

# Albania family planning: Improving access and use of modern contraception among young men and women

Report of findings

October 2009

| Gëzoni dashurinë, Gëzoni jetën |



Për një jetë të mbushur me momente të lumtura, dashuri, rehati dhe kënaqësi... përdorni kontraktivët bashkëkohorë të tilla si: pilulat kontrceptive, injeksionet dhe kontraktivët e urgjencës, si një mënyrë e sigurtë për të parandaluar shtatëzanitë e paplanifikuara. Vizitoni qendrat shëndetësore të planifikimit familjar për informacionin e nevojshëm.

për **momente të lumtura**





# **Albania family planning: Improving access and use of modern contraception among young men and women**

**Report of findings**

**October 2009**

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**Cover Photo:** Example of materials developed for the C-Change family planning mass media campaign in Albania in 2009.

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## List of Acronyms

BCC	behavior change communication
EC	emergency contraception
IRB	Institutional Review Board
IUD	intrauterine devices
PHC	public health care
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development



## Overview

The Family Planning Project in Albania builds on previous USAID-supported behavior change communication (BCC) activities and the family planning efforts of numerous stakeholders, including the United Nations Population Fund (UNFPA), the World Bank, and the Albanian Institute of Media. In October 2008, C-Change, managed by AED, initiated an integrated communication program with three objectives: increase the uptake of modern family planning, create a more supportive environment for the use of modern contraceptives, and develop programmatic linkages with organizations and stakeholders working in reproductive health.

To encourage young men and women to use modern contraception, C-Change conducted a multi-component communication campaign that brought together mass media at the national level with an intensive interpersonal communication intervention targeting young university students and pharmacists surrounding university housing complexes.

**Study purpose:** The research activities described in this report were used to evaluate the initial phase of the Albania family planning program and to further understand the factors underlying students' choices of contraceptive method to inform the development of additional programs. The objective was to evaluate whether the initial Albania family planning intervention has led to changes in modern contraceptive knowledge, awareness, and choices among young men and women in Tirana and Vlorë.

These results will be used to assist C-Change in the further development, targeting, and delivery of current and future projects. This research contributed to the fulfillment of USAID Intermediate Results:

- IR 2.0: Knowledge generated, organized, and communicated in response to field needs
- IR 3.0: Support provided to the field to implement effective and sustainable family planning/reproductive health programs

**Study design:** The study had two parts: Part 1 includes baseline and follow-up assessments of the pharmacists' communication styles and accuracy of information they provided, and Part 2 comprises the baseline and follow-up surveys of young men and women living in university housing. In addition, a qualitative assessment of emergency contraception (EC) use among young women was conducted; a detailed report of this assessment is provided elsewhere.<sup>1</sup> Data collection for the quantitative study was conducted before the intervention started and again when it ended, covering four months from February through June 2009.

**Research sites:** The study was carried out in the University Centers in Tirana, Vlorë, and Elbasan. University Centers are living quarters for young people attending the university in each city. There were two intervention sites (one in Tirana ["Student City Dorms"] and one in Vlorë) and two comparison sites (one in Tirana ["Engineer Building Dorms"] and one in Elbasan). These sites were purposely chosen to ensure that the sites house similar types of students and then were assigned to serve as an intervention site or a comparison site.

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<sup>1</sup> Gryboski, K., E. G. Hoxha, J. Volle, and B deNegri. 2009. "Women's Perspectives on Contraception: A Qualitative Study among University Students in Tirana, Albania." Washington DC: AED/C-Change . [www.c-changeprogram.org/resources/](http://www.c-changeprogram.org/resources/) (forthcoming).

**Population:** The two study populations are pharmacists working within 200 meters of the selected University Centers and their corresponding academic facilities, and young men and women living in the selected University Centers.

**Sample:** All pharmacists in the designated areas were invited to participate in the study. At baseline, 177 pharmacists agreed to participate (99 in the intervention sites and 78 in the comparison sites). At follow-up, 176 pharmacists agreed to participate (91 in the intervention sites and 85 in the comparison sites). A total of 2,179 university students agreed to be interviewed at baseline in the four locations (1,096 in the intervention sites and 1,083 at baseline in the comparison sites). At follow-up, 2,201 university students agreed to be interviewed (1,098 in the intervention sites and 1,103 in the comparison sites).

**Intervention highlights:** The intervention to be evaluated was designed to raise awareness and inform young men and women in Albania about modern contraceptive options. C-Change used several methods to achieve this goal. There was a national media campaign using television, posters, and radio ads that all Albanians had the opportunity to see or hear. The intervention included two intensive interpersonal communication activities that focused only on pharmacists and students in the two intervention sites. The project also implemented a peer lead program for university students, and dialogue and advocacy with pharmacists. A detailed description of the intervention is reported elsewhere.<sup>2</sup>

**Summary:** This study was designed to answer two main questions: Did the intervention help young men and women make more informed reproductive choices, and what was the added effect of the intensive interpersonal communication to the media campaign? Using the assessments with the pharmacists and the quantitative surveys with students allowed us to measure changes in the target population that was exposed to the media campaign and the contribution of the interpersonal communication intervention. Based on the results, we determined the following: The media campaign positively affected the underlying determinates of behaviors, and the combination of the media campaign and the interpersonal communication intervention affected these determinates to an even larger degree than the media campaign alone.

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<sup>2</sup> “The Albania Family Planning Communication Program, Phase I – August 2008-June 2009: A Report of Findings.” Washington DC: AED/C-Change. [www.c-changeprogram.org/resources](http://www.c-changeprogram.org/resources) (forthcoming).

## **I. Introduction**

Albanian couples' use of modern contraceptives is the lowest in the European region, with high reliance on traditional means of family planning, such as withdrawal, and on abortion in the event of unwanted pregnancies. Recent estimates (DHS 2002 and PRO Shëndetit 2005) indicate that the use of modern contraceptive methods has increased from about 8% in 2002 to about 15% in 2008.

A 2005 survey in three prefectures (PRO Shëndetit, "Knowledge and Use of Modern Methods of Contraception 2002 and 2005") found low levels of contraceptive knowledge among both men and women. Forty percent of men and women of reproductive age had not heard of injectable contraception, while 60% of men and women had not heard of intrauterine devices (IUD). Interviews with health care providers and health care consumers found misconceptions among both groups regarding contraceptive products and services. This lack of accurate information likely contributes to consumers' low level of awareness and confidence in modern contraceptive methods. In addition, many health care consumers are choosing to bypass public health care (PHC) facilities for treatment at private hospitals and with specialists. Many consumers have low confidence in the quality of care of PHC facilities and believe they will be expected to provide a "contribution" to obtain nominally free services.

C-Change is implementing communication activities to increase uptake of modern methods of contraception in Albania. The research described in this protocol will be used to help evaluate these communication programs to increase knowledge and use of modern methods of contraception.

## II. Description of the C-Change family planning activities

The initial phase of the Albania family planning program focused on communication activities to increase awareness of family planning services available in the private and public sectors, to counter misconceptions about methods, and to improve informed choice. The program's goal was to increase the use of modern contraceptive methods among young adults in Albania as well as decrease reliance on withdrawal and other traditional methods. The program sought to create a positive environment for the discussion, selection, and use of modern methods, with particular emphasis on young men and women in two cities in Albania. More specifically, the project sought to: 1) increase the percentage of young adults in the cities stating that they are comfortable talking with their sexual partners about contraception; 2) increase the percentage of young women comfortable with asking questions and discussing modern contraception with a pharmacist or a physician; and 3) improve the quality of those discussions between pharmacists/physicians and young women.

The intervention comprised four components. The first component was a nationwide mass media campaign designed to increase awareness and correct some of the misperceptions about modern contraception. The second component, an intensive pharmacist education activity, focused on improving the communication skills of pharmacists as they talk with young women about modern contraception. The third component was an intense interpersonal peer education communication activity directed at young men and women in urban areas. The fourth component was family planning training for 11 journalists to ensure quality articles on family planning and coverage of all of the project's special events; however, this component was not a part of the evaluation research and is not covered in this report.

The interpersonal peer education communication was conducted in two of four University Centers, which house students from around the country. The Centers house a central medical clinic and many pharmacies, providing ideal opportunities for students to interact with pharmacists.

The intensive pharmacist component was conducted in selected pharmacies within 200 meters of the intervention site for students in the University Center and the university buildings in Tirana, and one selected University Center in Vlorë. The pharmacist intervention in Vlorë was less intensive than the one in Tirana due to staffing and time. The Vlorë pharmacists had the same initial family planning methods meeting as the Tirana group but did not have follow-up visits by a trainer as happened in Tirana. "Non-intervention" pharmacies in other parts of Tirana and pharmacies in Elbasan were selected as comparison sites. The pharmacists in these sites were exposed to the national mass media campaign but not the additional activities conducted with the other pharmacists.

### III. Description of research activities

#### 1. *Research objectives*

The research activities described in this report were used to evaluate the initial phase of the Albania family planning program and to further understand the factors underlying students' contraceptive choices to inform the development of additional programs. The first objective was to evaluate whether the initial program led to changes in modern contraceptive choices among young men and women in Tirana and Vlorë. As described above, three components of the intervention (mass media, pharmacist education, and intensive peer lead interpersonal communication with university students) were implemented in a controlled manner. Therefore, it was possible to not only evaluate the effect of the full three-component intervention, but also to examine the added benefit of the intensive peer lead communication components with young men and women.

#### 2. *Methodology*

The study was conducted by SRC&IT, a local research group; the C-Change country office staff; and a U.S.-based consultant. The team worked together to ensure that the questionnaires were properly translated into Albanian and then back-translated into English to ensure the fidelity of the translation. The team recruited local graduate students in psychology, sociology, and related fields to collect data and then trained the students in the methodology, instruments, use of PDAs, confidentiality, and ethics.

#### **Description of Part 1 and Part 2 of the evaluation**

##### **1) Assessment of the pharmacists' communication styles and accuracy of information**

Part 1 of the research used both qualitative and quantitative approaches. The quantitative approach was a short face-to-face interview with pharmacists in the intervention and comparison sites who worked within 200 meters of the University Centers and, in Tirana, the University buildings. The interview assessed pharmacists' knowledge, attitudes, and self-reported behaviors regarding sales of contraceptives; no identifying information was collected beyond basic demographics (gender and age).

For the qualitative portion, the research used trained "mystery clients" who, playing the role of women with little or no knowledge about contraception, asked pharmacists open questions about modern contraceptives and noted on a standardized checklist the pharmacists' attitudes and style, whether they provided vital and accurate information, and whether they provided a referral to an appropriate doctor.

We hypothesized that, at the end of the intervention, the pharmacists would show increased knowledge about modern methods of contraception, more positive attitudes toward modern contraception, and improved communications with their clients, and that they would refer more clients to physicians.

**Interviewers** – The short quantitative interviews were conducted by C-Change staff and SRC&IT. All interviewers were skilled in interviewing techniques and were trained for this particular interview. Six young university women were recruited and trained to serve as mystery clients. Both the survey interviewers and the mystery clients were trained in procedures to protect the confidentiality of the pharmacist data.

**Data collection** – The data were collected using a standardized interview instrument for both the survey interviews and the mystery client activities. For the survey interviews, the interviewers approached prospective respondents in the pharmacy, introduced themselves and the study, and took the participants through the consent process. Data were collected before the start of the intervention (late January 2009) and again at the end (May-June 2009).

**Questions of interest:**

- What are pharmacists telling women about modern contraception?
- How accurate is this information?
- What misperceptions do pharmacists have about modern contraception?
- What misinformation are pharmacists giving clients?
- What biases exist among pharmacists when it comes to contraception and family planning?
- Do pharmacists refer clients to see a doctor when talking about contraception?

**2) Survey of young men and women**

For this part of the study, young men and women living in the four selected University Centers were interviewed face to face by trained university students who were from the surrounding universities but did not live in the selected intervention or comparison sites. As described above, the sites were purposely selected from among all the University Centers in both cities to try to ensure that the chosen sites resembled one another, which would make comparison easier. In the end, because of the small size of the other University Centers in Vlorë, we selected one site in Vlorë and used the Elbasan site as Vlorë's comparison. We also chose two Tirana sites. One site in Tirana and the Vlorë site received the interpersonal communication component; and one site in Tirana and the Elbasan site received only the national media campaign. Surveys were conducted in both intervention and comparison sites in each city.

Once a student was selected for the study, the interviewer introduced himself/herself, explained the purpose of the study, and then took the participant through the consent process, conducted in Albanian. Each interview was conducted in a private area in the participant's room.

The interviews were conducted twice, in late January/early February and again in May/early June. This provided two data points to measure incremental changes in attitudes, awareness, and behavior over a short period (four months).

**Interviewers** – There were four teams of interviewers, two female and two male. One team of each gender was recruited from universities in Tirana and another team of each gender from universities in Vlorë; those from Vlorë were used in Elbasan as well as in Vlorë. The interviewers were recruited from University Centers that were not participating in the study to reduce the chances that an interviewer and potential participant would know each other.

All interviewers went through an intense four-day training that covered such issues as interviewing skills, the survey instrument, the consent form process, confidentiality and ethics of interviewing, using a PDA for data collection, procedures for selecting potential subjects, daily procedures for picking up PDAs and returning them to their Team Leaders.

**Sampling approach** – Working with the management of the selected University Centers, we obtained a list of all residents currently living in the University Centers and numbered them. We then randomly selected a number between 1 and the total number of individuals registered in the housing units. Starting with the person with the randomly selected number, we then randomly selected every  $n^{\text{th}}$  person, another random number, to interview. We went through the list for males once and then for females until we reached the appropriate sample size. The sample size was calculated with a 15% refusal rate so there was no need to sample with replacement. If someone was not willing to participate, the interviewer thanked the person and moved on to the next person on the list.

**Sample size** – The sample size calculation was based on a review of several key variables. The largest sample size needed to measure significance was chosen so that each variable could be accurately measured. All of the calculations were based on an alpha of .05 and a beta of .20 for a one-sided test. A one-sided test was chosen because we were interested in specific directions of change for each variable of interest. The values for the baseline data ( $p_1$ ) were taken from the “Reproductive Health Survey, Albania 2002.” Because we randomly selected respondents, the design effect is 1. The following formula was used to calculate the sample size:

$$n = D \frac{\left[ \sqrt{2P(1-P)}Z_{1-\alpha} + \sqrt{P_1(1-P_1) + P_2(1-P_2)}Z_{1-\beta} \right]^2}{\Delta^2}$$

Where:

D = design effect;

$P_1$  = the estimated proportion at the time of the first survey;

$P_2$  = the proportion at some future date such that the quantity ( $P_2 - P_1$ ) is the size of the magnitude of change it is desired to be able to detect;

$P = (P_1 + P_2) / 2$ ;

$\Delta^2 = (P_2 - P_1)^2$

$Z_{1-\alpha}$  = the z-score corresponding to the probability with which it is desired to be able to conclude that an observed change of size ( $P_2 - P_1$ ) would not have occurred by chance. For this survey we used a one-sided test – assuming that modern contraception awareness and use will increase as a result of interventions; and

$Z_{1-\beta}$  = the z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size ( $P_2 - P_1$ ) if one actually occurred.

$\alpha = 0.05$  ( $Z_{1-\alpha} = 1.65$ )  $\beta = 0.20$  ( $Z_{1-\beta} = 0.84$ )

This formula resulted in the following sample sizes for males and females.

**Table 1: Sample size distribution for males and females, by sites**

Site	Female	Male	Total
Tirana Intervention	340	305	645
Tirana Comparison	340	305	645
Vlorë Intervention	340	305	645
Vlorë Comparison (Elbasan)	340	305	645
Total	1,360	1,220	2,580

**Data collection** – Each interviewer used a PDA to conduct the interview. The questionnaires did not contain any personal identifiers beyond basic demographic variables (gender, age, religion, marital status, dating status). At the end of each day of interviewing, the PDA was returned to a locked secure facility, where the data were synched with a central computer, backed up, cleaned and then deleted from the PDA.

**Questions of interest** – The main questions of interest were:

- How many men and women are aware of different modern methods of contraception?
- Which modern methods are they aware of?
- Which modern methods have they ever used?
- Which methods, modern or traditional, are they currently using? (What did they use at last intercourse?)
- How many women have ever used EC?
- How many use EC exclusively, rather than any other modern or traditional method?
- What are their beliefs about the effectiveness of modern and traditional methods?
- What are their beliefs about side effects of modern and traditional methods?
- What prevents them from using modern methods?
- How many have ever talked about contraception with their sexual partners?
- How many have ever talked about contraception with their parents?
- How many have ever talked about contraception with a pharmacist or physician?
- How many have heard, seen, or read the C-Change media campaign?

### ***3. Ethical considerations***

**Ethical review** – The protocol, informed consent forms, and other requested documents were reviewed by both a U.S. Institutional Review Board (IRB) as well as the National Committee on Ethics in Albania. All documents (protocol, consent forms, questionnaires, and requested IRB application forms) were presented to both committees and were translated into Albanian for the in-country review.

**Consent process** – When approaching a prospective participant, each interviewer introduced himself/herself and the study. If the prospective participant was interested in proceeding, she/he was taken through the consent form. Each interviewer gave each participant a copy of the form to read. At the end, participants were asked if they had any questions and were reminded of three key issues: 1) They had the right to refuse to answer any questions with which they were uncomfortable; 2) they could end the interview at any moment without any repercussions; and 3) their information would be kept in the strictest of confidence.



After reading and orally agreeing to participate in the study, the participant was given a copy of the form with the principal investigator's contact information, should he/she have any problems or further questions after the interview. We obtained a waiver of documentation of consent based on U.S. regulations (45 CFR). Participants were given a written informed consent form to read and keep, but the requirement that they sign the consent form was waived, and their oral agreement indicated consent to participate. The following criteria were the basis for requesting a waiver of documentation of consent:

(c) An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either:

(1) That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality, or

(2) That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

For this study, both of these requirements were met.

#### IV. Introduction to the data

Baseline and follow-up data were collected at all four sites. The baseline was conducted in early February, before the start of the project, and the follow-up was conducted in late May and early June, as the school year ended and after the pharmacy intervention had concluded.

Since the program’s primary objectives were to increase awareness, alter attitudes about modern contraceptive methods, and increase communication with relevant others about contraception, three key variables for evaluating the program were: 1) the percentage of respondents able to spontaneously identify various modern contraceptive methods without being prompted (which could indicate that respondents are familiar with the method and aware that it is an option that they might consider), 2) respondents’ perceptions of the effectiveness of the different methods (with the goal that respondents will view modern methods as effective more often than ineffective and that the reverse will happen with the traditional methods of the rhythm method and withdrawal.), and 3) the set of variables pertaining to respondents’ views of the importance of communicating about contraception with sexual partners and pharmacists.

Tables 2 and 3 provide a summary of the demographics of the youth and pharmacists who participated in the survey.

**Table 2: Summary demographics for youth survey**

	<b>Tirana Engineer Building Dorms Comparison Group</b>	<b>Tirana Student City Dorms Intervention Group</b>	<b>Vlorë</b>	<b>Elbasan</b>
<b>Baseline Youth</b>				
<b>Sample Size</b>	644	664	432	439
<b>Male</b>	47.50%	46.50%	20.80%	22.60%
<b>Female</b>	52.50%	53.50%	79.20%	77.40%
<b>Mean Age</b>	20.8	20.51	19.87	19.89
<b>Married + Cohabiting</b>	3.88%	3.46%	5.79%	5.24%
<b>Single</b>	96.12%	96.54%	94.21%	94.76%
<b>Muslim</b>	62.58%	61.75%	68.75%	78.58%
<b>Orthodox</b>	22.05%	21.54%	22.45%	7.74%
<b>Roman Catholic</b>	9.16%	8.13%	5.32%	7.06%
<b>Follow-Up Youth</b>				
<b>Sample Size</b>	682	673	425	421
<b>Male</b>	50.40%	49.20%	20.90%	19%
<b>Female</b>	49.60%	50.80%	79.10%	81%
<b>Mean Age</b>	21.24	20.89	20.16	20.3
<b>Married + Cohabiting</b>	5.57%	8.02%	4%	9.97%
<b>Single</b>	94.40%	91.90%	96%	90%
<b>Muslim</b>	69.35%	61.96%	72.90%	85.50%
<b>Orthodox</b>	16.27%	23.92%	21.41%	8.31%
<b>Roman Catholic</b>	7.91%	6.68%	2.35%	2.37%

**Table 3: Summary demographics for pharmacist survey**

	<b>Tirana Comparison Group</b>	<b>Tirana Intervention Group</b>	<b>Vlorë</b>	<b>Elbasan</b>
<b>Baseline Pharmacists</b>				
<b>Sample Size</b>	48	66	33	30
<b>Male</b>	19.60%	15.50%	18.20%	16.70%
<b>Female</b>	80.40%	84.50%	81.80%	83.30%
<b>Mean Age</b>	38	43.3	52	49.7
<b>Follow-Up Pharmacists</b>				
<b>Sample Size</b>	55	58	33	30
<b>Male</b>	14%	24%	9.10%	16.70%
<b>Female</b>	86%	76%	90.90%	83.30%
<b>Mean Age</b>	38.9	44.5	52	49.7

## V. Youth Survey

### 1. *Exposure to the two arms of the social and behavior change communication program*

Some respondents in all four sites stated that they had heard something about contraception in the last three months, at both baseline and follow-up (Table 4). While the percentage of respondents who had heard something increased in all four sites, significantly more respondents reported having seen something in the last three months in the two intervention sites than in the comparison sites.

**Table 4: Exposure to information on contraception in last three months**

	Elbasan	Vlorë	Tirana Engineer Building Dorms Comparison Group	Tirana Student City Dorms Intervention Group
<b>Baseline</b>	25.1%	43.3%	26.4%	33.6%
<b>Follow-up</b>	27.3%	66.4%*	44.3%	79.2%*

\*p<0.01

A relatively large percentage of respondents in all four sites stated that they had seen the C-Change message on TV, and a few had also heard it on the radio (Table 5). As would be expected, only in the two intervention sites did a significant percentage of respondents read a pamphlet or participate in a peer education program on contraception. Of those who participated in the peer education program, 97% of the Tirana intervention respondents and 98% of the Vlorë intervention respondents rated their experience as “excellent” or “good.”

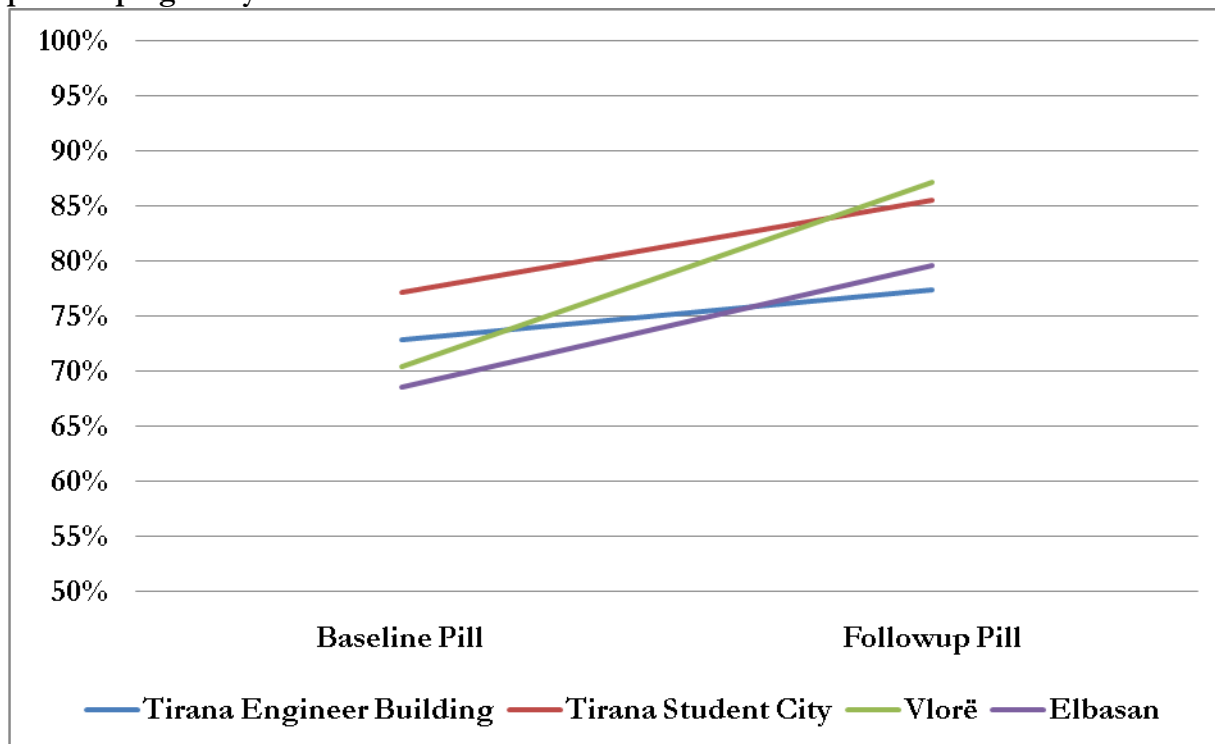
**Table 5: Exposure to media and peer education in last three months**

	Elbasan	Vlorë	Tirana Engineer Building Dorms Comparison Group	Tirana Student City Dorms Intervention Group
<b>Radio</b>	15.7%	23.4%	19.1%	9.5%
<b>TV</b>	60.0%	41.1%	54.4%	45.2%
<b>Pamphlet</b>	5.2%	50.4%	12.1%	50.1%
<b>Peer Education</b>	6.1%	38.1%	12.8%	46.9%

## 2. Awareness of different modern contraceptive methods

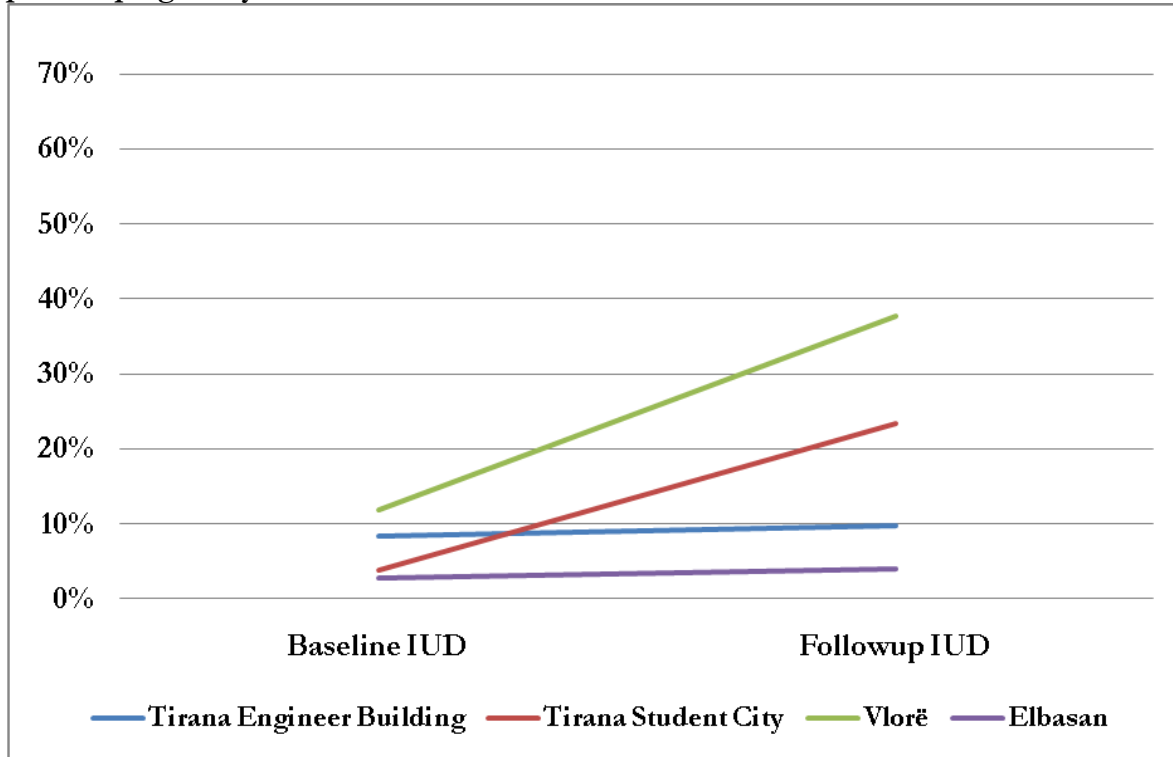
The media campaign and the peer education program sought to increase the population's awareness of modern forms of contraception. In the four months from baseline to follow-up, awareness of the Pill increased in all four sites at nearly the same rate, with increases ranging from five points in the Tirana Engineer Building to 17 points in Vlorë. None of the increases were significantly higher than any others (Graph 1).

**Graph 1: Percentage of students able to spontaneously identify the Pill as a method to prevent pregnancy**



Both intervention sites showed a significantly higher increase in awareness of IUD than the two comparison sites (Graph 2). Vlorë increased by 26 points and Tirana Student City by 19 points, while Tirana Engineering Building increased by 2 points and Elbasan by 1 point.

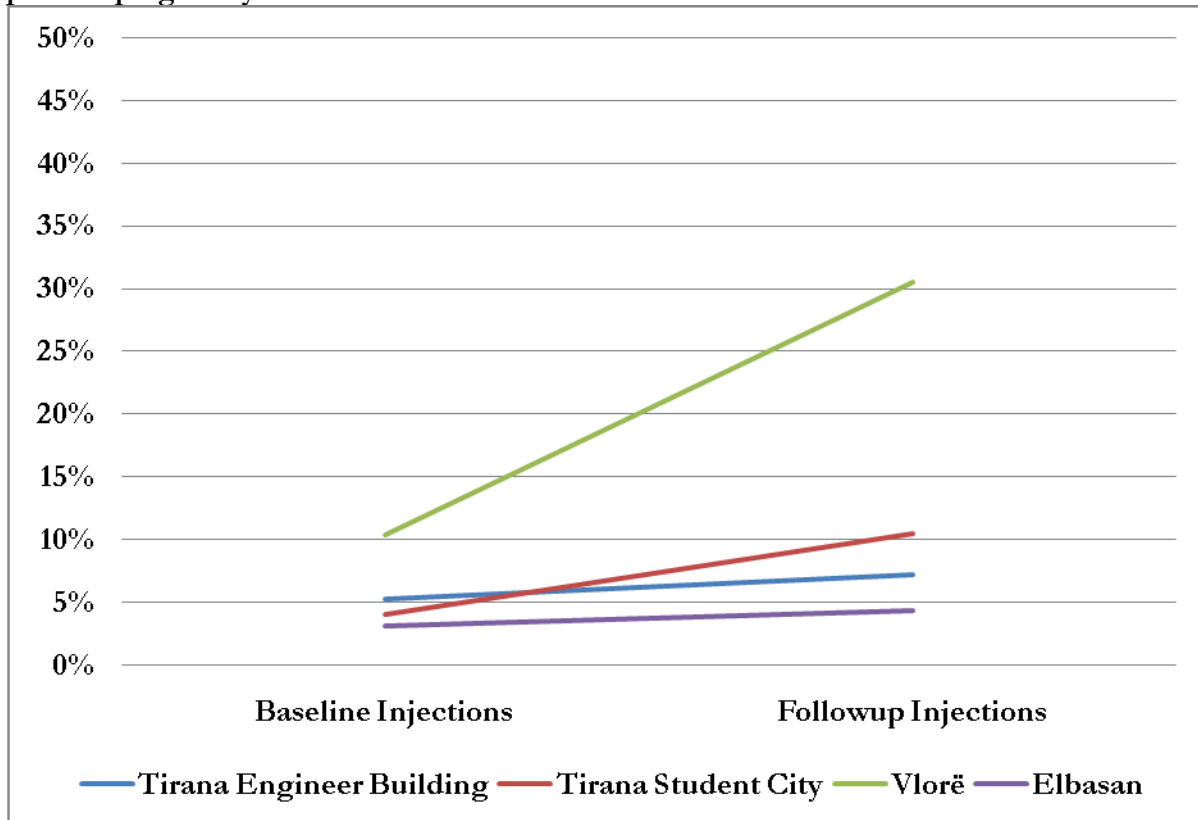
**Graph 2: Percentage of students able to spontaneously identify the IUD as a method to prevent pregnancy**



Condom awareness started off high, ranging from a low of 80% in Vlorë to a high of 92% in both Tirana sites. While there were increases in all four sites, there was no significant difference in those increases among sites.

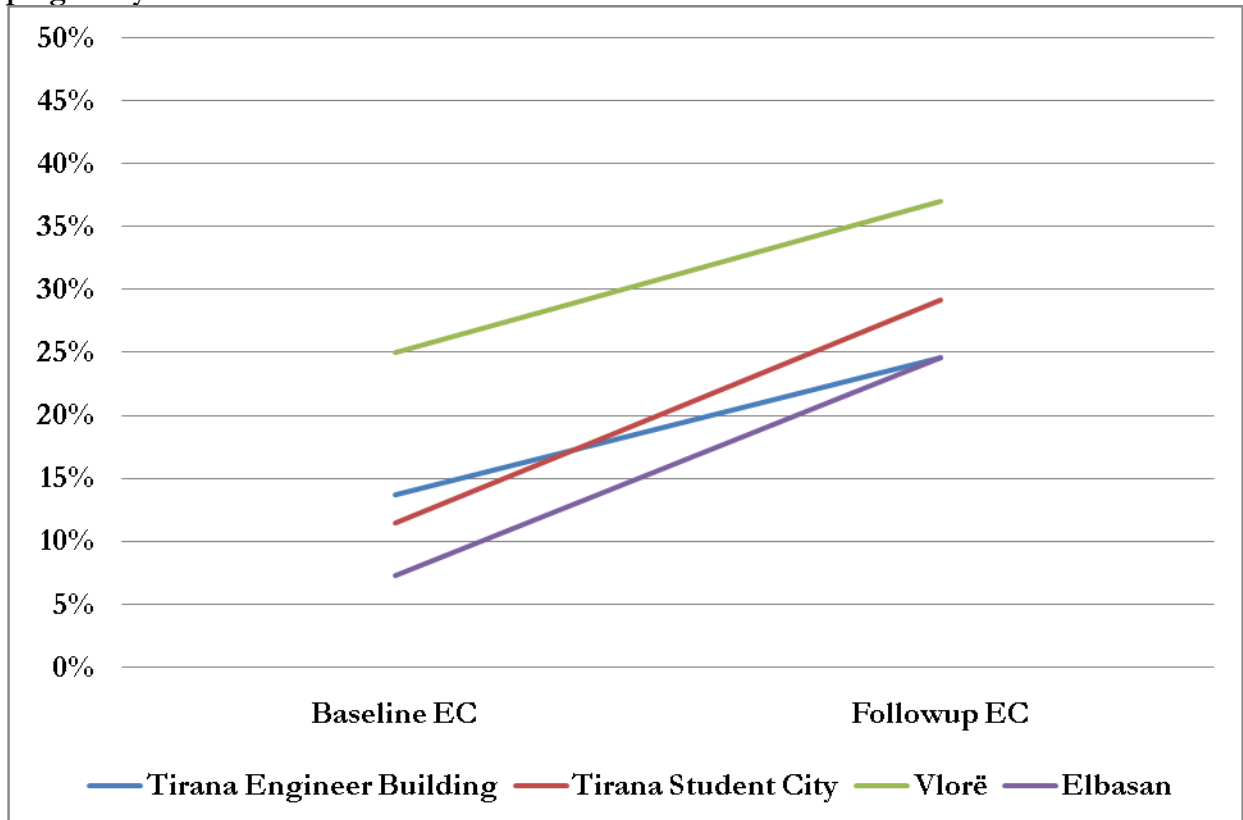
Awareness of injectables started off low in all four sites, 3-5% in Elbasan, Tirana Engineer Building, and Tirana Student City, and 10% in Vlorë. However, both intervention sites saw a significant increase over the comparison sites. Tirana Student City increased from 4% to 11% and Vlorë increased to 31% (Graph 3).

**Graph 3: Percentage of students able to spontaneously identify injectables as a method to prevent pregnancy**



EC was better known than injectables but still relatively unknown at baseline. Less than 15% of students in Elbasan, Tirana Engineer Building, and Tirana Student City spontaneously identified EC as a method for pregnancy prevention, while 25% of respondents in Vlorë were aware of EC as an option. At follow-up, awareness in the Tirana intervention site (Student City) increased significantly more than the comparison group, a 17-point increase vs. an 11-point increase. However, the reverse happened in Vlorë and Elbasan. While spontaneous awareness of EC increased at both sites, there was a significantly larger increase in Elbasan than in Vlorë, 18 points vs. 12 points (Graph 4).

**Graph 4: Percentage of students able to spontaneously identify EC as a method to prevent pregnancy**





In spite of the findings on EC awareness, in general the peer education program appears to have increased awareness of modern contraceptives among students in the intervention sites more than among students in the comparison sites, who were only exposed to the media campaign (Table 6).

**Table 6: Changes in spontaneous recall from baseline to follow-up**

Modern contraceptive method	Tirana Engineer Building Dorms Comparison Group	Tirana Student City Dorms Intervention Group	Elbasan Comparison Group	Vlorë Intervention Group
Pill	ND	ND	ND	ND
IUD		SD		SD
Condom	ND	ND	ND	ND
Injectables		SD		SD
EC		SD	SD	

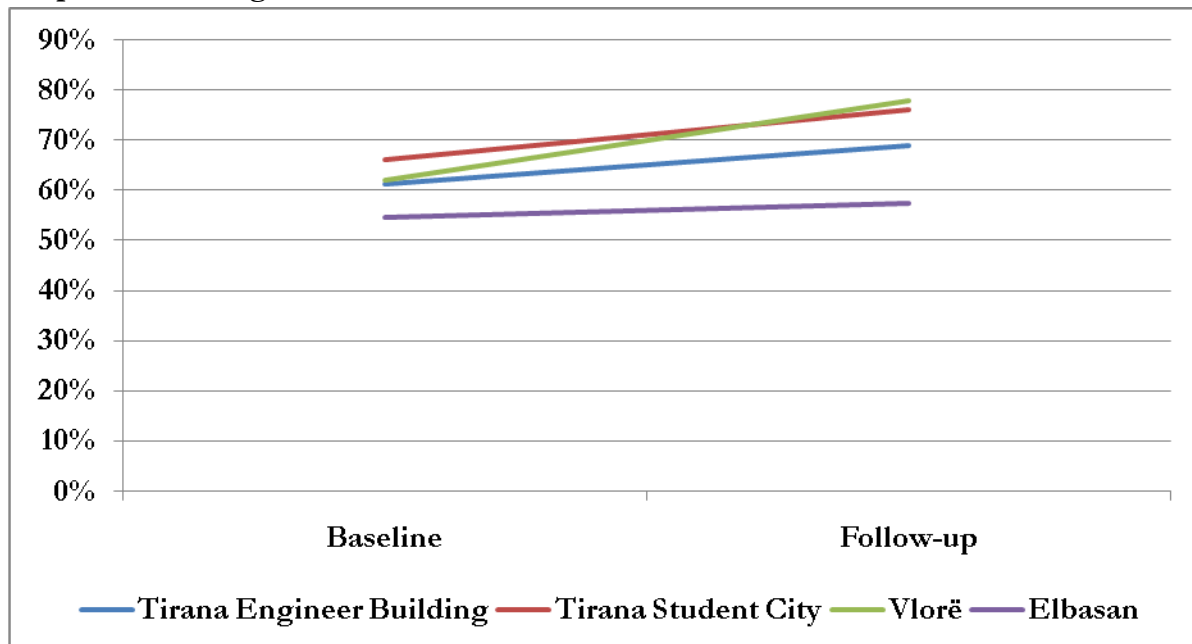
ND = no difference; SD = significant difference ( $p < 0.01$ )

### 3. Perception of effectiveness of modern contraceptive methods

For each modern method that students recalled on their own (spontaneous recall), they were also asked how effective they believed the method was. We found that the perceptions varied by method and that the perceived effectiveness of almost all methods showed some level of improvement by the end of the program. We also found that changes took place in the intervention sites (Tirana Student City and Vlorë) that did not occur in the comparison sites (Tirana Engineer Building and Elbasan).

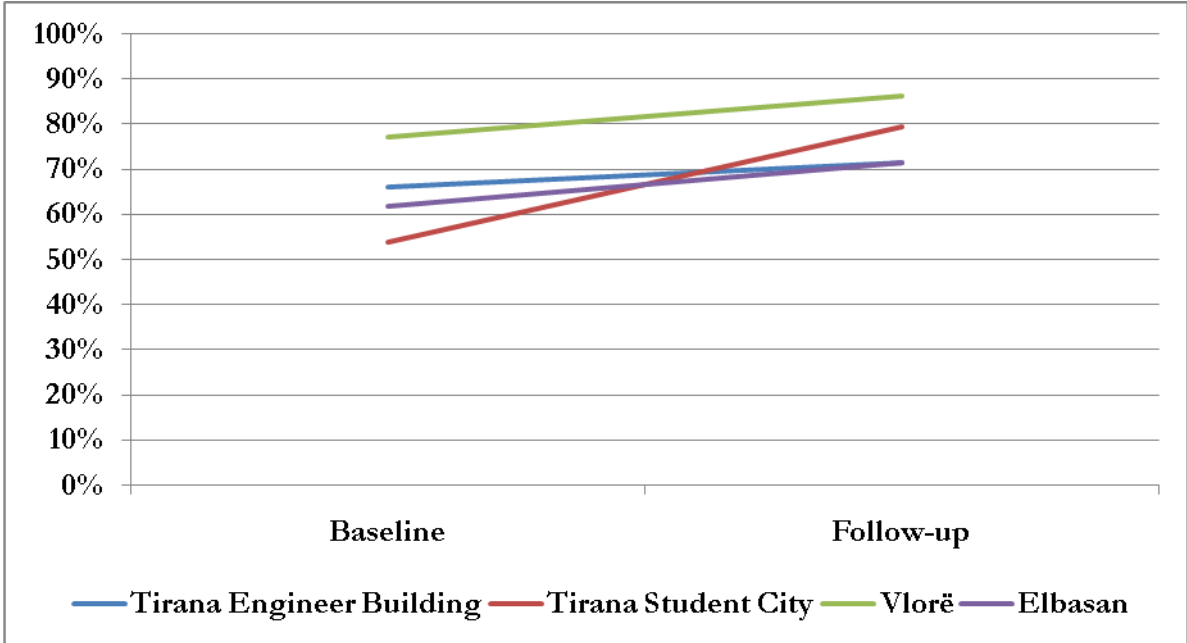
While perceptions of the Pill's effectiveness increased at both Tirana Student City and Tirana Engineer Building, they increased at about the same rate. However, there was a significant difference between Vlorë and Elbasan, with Vlorë showing a larger increase in the percentage of students who believe the Pill is effective.

**Graph 5: Percentage of students who believe the Pill is effective**



Perceptions of the effectiveness of IUD showed a significantly larger increase in the intervention sites (Tirana Student City and Vlorë) than in the comparison sites (Graph 6).

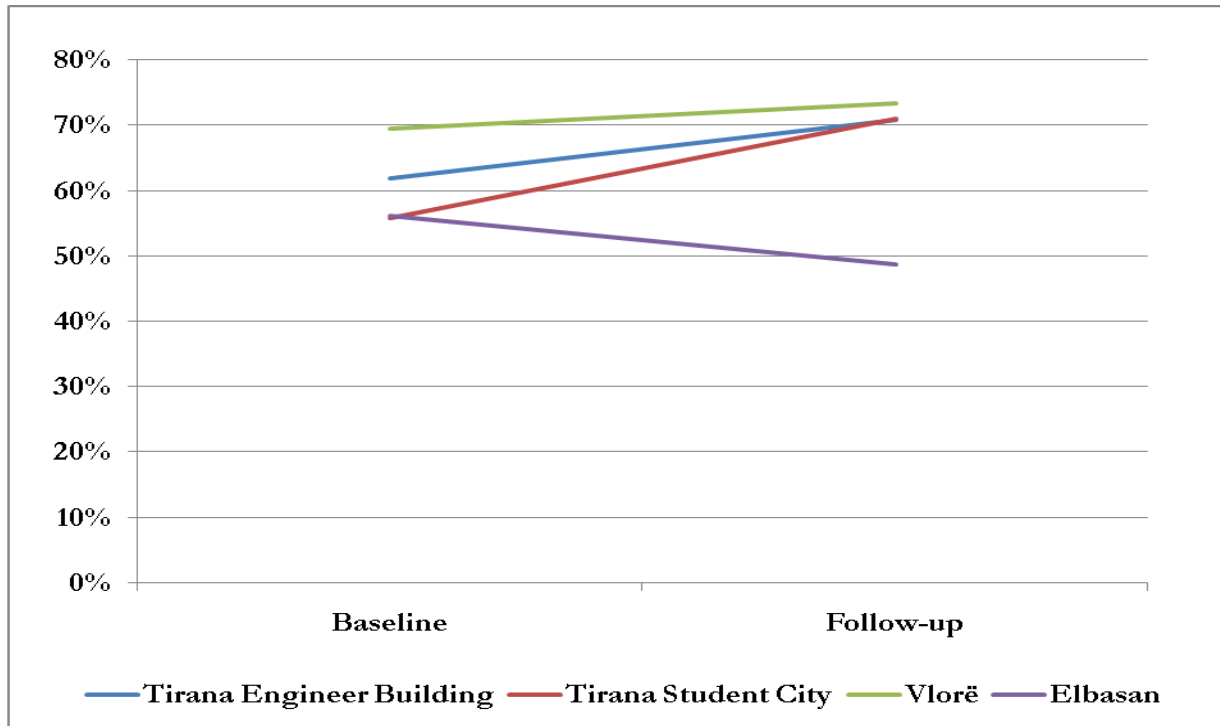
**Graph 6: Percentage of students who believe the IUD is effective**



There was no change in perception of the condom’s effectiveness. This might have been due to the high percentage of students in all sites who both recalled the condom and already believed it to be effective. This was true at baseline and follow-up, leaving little or no room for growth.

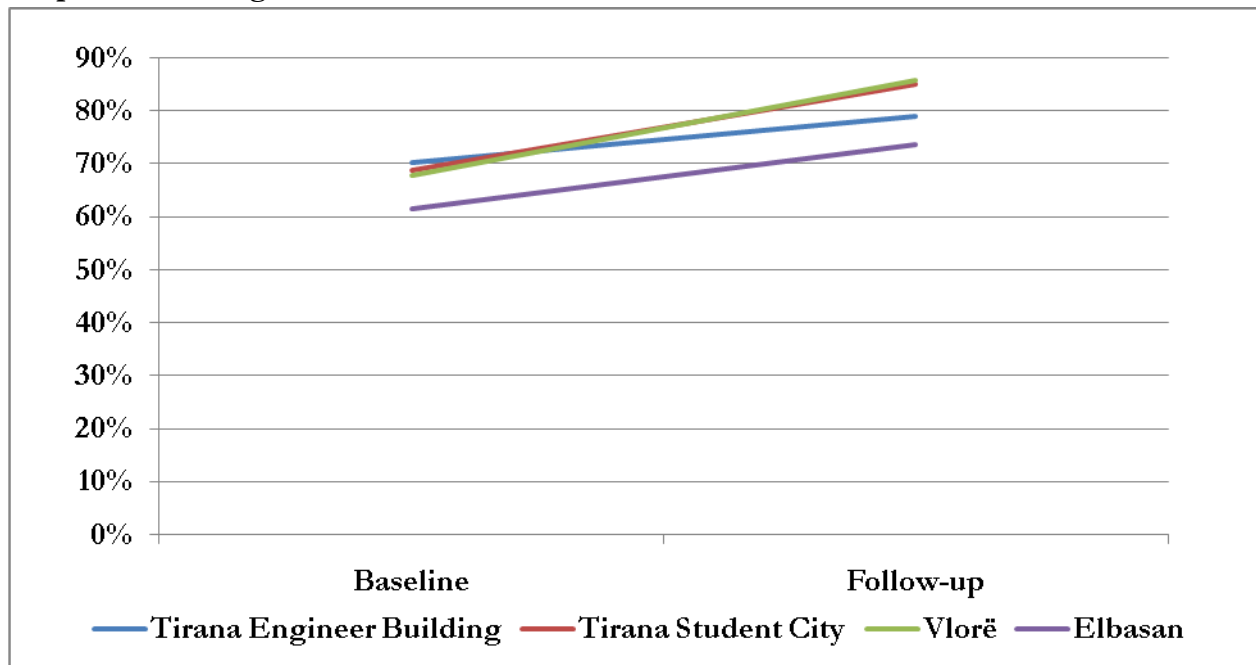
Perceptions of the effectiveness of injectables had a larger increase in the intervention sites than in the comparison sites. At baseline, the percentage of students who believed injectables were effective was lower in Tirana Student City (intervention site) than in Tirana Engineer Building (comparison site). But by the end of the project, slightly more students in Tirana Student City believed that injectables were effective than in Tirana Engineer Building, and the percentage increase was significantly higher in Tirana Student City than in Tirana Engineer Building. Also, this perception showed a slight increase in Vlorë and a decrease in its comparison site, Elbasan (Graph 7).

**Graph 7: Percentage of students who believe injectables are effective**



The percentage of students who believed EC is effective increased in all sites. However, the increase was significantly larger in the intervention sites than the comparison sites (Graph 8).

**Graph 8: Percentage of students who believe EC is effective**



Again, the baseline and follow-up surveys in these four sites indicate that the peer education program had a significant effect on students' perceptions of the effectiveness of various modern methods (Table 7).

**Table 7: Changes in perceptions of modern methods' effectiveness, baseline to follow-up**

Modern contraceptive method	Tirana Engineer Building Comparison Group	Tirana Student City Intervention Group	Elbasan Comparison Group	Vlorë Intervention Group
Pill	ND	ND		SD
IUD		SD		SD
Condom	ND	ND	ND	ND
Injectables		SD		SD
EC		SD		SD

ND = no difference; SD = significant difference ( $p < 0.01$ )

By comparison, there were no statistically significant differences in any of the sites, nor between sites, in the perception of how effective the traditional rhythm and withdrawal methods were. The apparent differences in Vlorë and Elbasan are due to small numbers of individuals identifying and rating these methods in those sites (Table 8).

**Table 8: Changes in perceptions of traditional methods' effectiveness, baseline to follow-up**

Traditional Method	Tirana Engineer Building Comparison Group	Tirana Student City Intervention Group	Vlorë	Elbasan
Rhythm Baseline	30%	45%	47%	33%
Rhythm Follow-up	30%	40%	57%	44%
Withdrawal Baseline	57%	57%	64%	59%
Withdrawal Follow-up	55%	50%	63%	62%

#### ***4. Communication and contraception***

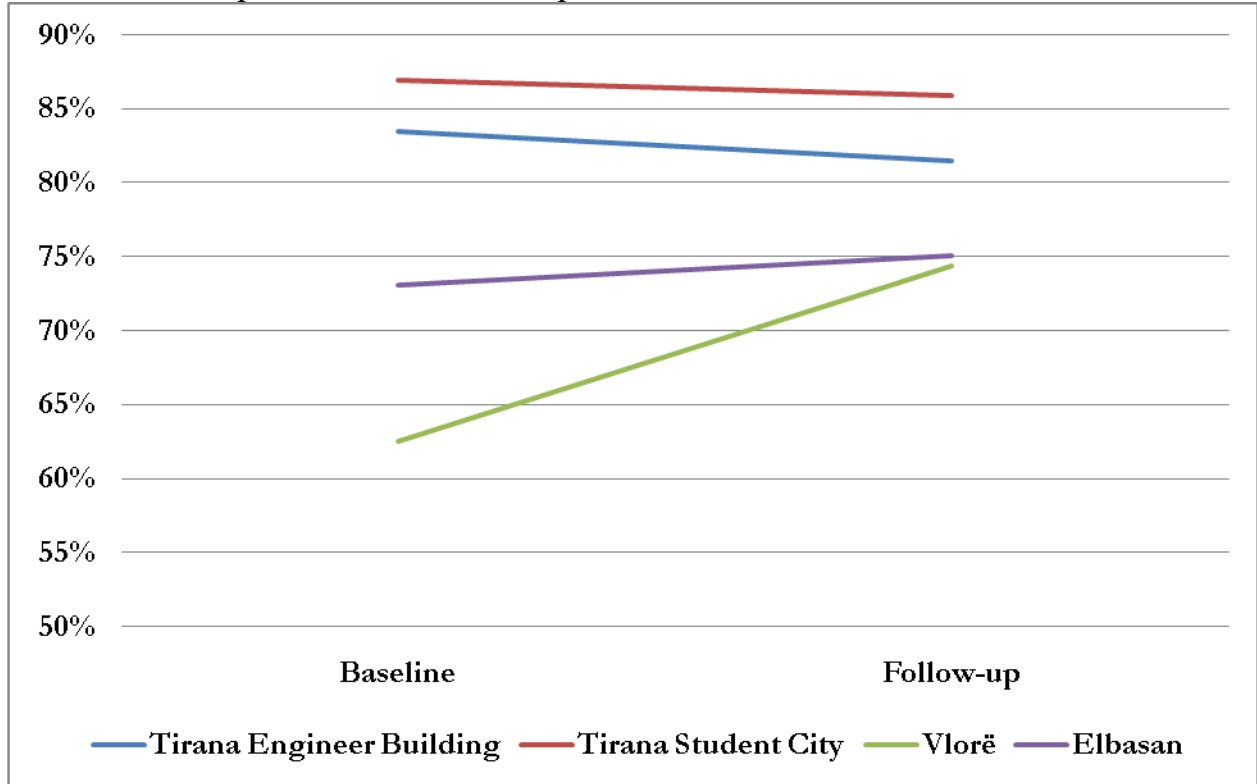
The program was designed to affect not only people's awareness of modern contraceptive methods but also their comfort in discussing various methods with their sexual partners and pharmacists, given that pharmacies were identified as the most common place to get contraceptives and contraceptive information. To measure these domains, we focused on the following four questions:

- How comfortable are you in discussing contraception with a sexual partner (among respondents who have had sex)?
- Is a pharmacist a good source of information on contraception?
- Is it a good idea to discuss contraceptives with a pharmacist?
- How comfortable are you discussing contraception with a pharmacist?

None of these questions showed significantly different changes between intervention sites and comparison sites. However, the trends are in a positive direction. Given more time with the intervention, these modest and statistically insignificant changes might become statistically significant.

On the question of discussing contraception with a sexual partner, only Vlorë showed any increase, by 12 points. The other sites remained virtually the same (Graph 9). Being able to communicate with sexual partners has long been believed to be a major factor in determining contraceptive method choice, if any. The fact that there was no measurable difference between intervention and comparison sites might mean the intervention needed more time.

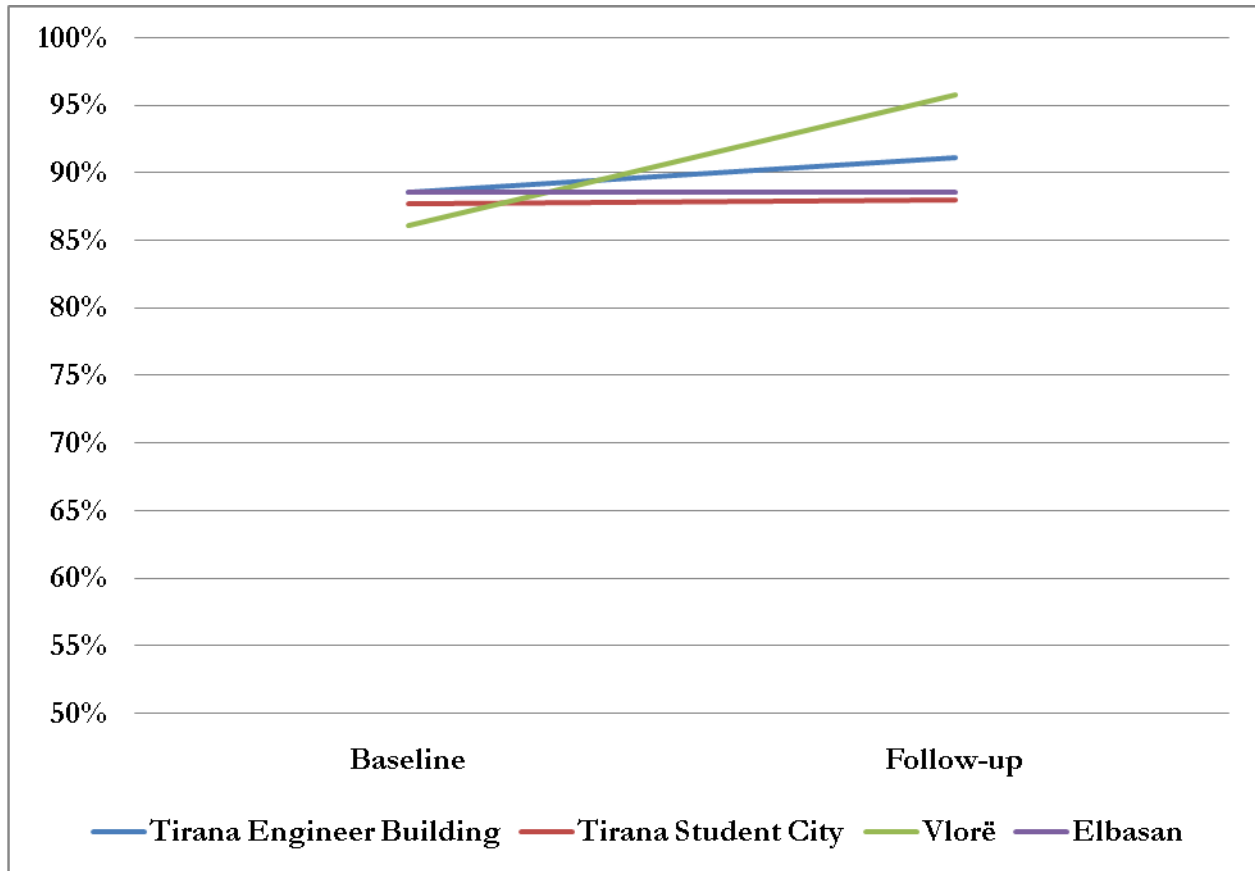
**Graph 9: Percentage of respondents stating they are comfortable or very comfortable talking with their sexual partners about contraception**





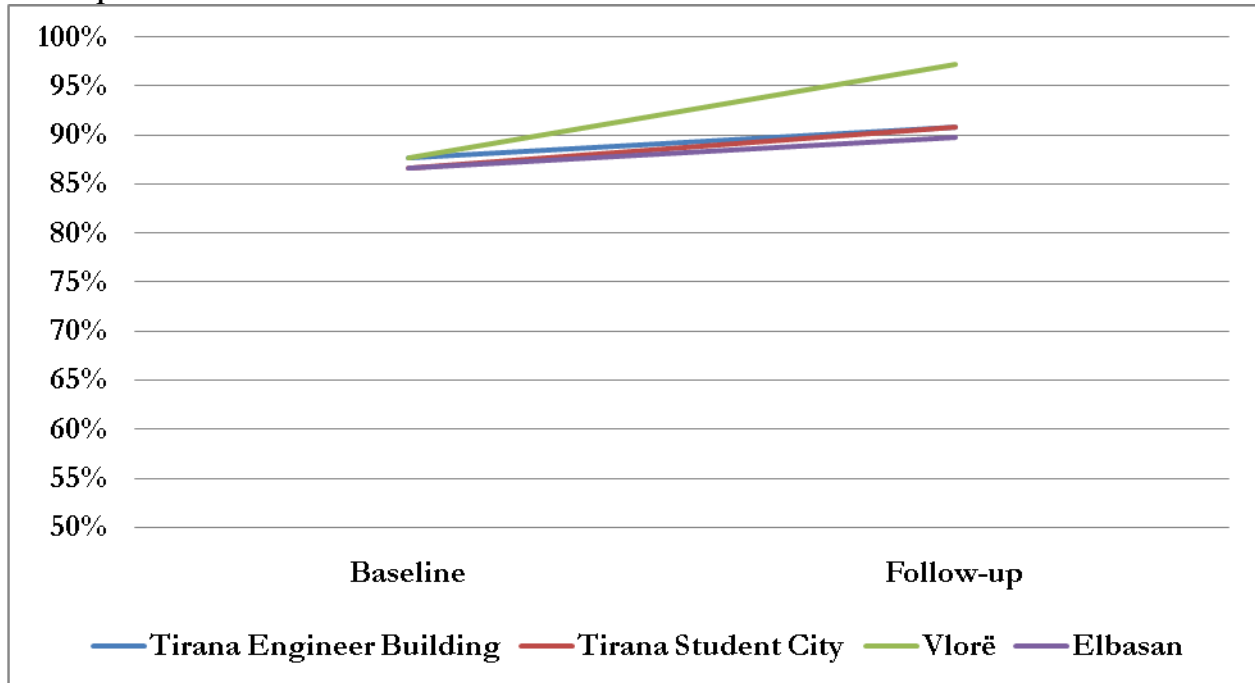
When asked whether pharmacists are a good source of information, Vlorë once again stands out with a 15-point increase. While this is larger than any other increase, it is not statistically significant but does suggest that with more time, the intervention site might have increased even more (Graph 10).

**Graph 10: Percentage of respondents who believe that a pharmacist is a good source of information on contraception**



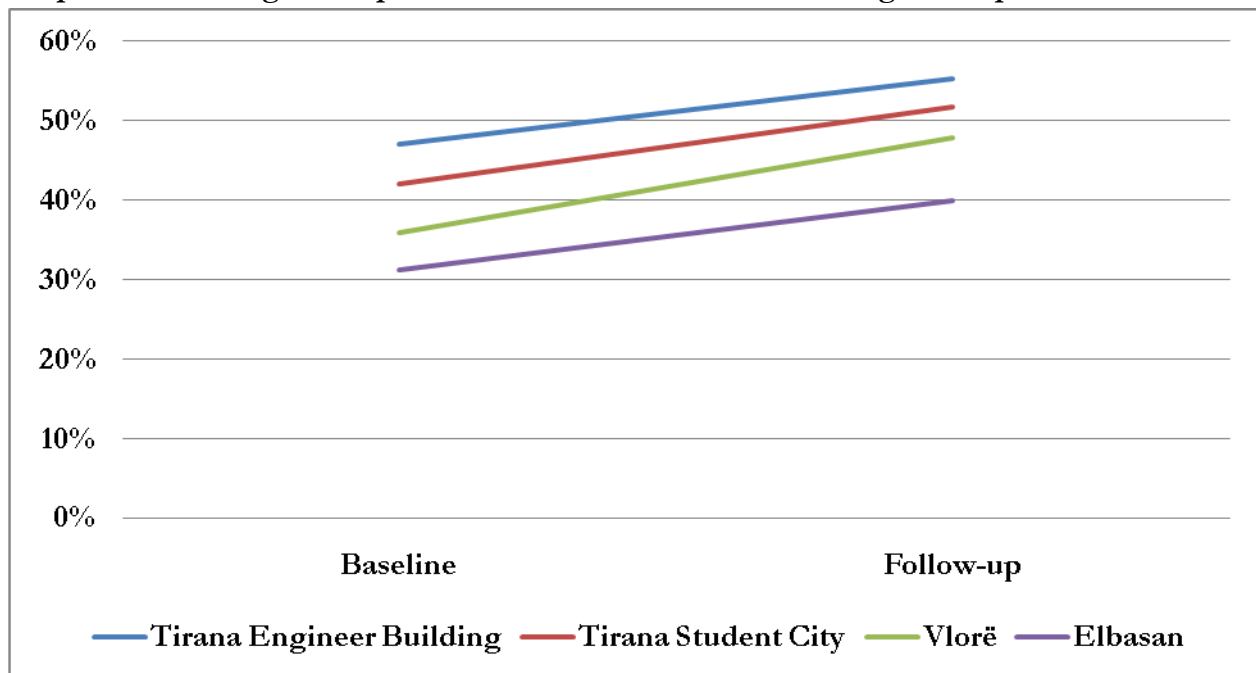
More of the respondents in Vlorë think it is a good idea to talk with a pharmacist about contraception. While this is not a statistically significant change, it is a larger increase than any other site (Graph 11).

**Graph 11: Percentage of respondents who think it is a good idea to discuss contraceptives with a pharmacist**



Regarding perceptions of being comfortable in discussing contraception with a pharmacist, all four sites had an increase of eight to 10 points (Graph 12). Being comfortable talking about contraception with a pharmacist (just as it is with a sex partner) is a small step away from a behavior change. The intervention might not have had enough time to bring about this level of behavior change, particularly since talking with a pharmacist raises issues such as embarrassment when discussing sex with someone and any taboos that go along with that.

**Graph 12: Percentage of respondents who feel comfortable talking with a pharmacist**



### **5. Use of various methods of birth control**

The program’s ultimate goal is to increase the use of modern contraceptive methods among sexually active adults who do not wish to become pregnant. Normally, family planning activities target married couples. As a result, in most family planning studies there tends to be higher numbers of individuals engaging in higher numbers of sex acts than were found in this study. At both baseline and follow-up, approximately 50% of all students acknowledged ever having had sex. Approximately 90% of those students at both baseline and follow-up acknowledged ever using some form of contraception. Furthermore, of those who have ever used contraception, 74% at baseline and 69% at follow-up said that they are currently using a method (these are statistically non-different).

The most frequently used method was the condom (Table 9), followed by withdrawal. This means all other contraceptive methods have few users, which makes measuring any behavior change difficult because of the small numbers and the short period of time for the intervention to take effect. It is possible that if the intervention continued for a longer period, change in use might be measured more easily.

Below is a look at the levels of contraception use by type, baseline/follow-up, and location.

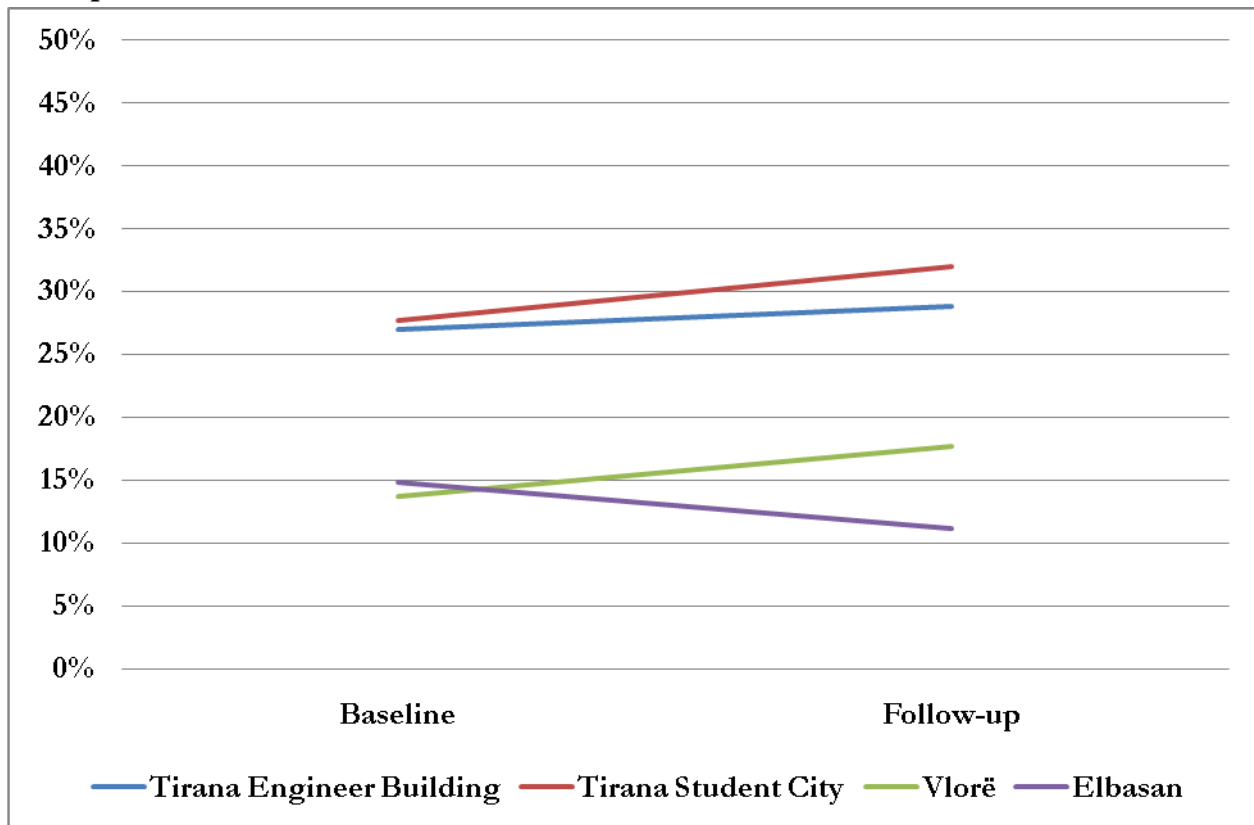
**Table 9: Level of modern contraceptive use from baseline to follow-up**

	<b>Tirana Engineer Building Comparison Group n (%)</b>	<b>Tirana Student City Intervention Group n (%)</b>	<b>Vlorë n (%)</b>	<b>Elbasan n (%)</b>
<b>Condoms Baseline</b>	191 (74.9%)	180 (73.8%)	55 (74.3%)	69 (67.0%)
<b>Condoms Follow-Up</b>	198 (78.0%)	216 (80.0%)	79 (75.2%)	36 (45.6%)
<b>Pill Baseline</b>	17 (7.0%)	20 (7.8%)	6 (8.1%)	1 (1.0%)
<b>Pill Follow-Up</b>	75 (29.5%)	99 (36.7%)	8 (7.6%)	5 (6.3%)
<b>EC Baseline</b>	15 (5.9%)	19 (7.8%)	8 (10.8%)	6 (5.8%)
<b>EC Follow-Up</b>	57 (22.4%)	96 (35.6%)	25 (23.8%)	1 (1.3%)
<b>Injectables Baseline</b>	10 (3.9%)	3 (1.2%)	8 (10.8%)	0 (0.0%)
<b>Injectables Follow-Up</b>	22 (8.7%)	34 (12.6%)	0 (0.0%)	0 (0.0%)

Use of the Pill rose considerably in both the intervention and comparison sites in Tirana, but there was nearly no difference in the other two sites. Similarly, for injectables, there was a large increase in both Tirana sites, but no use in the other two sites. Reported condom use was consistently high at baseline and follow-up in three sites, but in Elbasan, fewer respondents reported using condoms. And for EC use, three sites reported relatively large increases while use dropped to nearly zero in Elbasan. Again, it appears that not enough time has gone by for any real behavior change to show up as a result of the intervention. Additional time and further data collection will be needed to determine if this intervention ultimately leads to increased use of modern contraceptive methods and less reliance on traditional methods.

The percentage of students who purchased some form of contraceptive method appeared to increase in three sites (Graph 13). In Vlorë, the percentage rose from 14% to 18%, a significantly higher increase than in Elbasan, the comparison site, which fell from 15% to 11%. The Tirana sites had increases that were not significantly different, although the increase in Tirana Student City was slightly higher than in Tirana Engineer Building, the comparison site.

**Graph 13: Percentage of students who purchased a contraceptive method from a pharmacist in the previous 3 months**



## 6. Conclusions

Overall, these findings have shown that the intensive peer education intervention can affect knowledge and awareness in just a few months. For some of the youth intervention indicators, sites exposed to both the media campaign and the interpersonal approach had increases that were 5% to 10% higher than in the sites exposed to only the media campaign. Respondents from the intervention sites spontaneously recalled more types of modern contraceptive methods after the intervention than did their counterparts in the comparison sites. Also, more students from the intervention sites perceived modern contraceptives as effective or very effective after the intervention ended than did students in the comparison sites. (Two notable examples are spontaneous recall of EC and perception that the pill is effective, which both showed statistically significant differences between the intervention and comparison sites.)

However, changing behaviors requires more time than was possible during the initial phase of this project. While knowledge and communication about contraception can be influenced by an interpersonal peer education intervention, any real change in uptake of contraceptive use requires more than a few months. Changing a behavior is a process that starts with awareness and ultimately leads to the desired action. Along this process, the project was able to show increased communication with pharmacists as a result of the peer education activity. It seems as if the students are gathering the information that is needed to make an informed choice and the ultimate behavior change to use modern methods.

As seen in other studies, the media campaign was effective in influencing the knowledge and attitudes of those exposed to the campaign (indicated by increases in comparison sites on key variables). However, by adding the Peer Education activity with an emphasis on Interpersonal Communication Skills, the program was able to effect even more change.

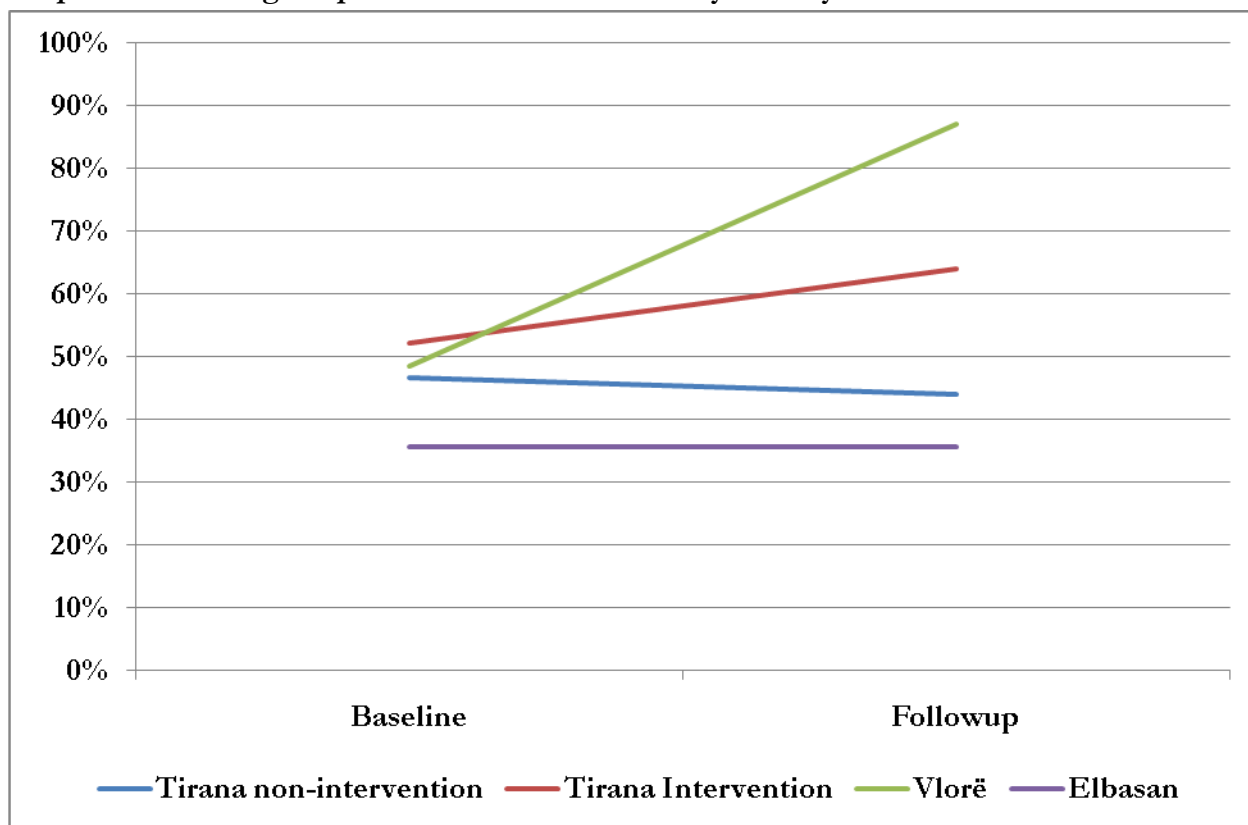
## VI. Pharmacy Survey

The program's main objectives included seeing an improvement in the pharmacists' communication skills. Two key domains of interest were pharmacists' knowledge of modern contraceptive methods and their attitudes about selling modern contraceptives to university-age young adults.

### 1. Knowledge variables

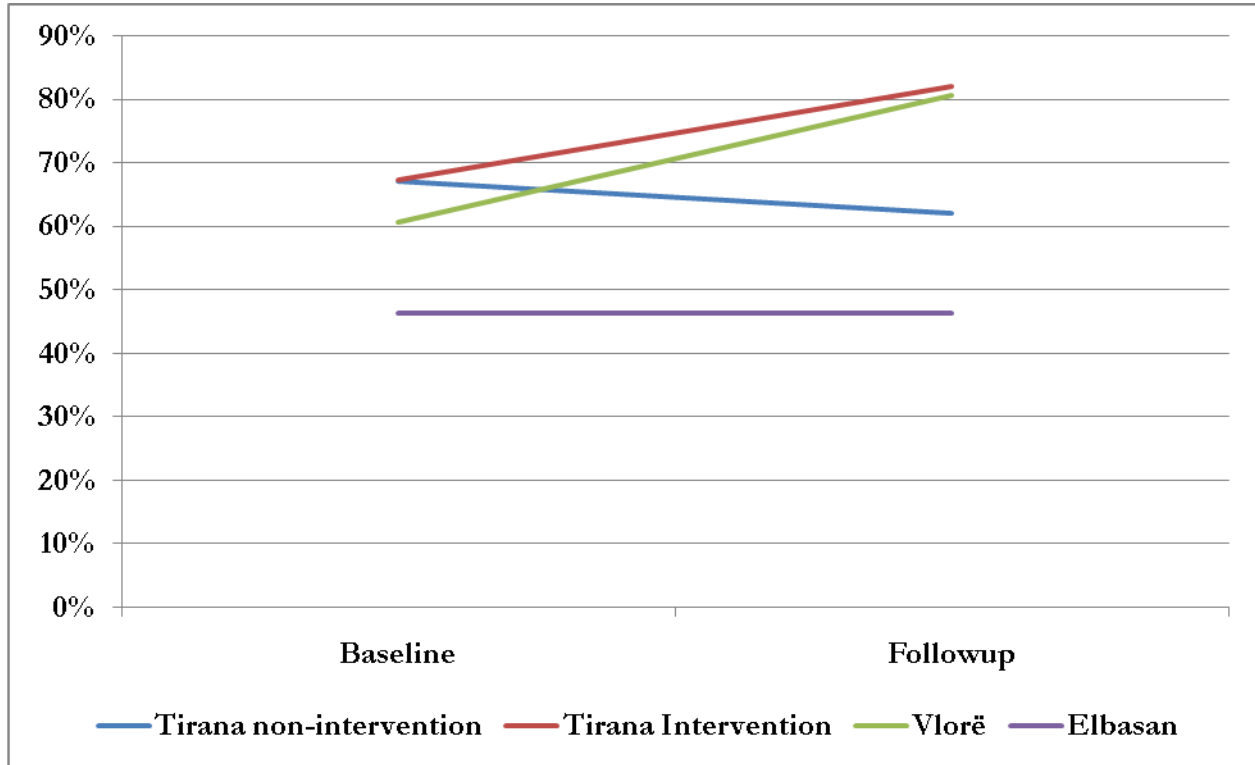
From baseline to follow-up, the percentage of pharmacists who could accurately identify the Pill's accepted level of effectiveness increased significantly in the two intervention sites (Graph 14).

**Graph 14: Percentage of pharmacists able to correctly identify the Pill's effectiveness level**



The analysis also showed a significant increase in the percentage of pharmacists in the two intervention sites (Graph 15) who could accurately identify the effectiveness level of EC. Because the level of effectiveness varies based on the brand of the EC pill and how soon it is taken after unprotected sex, we allowed for answers ranging from 89% to 95%.

**Graph 15: Percentage of pharmacists able to correctly identify EC's effectiveness level**



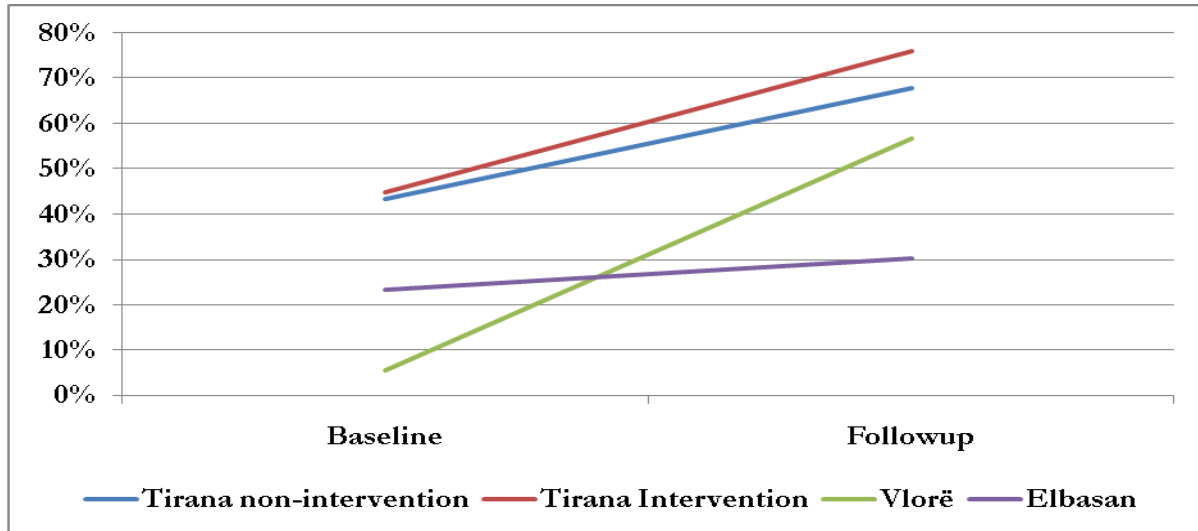


Another measure of increased knowledge was the percentage of pharmacists who could accurately identify how EC works in the body to prevent pregnancy. Two answers were considered acceptable:

- 1) EC inhibits ovulation or fertilization.
- 2) EC prevents the fertilized egg from implanting on the wall of the uterus.

All four sites showed improvement on this question. However, the increases were higher in the intervention sites than in the comparison sites (Graph 16).

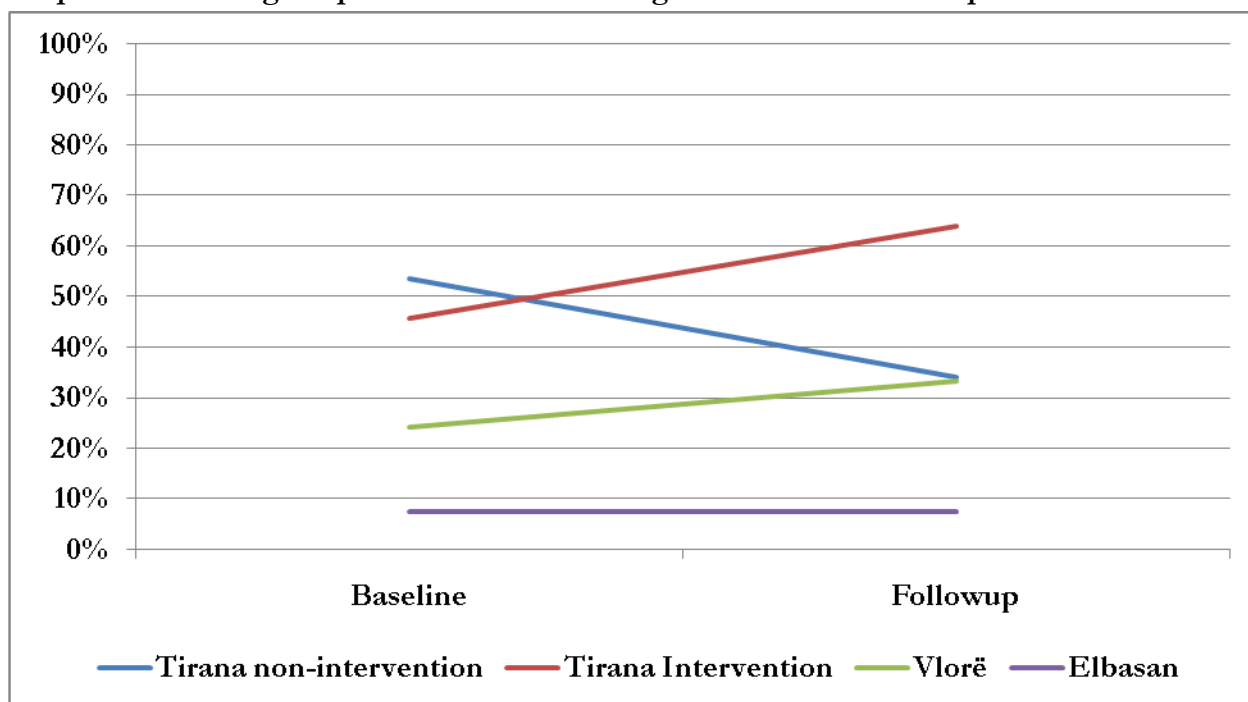
**Graph 16: Percentage of pharmacists with correct knowledge of how EC works in the body**



## 2. Sharing information

The project was interested in increasing the distribution of materials at pharmacies to boost clients' knowledge and awareness of modern methods. We asked pharmacists how often they distribute materials to potential clients. A much larger percentage of pharmacists in the intervention sites than in the comparison sites said they frequently or always distribute contraception materials (Graph 17). Not only do they distribute materials more often in the intervention sites, but the increase from pre-intervention to post-intervention was also large and statistically significant. Pharmacists who did not distribute materials said they would distribute them if they had any.

**Graph 17: Percentage of pharmacists distributing materials on contraception**



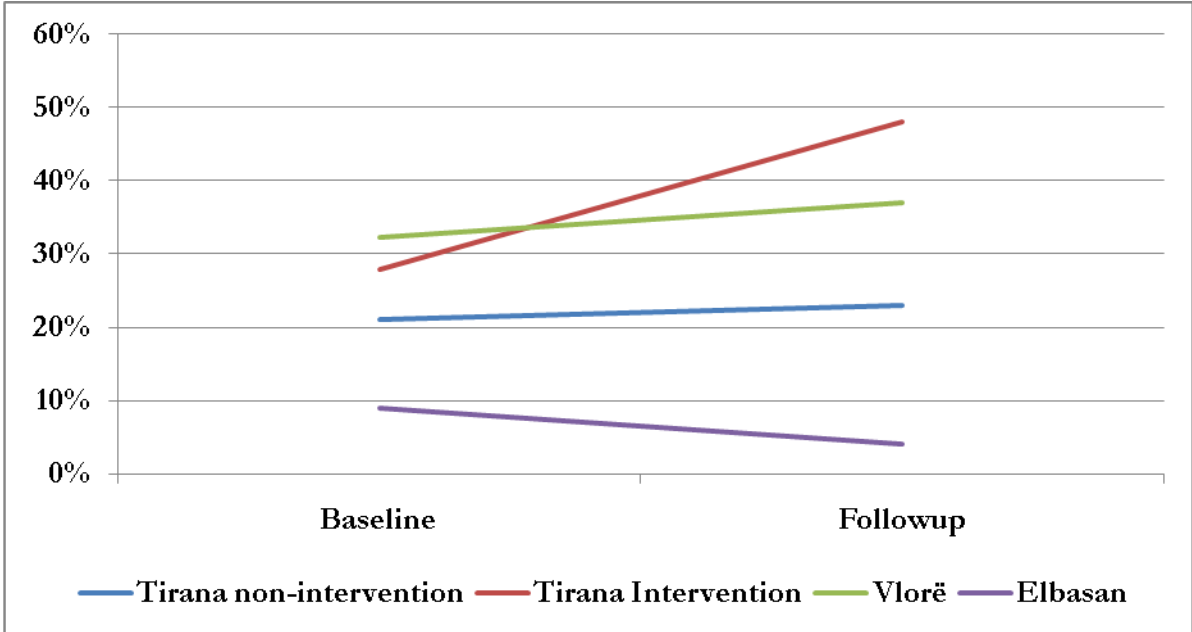
Nearly all pharmacists felt that it was important to discuss side effects with clients. The percentages who agreed that talking about side effects is important ranged from 90% to 96%. Because the numbers were already very high, there was little room for improvement.

The percentage of pharmacists who made clinical referrals either decreased or stayed the same in all four sites. This might be due to timing: The intervention's referral cards came late in the program, so the pharmacists might not have had time to start using them.

As mentioned, the qualitative portion of this assessment used trained mystery clients to help the evaluation team measure the accuracy of the information pharmacists provided and measure the pharmacists' communication skills and attitudes toward the clients. The mystery clients visited pharmacies to ask pharmacists about contraceptives both before and after the intervention.

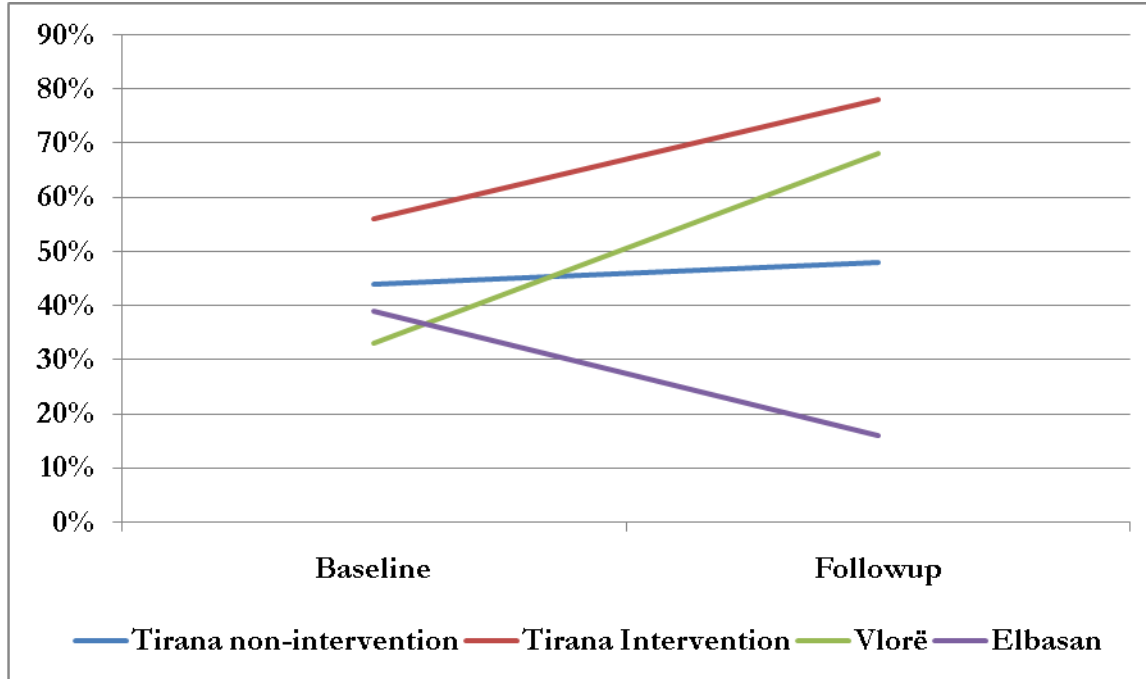
One key finding was that by the end of the intervention, pharmacists in the intervention sites were significantly more likely to have given clients information about more than one contraceptive method than pharmacists in the comparison sites (Graph 18).

**Graph 18: Percentage of pharmacists who offered information on multiple methods of contraception**



Both the survey and the mystery clients found that pharmacists in the intervention sites were also more likely to explain side effects and what to do should they occur (Graph 19).

**Graph 19: Percentage of pharmacists offering information on side effects of modern contraceptive methods**

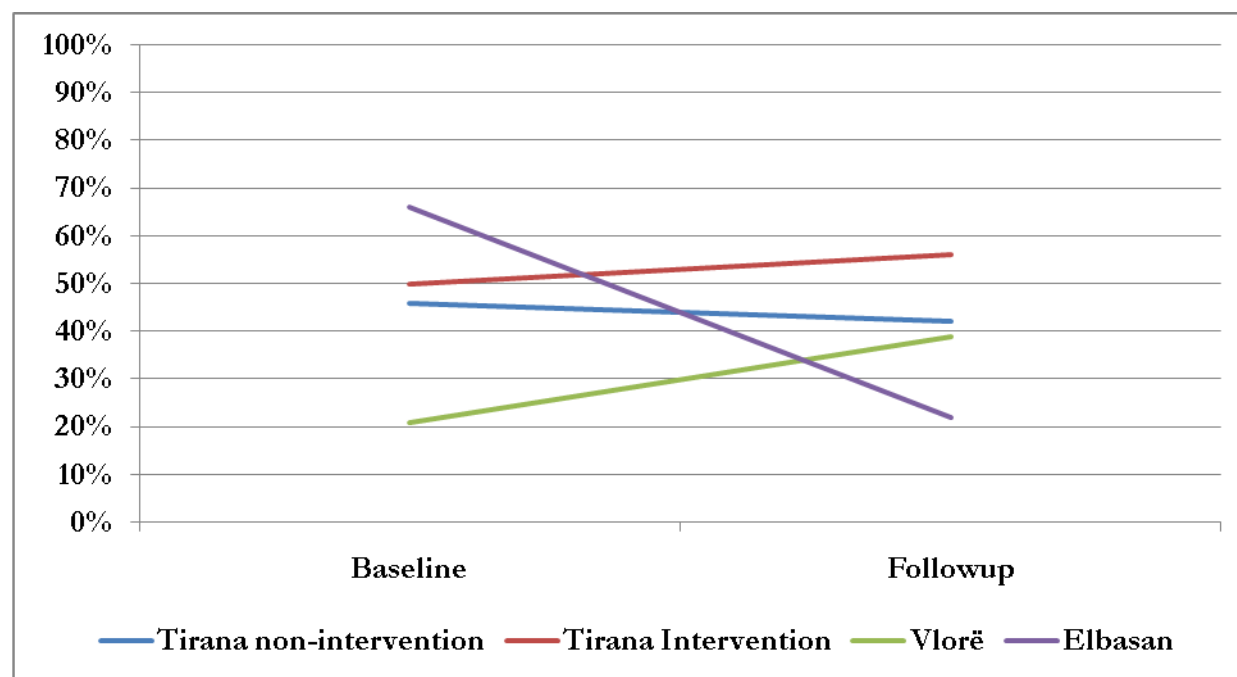


### 3. Communication skills

The intervention focused on five specific communication skills: 1) using open-ended questions, 2) encouraging the client to ask questions, 3) treating the client with respect, 4) making an effort to protect privacy, and 5) asking the client if she had concerns/questions about any method. A pharmacist who demonstrated three of the five skills was considered to be communicating. Again, the two intervention sites improved in this area and the comparison sites did not (Graph 20).

It is unclear what was happening in Elbasan. There might have been outside variables affecting their ability to demonstrate at least three skills. Since it was election time, the pharmacists might have been getting tired of having so many people come into their stores and ask a lot of questions. Further investigation into the skills of pharmacists in Elbasan is warranted.

**Graph 20: Percentage of pharmacists demonstrating three or more of the five communication skills**



### 4. Conclusions

Overall, intervention sites showed an approximately 10% to 40% improvement in the indicators compared with the non-intervention sites. The short, intensive intervention with pharmacists led to improvement in several key variables, including increases in knowledge of the effectiveness of modern contraceptive methods (the Pill, which showed a statistically significant improvement, and EC) and in general knowledge of EC and how it works. In addition, the intense interpersonal activities led to a greater willingness to distribute materials, talk with clients, and share information on multiple contraceptive methods. Both the survey and the mystery clients showed that the intervention improved both pharmacists' basic communication skills with clients and their willingness to share information on side effects.

One of the concerns for this project was that at the outset many people in the field of family planning believed that pharmacists would not want to take the time to participate in an intervention of this type; it would take up too much of their time. However, this study found that pharmacists are willing to participate in this kind of intensive learning situation. It enhances their awareness and communication skills and leads to better service for clients.

## **VII. Key findings**

### ***1. Youth Survey***

Information was collected from 2,100 students for the baseline survey and from 2,200 students for the follow-up survey, with 37% male and 63% female participation in both surveys. Upon securing university approval, we randomly selected students from the student housing list and invited them to participate. After the mass media campaign and peer education intervention, the sites in Tirana and Vlorë showed significant improvement when compared with the media-campaign-only sites for the following indicators:

- Awareness of modern contraceptive methods, in particular IUD, injectables, and EC
- Attitudes about the effectiveness of modern contraceptive methods, especially regarding the Pill, IUD, injectables, and EC
- Purchases of modern contraception from pharmacists

For the following indicators, the intervention sites in Tirana and Vlorë showed increases compared to the media-only sites, but were statistically significant only in Vlorë.

- Perception that pharmacies are good sources of information
- Perception that it is a good idea to talk with a pharmacist about modern contraception
- Comfort level with the idea of talking with a pharmacist about modern contraception

The media campaign effected improvements in knowledge and awareness, but the addition of the intensive peer lead activity resulted in an even larger change among the students. However, increasing contraception use requires more than a few months to see any real change in uptake.

### ***2. Pharmacy Survey***

At follow-up, 176 pharmacists were interviewed, one less than during the baseline survey. Approximately one-half of those interviewed at follow-up had been involved in the intervention. These pharmacists as well as those who were not involved in the intervention all agreed to participate in the survey as well as the mystery client activity.

The intensive intervention with pharmacists increased their knowledge of the effectiveness of modern contraceptive methods and general knowledge of the EC, willingness to distribute materials and talk with clients, sharing of information on multiple contraceptive methods and side effects. The intervention also improved their communication skills with clients.

The follow-up survey found significant increases in the intervention pharmacies in Tirana and Vlorë compared to the comparison sites for the following indicators:

- Knowledge of the levels of effectiveness of modern contraception
- Knowledge of how EC works
- Distribution of materials to clients to support awareness of modern contraceptive methods
- Positive attitudes about selling contraceptives to young university students
- Sharing of information on multiple methods

- Discussions of side effects and how to handle them
- Use of three or more of the five core communication skills (using open-ended questions, encouraging client to ask questions, treating client with respect, making an effort to protect privacy, and asking client if she had concerns/questions about any method)



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