STUDY REPORT
Integration of Family Planning Counseling and Referral into Pediatrics Services
Ijevan, Armenia

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Integration of Family Planning Counseling and Referral Into Pediatrics Services
Ijevan, Armenia

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CONTENTS

List of Tables and Figures .................................................................................................................. 4
Abbreviations .................................................................................................................................. 5
Acknowledgments ............................................................................................................................. 6

Background ....................................................................................................................................... 7
Study Design ..................................................................................................................................... 8
  Hypotheses ...................................................................................................................................... 8
  Goal ................................................................................................................................................. 8
  Methods and Materials .................................................................................................................... 8
  Study Interventions .......................................................................................................................... 8
Results ............................................................................................................................................... 9
Findings and Recommendations ....................................................................................................... 11

Appendices
  Appendix 1: Project NOVA Questionnaire for women attending pediatrician’s services
  Appendix 2. Study Profile
  Appendix 3. Family Planning Referral Card
LIST OF TABLES AND FIGURES

Table 1. Reproductive history of respondents .................................................................10
Figure 1. Reason for a pediatrics' visit ..............................................................................10
Figure 2. Previous use of contraceptive methods .............................................................10
Figure 3. Number of family planning visits before and after study interventions..........11
Figure 4. Methods of contraception received at intervention site.................................11
**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
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<tbody>
<tr>
<td>FP</td>
<td>FAMILY PLANNING</td>
</tr>
<tr>
<td>IUD</td>
<td>INTRAUTERINE DEVICE</td>
</tr>
<tr>
<td>LAM</td>
<td>LACTATIONAL AMENORRHEA METHOD</td>
</tr>
<tr>
<td>MCH</td>
<td>MATERNAL AND CHILD HEALTH</td>
</tr>
<tr>
<td>MOH</td>
<td>MINISTRY OF HEALTH</td>
</tr>
<tr>
<td>NFP</td>
<td>NATURAL FAMILY PLANNING</td>
</tr>
<tr>
<td>OB/GYN</td>
<td>OBSTETRICIAN-GYNECOLOGIST</td>
</tr>
<tr>
<td>SPSS</td>
<td>STATISTICAL PACKAGE FOR SOCIAL SCIENTISTS</td>
</tr>
<tr>
<td>USAID</td>
<td>UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT</td>
</tr>
<tr>
<td>WCC</td>
<td>WOMEN’S CONSULTATION CENTER</td>
</tr>
<tr>
<td>WHO</td>
<td>WORLD HEALTH ORGANIZATION</td>
</tr>
<tr>
<td>WRA</td>
<td>WOMEN OF REPRODUCTIVE AGE</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

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BACKGROUND

Since declaring independence from the Soviet Union in 1991, the Republic of Armenia has been in a state of political, economic and social transition, which has impacted the entire health system of the country and the general health status of the population. Reproductive and Maternal and Child health (RH/MCH) has also suffered as a result of this upheaval. Over time, health service utilization rates have plummeted as individuals are required to pay for much of the cost of care, whether formally or informally. This decline has greatly impacted rural populations and in preventative services, such as family planning (FP).

The vast majority of Armenian women marry in their early 20s and complete their desired family size by the age of 30 (Total Fertility Rate for rural women is 1.8)¹. Women’s desire to limit fertility increases significantly with the number of living children: almost all married women with no children want to have a child; eight in ten women with two children say they want no more, as do nine in ten women with three or more children².

Even though the use of family planning is relatively high among married Armenian women (53%), only 19.5% use effective modern methods. The most commonly used method is withdrawal (28%), followed by the IUD (9%) and male condom (8%). The recent data also indicate decreases in the use of both modern and traditional methods³. As a result, more than half of all pregnancies in Armenia are unintended and end in abortions with a total abortion rate of 1.8⁴. The age-specific rates of induced abortion peak among women age 25-29 and decline in the older ages⁵.

Usually women obtain maternal health services for pregnancy care, especially during the antenatal period and the delivery itself. After giving birth, women in Armenia rarely return for a postpartum follow-up visit to the obstetrician-gynecologist unless they experience complications. However, most women do bring their infants to see a pediatrician for routine well-baby or sick-baby visits and immunizations. Pediatricians are an untapped resource for informing women of reproductive age about the family planning options available to them in general and during the postpartum period in particular.

In 2004, the United States Agency for International Development (USAID) awarded the Emerging Markets Group (EMG) together with IntraHealth International and Save the Children a five-year contract to increase access to and quality of rural RH/FP/MCH services in Armenia and build national capacity to sustain such improvements over time. To achieve this goal, Project NOVA focuses on increasing the capacity of health facilities to provide quality services throughout 10 administrative regions (marzes) of the country (excluding Yerevan).

Project NOVA undertook a study to investigate whether involving pediatric outpatient services in family planning counseling and referral increases the use of family planning services offered by obstetrician/gynecologists. And, furthermore, does it ultimately increase contraceptive use among married women who have either completed their desired family size

or are interested in postponing their next pregnancy. Project NOVA conducted the study in early 2006 in the northern marz of Tavush in two outpatient facilities that offer both pediatric and obstetric/gynecological services. Study participants were women of reproductive age (18-45 years) accompanying children seeking pediatrics services.

**STUDY DESIGN**

**Goal**

- Test effectiveness of the referral system between pediatricians and district-level obstetrician/gynecologists to provide family planning services for postpartum women as a means to increase utilization of family planning services.

**Hypothesis**

- Basic family planning counseling and referrals by pediatricians will lead to increased utilization of family planning services provided by obstetrician-gynecologists in Armenia.

**Methods and Materials**

The study relied on a case-control methodology and involved collecting data at baseline and again after the project intervention. The variables under study included family planning visits, family planning use by method, referral rates, and selected demographic information.

The study took place from March – July 2006 at the Ijevan Maternal and Child Health (MCH) Center (intervention site) and Dilijan Polyclinic (control site) in 2006. The Ijevan MCH Center serves a general population of 42,614 people, out of which approximately 7,606 are women of reproductive age. The catchment area for the Dilijan Polyclinic is 16,202 people with almost 3,000 women of reproductive age. Both sites are neighboring regions of Tavush marz and offer a similar range of family planning, maternal and child health services located in a semi-rural area. (See Appendix 2 for Study Profile).

At baseline in each facility, Project NOVA collected data on the number of family planning visits over the previous 3 months (January – March 2006). Following study intervention, data was collected over the next 3 months on the number of family planning visits, referral rates, and family planning method use. In addition, a special client interview questionnaire was developed to obtain socio-demographic information and the reproductive health histories of women of reproductive age visiting pediatricians. The histories will aid in the development of a detailed profile of potential family planning clients (See Appendix 1 for Client Interview Questionnaire).

All collected data were inputted and analyzed using SPSS version 13.

**Study Intervention**

The activities carried out break down into separate components:

- **Referral card:** A special carbon-copy referral card was developed to keep track of family planning referral clients. The original copy of the referral card stayed with the referring
pediatrician and the carbon-copy referral slip went with the client before it passed on to the district ob/gyn for tracking purposes. (Appendix 3. Referral Card)

Training of pediatricians and ob/gyns: All six pediatricians from the Ijevan MCH Center received a 3-day contraceptive technology update, as well as training in basic family planning counseling skills and referral procedure to the district ob/gyn. In addition, two district ob/gyns from both the intervention and control sites received refresher training in family planning service delivery and the use of referral cards to assure a similar baseline level of their knowledge. Topics covered during the training included benefits of family planning, principles of family planning counseling, FP/RH legislation in the Republic of Armenia, and clients’ rights and informed choice, etc. Results of the pre- and post-test revealed that the knowledge of training course participants increased by more than 20% from 71% to 92%.

After the training, all pediatricians from the Ijevan MCH Center offered basic family planning counseling and referral to all women who met the following study eligibility criteria:

- Woman of reproductive age who brought her child for either well or sick child care visits, immunization or any other procedure/reason to the pediatric department.

  OR

- Women of reproductive age who brought the child of their close relative: sister, brother, cousin, or accompanying the person for the child health care visit (either well or sick child care), or any other reason to the pediatric department.

All women who met the study eligibility criteria and verbally agreed to participate were recruited for the study and administered client interview questionnaire. Those interested in further family planning counseling or methods received a referral card for comprehensive family planning services.

Monitoring visits: Project NOVA assigned staff to monitor study progress and compliance. A series of field trips were made to the Ijevan MCH Center after the training to monitor the progress of the study and to address any issues that arose.

RESULTS

Profile of a woman visiting a pediatrician

As part of the study, a total of 219 women who visited a pediatrician during a three-month period (April – June 2006) at the Ijevan MCH Center were interviewed. Slightly more than half of women (51.6%) came to receive immunization services for their children. Other reasons for visiting included follow-up visits (15%), general consultation (11.3%) and any other reason (22.1%). Other reasons included healthy child visit, sick child visit, forms for kindergarten, and laboratory examination.
The mean age of women interviewed was 25 years, and all respondents were of Armenian nationality. The vast majority of women interviewed were unemployed (84%) and almost all were married (98%). Two out of five women had secondary-level college education (39%) and three out of ten graduated from a university (30%).

At the time of the interview women reported having on average 2.2 pregnancies with 1.8 births and 1.7 abortions (see Table 1). Two out of five (40.4%) women reported having two pregnancies, three out of ten (30.3%) only one pregnancy, 14.2% had three pregnancies and 15.1% had from four up to eleven pregnancies. More than half of all respondents (53%) reported having two births, 34.2% of women had one birth, 8.7% had three births and 4.1% reported having more than three births (up to 8). At the time of the interview, 53% of all respondents reported having two living children, 35.6% had one child, 7.3% had three children and 4.1% reported having four to eight children.

Three out of ten women interviewed (30%) reported having used a contraceptive method(s) in the past. A total of 32 women reported using Lactational Amenorrhea Method (LAM), 26 women had used an intrauterine device (IUD), followed by traditional methods (listed as others, n=22) and condoms (n=18) (See Figure 2.) The duration of use, client satisfaction with a particular method, reasons for discontinuation (method failure, side effects, low comfort level, etc.) were not identified.

Overall, rural women usually visit pediatricians to receive immunization services for their child. They are most likely to be in their mid 20s, well educated, married, unemployed, having two births and two children, and have some experience using contraception in the past.

### Table 1. Reproductive History of Respondents (n=219)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
</tr>
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<tbody>
<tr>
<td>Age of menarche</td>
<td>13.7</td>
</tr>
<tr>
<td>Number of pregnancies</td>
<td>2.2</td>
</tr>
<tr>
<td>Number of births</td>
<td>1.8</td>
</tr>
<tr>
<td>Number of abortions</td>
<td>1.7</td>
</tr>
<tr>
<td>Number of miscarriages</td>
<td>1.1</td>
</tr>
<tr>
<td>Number of children</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**Direct impact of referrals on the utilization of family planning services**

During the three-month period after study intervention (April – June 2006) pediatricians referred 119 women out of total 219 interviewed to the district obstetrician-gynecologist for family planning services. The vast majority of all clients (76.4% out of 119 women) who received a referral slip at the intervention site visited the district obstetrician-gynecologist to obtain family planning services. During the same period only 21 family planning visits were recorded at the control site. Before the study intervention (January- March 2006), there were 25 family planning visits to Ijevan (intervention site) and 24 visits to Dilijan (control site).
There were no unusual events at the control site after study interventions. (See Appendix 2. Study Profile). A comparison analysis of the number of family planning visits before and after the study intervention at both control and intervention sites indicate that as a result of the study interventions the number of family planning visits increased almost four fold (See Figure 3).

All women who were referred to the obstetrician/gynecologist at the intervention site received family planning counseling at the time of the visit, out of which 30% of the respondents (n=28) received a modern family planning method of their choice. Twenty five women left the district ob/gyn with barrier methods (condoms and spermicides), two had an IUD inserted and one woman received a prescription for hormonal pills (See Figure 4).

As there were only 24 and 25 family planning visits prior to the study intervention at both control and intervention sites respectively (See Figure 3), we can safely assume that the number of clients receiving modern methods of contraception (estimated at 30%) was significantly higher after study intervention vs before the intervention. Overall, as a result of pediatricians’ basic family planning counseling and referrals, the utilization of family planning services provided by a district obstetrician-gynecologists in rural Armenian settings not only increased by more than four fold, but also contributed to the increased number of clients initiating the use of modern methods of contraception, which are well-known to be more effective in the prevention of unwanted or mistimed pregnancies.

**FINDINGS AND RECOMMENDATIONS**

Historically family planning programs in the Newly Independent States, including the Republic of Armenia, primarily engage obstetrician/gynecologists and midwives in family planning service provision. A USAID-funded Healthy Women in Georgia Project is working through the local NGO Caritas to enable pediatricians to offer family planning counseling at outpatient clinics. Pediatricians are trained to provide family planning counseling to postpartum mothers who accompany their infants to check-ups. Pediatricians also receive the necessary training to refer those women who want provider-driven methods, such as the IUD, or women who are experiencing postpartum complications to obstetrician/gynecologists.

Other USAID-funded projects in Russia, Turkey, Azerbaijan and Ukraine also tried to involve non-ob/gyns in family planning counseling and service delivery. The role of pediatricians as a family planning liaison is still underestimated and untested, even though...
they see women at the opportune time of their reproductive health cycle and can provide
them with information on their family planning options in general and during the postpartum
period in particular.

Summary

The study revealed that women in rural areas of Armenia mostly visit pediatricians to receive
immunization services for their child. They are most likely to be in their mid 20s, well
educated, married, unemployed, having experienced two births, have two children, and have
some experience using contraception in the past. This is an almost ideal profile of the family
planning client in need of an effective method of contraception.

Overall, this study revealed that basic family planning counseling and referrals offered by
pediatricians are effective in significantly increasing utilization of family planning services
and in initiating the use of modern methods of contraception. Institutionalizing family
planning counseling and referral offered by pediatricians is a low-cost intervention for the
existing healthcare system. It does not require any increase in personnel, purchase of
expensive equipment, or remodeling of healthcare facilities and can be easily replicated in
any healthcare facility that offers both maternal and child health care services. It can be
applied throughout Armenia and other countries where obstetrician-gynecologists are the
only healthcare providers offering family planning services, including prescriptions and
administration of contraceptives. Training pediatricians and neonatologists in family planning
counseling, referral and interpersonal communication skills is instrumental to the successful
scaling-up of family planning services in rural areas.

Recommendations

- Institutionalize basic family planning counseling and referral services by
  neonatologists and pediatricians in upcoming Project NOVA activities in five
  additional project-supported Armenian health networks.

- Develop client education materials for postpartum women to include information
  on contraceptive methods appropriate during the postpartum period for both
  breast-feeding and non-breastfeeding mothers.

- Consider using pediatricians involved in the Ijevan study during similar trainings
  in family planning counseling and referrals for primary healthcare physicians—
  pediatricians, neonatologists, general practitioners and family doctors.

- Even though the study does not indicate the shortage of contraceptive
  commodities, in order to establish an operational family planning referral system,
  it is important to ensure an adequate stock of family planning commodities at the
  referral facility.

- Expand this initiative in Armenia beyond Project NOVA activities.

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1 Health Network is defined as health facilities linked both by ownership structure and referral patterns. A NOVA RH/FP/MCH Health Network could include in-patient and out-patient service delivery sites, for example, Maternity, Women’s Consultation Center, Ambulatories, Health Center and Health Posts.
Appendix 1. Project NOVA
Client Interview Questionnaire
for women attending pediatrician’s services

1. Date of the visit: __________________________

2. Reason for the visit: _______________________

3. Name of the patient: _______________________

4. Date of birth: _____________________________

5. Nationality: ______________________________

6. Do you work?  □ Yes  □ No

7. Marital status:
   • Married
   • Divorced
   • Not married and has never been married
   • Live separately (not registered marriage)
   • Live with permanent partner
   • Other

8. Education attainment:
   • Has school diploma for 8 grades (middle school graduate)
   • Has school diploma for 10 grades (high school graduate)
   • College graduate
   • University graduate
   • Post-graduate education
   • Other

9. Age of menarche: _________________________

10. Number of pregnancies: ___________________

11. Number of births: ________________________

12. Did you ever have an abortion?  □ Yes  □ No

   If yes, how many:
   • Artificial abortions _______________________
   • Spontaneous abortion _____________________

13. Number of children: _______________________

14. Did you ever use any method of contraception in the past?  □ Yes  □ No

   If yes, list all methods used in the past: _______________________________

   If not, why: ________________________________
24 women came for a family planning visit at the control site

Study Intervention

January – March 2006

- TRAINING OF PEDIATRICIANS & OB/GYNs in Family Planning
- DEVELOPMENT OF THE REFERRAL FORM

April – June 2006

219 women visiting pediatrician interviewed at the intervention site

119 women received referral for family planning services

100 women didn’t receive referral for family planning

91 women came for a family planning visit

28 women did not come for a family planning visit

91 women received FP counseling
28 women received a FP method
- 25 condoms/spermicides
- 2 IUDs inserted
- 1 pack of OCs prescribed

25 women came for a FP visit at the intervention site

21 women came for a FP visit at the control site
Appendix 3. Family Planning Referral Card

Name of the pediatrician
Date of the visit
Name of the patient
Signature of the pediatrician