign concept and materials. In addition to increases in the use of modern contraceptive methods above the level anticipated, virtually all of the panelists feel that reproductive health and family planning is necessary and beneficial for Armenia

It is possible that these changes in women's attitude and practices will decay as time passes without reinforcement and free supplies. It is also worth noting that the period of six months intervention is rather short to instill a long-lasting shift in women's attitudes and behavior. The data obtained suggest that a long-term IEC campaign would provide even more positive and inspiring results. Armenian families are accepting of changes, even in such a difficult to change sphere as reproductive health behavior. In this respect, the importance of large-scale IEC campaigns in shifting other health behaviors in Armenia should not be underestimated.

In summary, the main observations of the program were:

- The campaign reached its target population
- The campaign components were well liked by the overwhelming majority of women exposed to them.
- The concept of family planning was perceived positively by 93.0% of the study sample.
- The panelists' perceptions of safety, effectiveness, cost and general acceptance of contraceptives improved.
- Visits to the Family Planning Cabinets increased as indicated by the percentage of women using the services following the launch of the campaign (7.7%) versus the percentage of women visiting the Cabinets in the year prior to baseline (5.0%).
- The majority (67.9%) of the women visiting the cabinets recommended the services to their family/friends.

- Significant association between the exposure to the Green Path Campaign and the use of family planning services was detected, with a higher percentage of exposed women attending the cabinets.
- Adopters were more likely to talk with their partners about contraception, report improved attitudes about modern methods, seek out information, perceive increased use of modern methods among friends, have been more exposed to the campaign, and have made greater use of FP Cabinets
- Patterns of changes in knowledge, attitudes, intentions, behaviors, and advocacy conform to the Steps to Behavior Change model and suggest the observed changes in method use are indeed attributable to the *Green Path* Campaign
- Increased use of modern contraceptive methods was associated with exposure to the media campaign and to the FP Cabinets
- Of the panel respondents, 10.3% adopted a modern method of contraception by the time of the follow-up, with a higher percentage of adopters among women using family planning services.
- The study results showed that there was a significant change in the use of modern methods of contraception among the panel women, with the net increase of 4.6%.

5. References

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6. Appendices

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