Emergency Contraception Research and Demonstration Project

Despite the availability of highly effective methods of contraception, one half of the pregnancies in the United States are unintended, and 28% of all pregnancies end in abortion. Nearly one half of the approximately three million unintended pregnancies each year occur among women who report using a contraceptive method, suggesting that many of these unintended pregnancies are a result of contraceptive failure. It has been known since the early 1970s that oral contraceptives given in high doses post-coitally are highly effective in preventing pregnancy, but their use has been limited.

In July 1996, Kaiser Permanente Southern California (KPSC) began a research and demonstration project on emergency contraceptive pills (ECP). The project was a collaboration between KPSC, the Pacific Institute for Women's Health (a Los Angeles-based nonprofit organization specializing in research on women's health), and the Program for Appropriate Technology in Health (PATH, a Seattle-based not-for-profit group specializing in development of contraceptive health education materials for consumers and providers). The project was designed to evaluate the feasibility and acceptability of ECP within KP, to increase the availability and use of ECP, and to develop institutional templates, provider training materials, and patient education materials that could be used to replicate the project in KP and elsewhere.

The demonstration and evaluation portions of the project were successfully completed in the San Diego Service Area of KPSC. Women who received ECP as part of the project were highly satisfied with this service. There was some evidence that abortion rates decreased more in San Diego than in other KPSC Service Areas, although this change cannot be attributed solely to provision of ECP.

The repackaging of oral contraceptives was "institutionalized" in San Diego, and the ECP kits that were developed and piloted in the project are now available throughout the KP Program. The Project has been replicated throughout KPSC, and ECPs are available and being provided in all KPSC Service Areas.

The supporting materials (brochures, posters, templates) have been made widely available both inside and outside KP. A cost analysis showed that provision of ECPs would be cost-saving to KP even if a commercial product were substituted for the ECP kits used in this project.

The project was designed to evaluate the feasibility and acceptability of ECP within KP ...

Table 1. Team members—Emergency Contraception Research and Demonstration Project

Kaiser Permanente Southern California	Pacific Institute for Women's Health	Program for Appropriate Technology in Health (PATH)
Contact person: Diana B. Petitti, MD, MPH Director, Department of Research and Evaluation	Linda J. Beckman, PhD Senior Scientist	Elisa Wells Senior Program Officer
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Background

The project was initiated in response to the observation that in spite of the demonstrated efficacy of oral contraceptives as emergency contraception (EC), several problems prevented their widespread distribution and use. At the time that the project was initiated, no commercially available ECP product existed, provider knowledge of how to correctly prescribe ECP was low, and obtaining ECP was inconvenient for women.

The project follows trends in patient care, both inside and outside KP, that focus on womens' health. The project is in keeping with initiatives in KPSC and elsewhere in the KP Program that seek to reduce the risk of unintended pregnancy. The project is in alignment with the public's desire to see contraceptives treated in the same way as other medications by health plans and insurers.

The ECP program had six components. The formal evaluation had five components. These are listed in Table 2 and described in the sections on Methodology and Evaluation.

It has been known since the mid 1970s that oral contraceptives (OCs) given in high doses postcoitally are effective in preventing pregnancy.

Objectives

The project was designed to evaluate the feasibility and acceptability of ECP within KP, to increase the availability and use of ECP, and to develop institutional templates, provider training materials, and patient education materials that could be used to replicate the project in KP and elsewhere.

Table 2. Emergency contraception project

Program Components
• Repackaging of oral contraceptives as ECP kit • Development of provider and patient education materials • Development of environmental intervention materials to support program • In-service training of providers • Making ECP kits available at convenient locations • Packaging and distribution of "Replication Packs"
Evaluation Components
• Before/after survey of providers' knowledge and practices • Survey of members who received an emergency contraception kit in San Diego during the demonstration period • Assessment of rates of induced abortion for members in San Diego in comparison with the rest of KPSC • Monitoring of utilization of ECP kits • Analysis of the cost-effectiveness of provision of ECP • Analysis of induced-abortion rates

Scope and Significance

Problem Statement

Despite the availability of highly effective methods of contraception, one half of the pregnancies in the United States are unintended, and 28% of all pregnancies end in abortion. Moreover, nearly one half of the approximately three million unintended pregnancies each year occur among women who report using a contraceptive method, suggesting that many of these unintended pregnancies are a result of contraceptive failure. Experts agree that increasing the menu of contraceptive choices is desirable and that providing women a method of contraception that prevents pregnancy after unprotected sexual intercourse or contraceptive method failure is critically needed.

Emergency contraceptive pills (also known as "morning-after pills") are a form of postcoital hormonal treatment intended to prevent pregnancy after unprotected sexual intercourse. It has been known since the mid 1970s that oral contraceptives (OCs) given in high doses postcoitally are effective in preventing pregnancy. Studies done over the last two decades have confirmed that a specific regimen of emergency contraception, known as the Yuzpe regimen, reduces the risk of pregnancy by about 75%. It is estimated that among 100 women who have unprotected intercourse, eight would be expected to become pregnant without ECP whereas only two would be expected to become pregnant with use of ECP. Other ECP regimens that provide only levonorgestrel in high doses reduce the risk of pregnancy by 90%.

Use of ECP has not been widespread in the United States for a number of reasons. Until very recently, provision of ECP required either provider knowledge of exactly how to instruct patients to punch out the proper number of oral contraceptives from a pill package that was designed to facilitate daily use of oral contraceptives for fixed periods of 28 days or arrangement for repackaging of OCs into packets specifically for use as ECPs. To repackage OCs in bulk requires a repackaging license. In addition, providers have been shown to lack detailed knowledge of the intricacies and complexities of ECP, including types of products that can be used, dosing regimens, and recommended timing for use.

Relevance to Patient Care

About two million members (24%) KP Medical Care Program are women of reproductive age (15-44 years) and are potentially in need of contraceptive services.

At least 25,000 KP members per year obtain an induced abortion (precise figures for abortions are not available) in spite of the fact that all members have access to contraceptive services. The number of members who are potentially affected by the quality issue addressed in this project—unintended pregnancy and the need for a method to backup failure of condoms and other contraceptives—is much larger, because the male partners of women members and male members of the Health Plan are potentially affected by the availability of ECP. All family members are affected by unintended pregnancy.

External Impact

In initiating this project, KP assumed a role of leadership in the local community and nationally. The project had an important influence on other organizations' willingness to provide ECP. The tools and templates developed in the project have been used as models or without modification in implementation of provision of ECP throughout the US. More than fifty EC Training Toolboxes have been purchased by organizations outside KP, including nursing schools, medical schools, and pharmacy schools; Planned Parenthood Federation of America, the Departments of Health and Human Services for Alaska, New Mexico, and Georgia; and an international health organization in Thailand. Project materials and protocols have been adopted by local Planned Parenthood affiliates, San Diego State University, the University of California at San Diego, and many local and regional community clinics.

ECP project team members have become recognized, influential experts on provision of ECP and have been speakers at multiple national conferences on this topic. Project participants were consultants to the national media firm that developed Public Service Announcements concerning ECP that were aired in four cities and public education materials used in several magazines with national circulation. Project team members have been consulted by a California State Senator regarding two submitted bills that would increase access to emergency contraception in California.

Methodology

Repackaging of Oral Contraceptives as ECP Kit

A cornerstone of the demonstration project was repackaging of oral contraceptives as ECP. When the project began, there was no commercially available product packaged as ECP. Providers who wanted to prescribe OCs as ECP would first need to write a prescription for a full cycle of regular oral contraceptives. They would then need to instruct the patient about how many of these pills to take at what interval. Oral contraceptives that contain norethindrone, which are the most commonly prescribed OCs given as regular oral contraception, have not been proven as effective as ECP. Even for OCs that contain norgestrel or levonorgestrel, which have been shown effective as EC, the number of pills that need to be taken differs between different OC brands (eg, two pills every 12 hours for Ovral; four pills every 12 hours for Levlen). These complexities meant that a provider would need to be very knowledgeable about some subtle issues in OC formulation to prescribe ECP correctly.

To remove any problems that might arise from a need for providers to have detailed knowledge of what kind and how many regular OCs needed to be given to be effective as ECP, oral contraceptives were repackaged in the KPSC Regional Pharmacy. In the demonstration phase, a combination oral contraceptive with 500 μg of dL-norgestrel and 50 μg of ethinyl estradiol (Ovral) was repackaged because, at the time the project began, all of the published data on efficacy reflected the use of this type of product. In the replication phase, Pharmacy is repackaging Levlen, which is less costly and equally effective. It is anticipated that repackaging by KP will be replaced with a commercial product.

In initiating this project, KP assumed a role of leadership in the local community and nationally.

Table 3. Contents of Emergency Contraception "Tool Kit"

Provider-oriented Materials
• Department of Obstetrics and Gynecology policy and procedures for ECP provider service manual (18 pages) • Screening guidelines (3 pages) • Dispensing protocol (2 pages)
Environmental Intervention Tools
• "Once a Secret, Now an Option" poster (11 inches x 16 1/2 inches in lavender) • Appointment center notes for ECP (1 page) • Health Phone script (2 pages) • Dispensing form (half-page)
Patient-oriented Materials
• Information brochure for patients in English (blue) and Spanish (rose), wallet card with national ECP hotline number (English on one side/Spanish on the other) (2 1/4 inches x 3 1/4 inches in green) • Instructions to patients for using ECP as included in ECP Tool Kit (English and Spanish)
Other
• Order sheet for customized material

Table 4. Contents of the emergency contraception "Training Toolbox"
• Microsoft PowerPoint slide presentation (34 slides)
• Media campaign interview video (four minutes)
• Training video (20 minutes)
• Trainer's outline
• Q&A (most commonly asked questions)

The ECP kit included two doses of antinauseant capsules (50 mg diphenhydramine) because nausea is a very common side effect of ECP.

We wrote instructions for the use of ECP and the antinauseants, evaluated the instructions using focus groups, and revised them based on input from focus group participants. These instructions were printed in Spanish and in English.

For ease of dispensing, we placed all of these items in a small box with special labeling. Thus, our ECP kit consisted of six oral contraceptive tablets (500 µg of dL-norgestrel and 50 µg of ethinyl estradiol), a sealed plastic bottle, four 50 mg diphenhydramine capsules in an envelope, instructions for use in Spanish and English, all in a labeled box about two inches on a side.

Development of Education and Environmental Intervention Materials and Screening Protocols

In collaboration with PATH, we developed informational posters, brochures, and wallet cards, in English and Spanish, for placement and distribution in appropriate places in medical offices where women seek care. We recorded a HealthPhone message, which was added to the San Diego Member Health Education phone service. The "HealthPhone Tape" was described in the patient brochures along with instructions for using it.

We developed protocols for screening women seeking ECP along with a worksheet to guide the provider through the screening process. These ensured that relevant information necessary to identify women for whom EC was contraindicated would be gathered systematically.

Inservice Training

We conducted inservice training programs for care providers and appointment center agents in San Diego. Care providers attended a formal lecture presentation by one or more project members. These

Table 5. Characteristics of surveyed women who received ECP during the ECP demonstration project (total N = 235)

Characteristic	% (95% CI)
Age	
18-25	48.1 (41.7, 54.5)
26-30	26.4 (20.1, 32.0)
31+	26.4 (20.8, 32.0)
Ethnicity	
African-American	10.5 (6.6, 14.4)
Caucasian	46.5 (40.1, 52.9)
Hispanic/Latino	24.6 (19.1, 30.1)
Asian/Pacific Islander	7.9 (4.5, 11.3)
Other/Unknown	10.5 (6.6,14.4)
Education	
High school or less	22.1 (16.8, 27.4)
Some college	45.5 (39.1, 51.9)
College +	32.3 (26.3, 38.3)
Marital status	
Single	63.4 (57.2, 69.6)
Married	23.3 (17.9, 28.7)
Separated/divorced/widowed	13.4 (9.0, 17.8)
Prior live birth	43.4 (37.1, 49.7)
Prior abortion	46.8 (40.4, 53.2)
Prior ECP use	14.5 (10.0, 19.0)
Contraceptive method	
None	30.2 (24.3, 36.1)
Condoms	50.6 (44.2, 57.0)
Oral contraceptives	11.9 (7.8, 16.0)
Diaphragm	4.2 (1.6, 6.8)
Depo-provera	2.2 (0.3, 4.1)
Other	4.2 (1.6, 6.8)

sessions took place at department meetings or specially arranged education sessions. We presented a copy of a comprehensive clinical manual on ECP to each participant and sent manuals to those unable to attend a presentation. The clinical manual provides detailed information about ECP with specific recommendations for treatment, and a bibliography.

Making ECP Kits Available in Convenient Locations

We arranged to have ECP kits dispensed under physician supervision in convenient locations within the San Diego Medical Center and at selected San Diego medical office buildings. When a woman called for advice and/or an appointment and the call center determined that she wanted ECP, she was directed to a screening/triage nurse, then to one of these locations to pick up an ECP Kit. A message was sent to the primary care provider to inform him/her of the request. If the provider ordered an ECP kit, it was provided at the nurse's station or centralized nursing treatment centers in the selected locations based on a physician order given under a standard, written protocol that was consistent with California pharmacy law.

KP San Diego Pharmacy personnel stocked each of the locations where ECP kits were provided and replenished supplies when they ran out.

Packaging and Distribution of "Replication Packs"

We assumed from the beginning of the project that there would be interest in replicating the project at other locations within KP as well as outside KP. To facilitate replication, we developed a "Tool Kit," whose contents are described in Table 3. We arranged with a local printer to customize the informational brochures, posters, and wallet cards with information (eg logo, telephone numbers) from the replication site. The printer has made these materials available to those inside and outside the organization.

We also developed the Training Toolbox (see Table 4 for description of contents), consisting of the materials a project manager would need to implement the project fully in another site. The Toolbox included a video written by the project team, filmed at KP, and "starred" Dr Preskill and Debbie Postlethwaite, members of the project team. Training Toolboxes have been distributed to the Chiefs of Obstetrics and Gynecology, Family Medicine, Internal Medicine, Pediatrics, and Pharmacy in all medical centers in all Regions of the KP Program (210 Toolboxes in all).

Evaluation

Before/After Survey of Provider Knowledge and Practice

The evaluation included a pre/post survey of health care providers (physicians, NPs, CNMs, PACs in Departments of Obstetrics and Gynecology, Family Medicine, Internal Medicine, Pediatrics, and Emergency Medicine) at baseline (September 1996, prior to training and availability of ECP kits, and implementation of posters, HealthPhone messages, etc) and one year following full implementation (March 1998). Of 288 health care providers who were asked to participate in the baseline survey, 164 (57%) completed it. The baseline survey showed that providers had a positive attitude about ECP but that their knowledge of how to prescribe it was incomplete. Only one-third knew that treatment could be initiated within 72 hours. Unavailability of a prepackaged product was considered a barrier to provision of ECP by 90% of survey respondents.

A total of 101 providers responded both to the baseline and follow-up survey, and showed improved knowledge about ECP. Specific areas of significantly greater knowledge included timing of doses for ECP, risk of teratogenic effects, rate of efficacy, mode of action, and contraindications. There were, however, no significant changes in global attitudes about ECP in respondents to both surveys.

Survey of Members Who Received an ECP Kit During the Demonstration

Data were collected using structured telephone interviews conducted by trained female interviewers from January 1997 through February 1998. Eligible

... protocols ... ensured that relevant information necessary to identify women for whom EC was contraindicated would be gathered systematically.

Table 6. Sources of information about ECP for women who received ECP during the demonstration project (N = 235)

Sources of information about ECP	% (95% CI)
Kaiser Permanente materials (brochures, posters, Member Health News)	24.3 (18.8, 29.8)
Kaiser Permanente provider	19.1 (14.1, 24.1)
Friend or family member	17.2 (12.4, 22.0)
Newspapers, magazines, other media	11.6 (7.5, 15.7)
Kaiser Permanente staff	9.5 (5.8, 13.2)
Other	16.4 (11.7, 12.1)

Note: Total percentage exceeds 100.0 because women could report more than one source of information.

for the survey were all women 18+ years who received ECP through the demonstration project in KP San Diego during the demonstration period. Of the 375 women for whom permission for contact was obtained from their health care providers, 248 were contacted and agreed to be interviewed. Thirteen had not taken the ECPs by the time they were contacted and the analyses are based on 235 women who had experience taking ECPs.

Tables 5-7 describe characteristics of surveyed women who received ECP during the demonstration project, where they obtained information about ECP and the symptoms and side effects they reported.

Ninety-one percent of women surveyed were either very satisfied (77%) or somewhat satisfied (14%) with ECP; only six women reported that they were not satisfied or were very dissatisfied with ECPs. Ninety-seven percent responded "yes" when asked, "Would you recommend ECPs to a friend or a family member?" and 93% reported they would use ECPs again if needed in the future. Women who reported they would use ECPs again were asked under what circumstances. The overwhelming majority of women (97%) stated they would use ECP only in an emergency, and 2% said they would use them occasionally as a contraceptive method.

Six women became pregnant despite use of ECP. The pregnancy rate in users of ECP in the surveyed women was 2.6%, which is close to the rate in well-conducted follow-up studies designed specifically to assess the effectiveness of ECP.

Table 7. Reported symptoms and side effects (total N = 235)

Symptom	n	% (95% CI)
Drowsiness	112	47.4 (41.0, 53.8)
Dizziness	48	20.4 (15.2, 25.6)
Dry mouth	38	16.2 (11.5, 20.9)
Cramps	33	14.0 (9.6, 18.4)
Bleeding	30	12.9 (8.6, 17.2)
Headache	28	11.9 (7.8, 16.0)
Breast tenderness	27	11.5 (7.4, 15.6)
Nausea after first dose	82	35.0 (28.9, 41.1)
Nausea after second dose	79	35.1 (29.0, 41.2)
Vomiting after first dose	20	8.5 (4.9, 12.1)
Vomiting after second dose	21	8.5 (4.9, 12.1)
At least one symptom	31	81.1 (76.1, 86.1)

Table 8. Comparison of abortion and live birth rates per 1000 women at risk (14-44 years old) for San Diego and other Southern California SAs

Year	Abortion rate per 1000 (95% CI)		Live births per 1000 (95% CI)	
	San Diego	Other SAs	San Diego	Other SAs
1994	20.0 (19.7. 20.3)	25.5 (25.4, 25.6)	54.7 (54.4, 55.0)	53.5 (53.4, 53.6)
1995	19.2 (18.9, 19.5)	25.2 (25.1, 25.3)	50.6 (50.3, 50.9)	52.6 (52.5, 52.7)
1996	17.4 (17.2, 17.6)	23.3 (23.2, 24.3)	52.3 (52.0, 52.6)	51.1 (51.0, 51.2)
1997	15.3 (15.1, 15.5)	22.4 (22.3, 22.5)	56.5 (56.2, 56.8)	53.7 (53.6, 53.8)
1998	14.4 (14.2, 14.6)	NA	52.6 (52.3, 52.9)	52.7 (52.6, 52.8)
Change 1994-97	-4.7 (-3.4, -5.8)	-3.1 (-2.4, -3.6)	+1.8 (-0.2, +3.9)	+0.2 (-0.6, +1.1)
Difference in change SD compared with other SAs 1994-97		1.6 (0.3, 2.9)[a]		1.6 (0.6, 3.7)[b]

SA = Service area.
NA = Not available.
[a] p = 0.002 comparing the change (*decrease)* in the abortion rates in SD with that in other SAs.
[b] p = 0.18 comparing the change *(increase)* in live birth rates in SD with that in other SAs.

Assessment of Induced Abortion Rates in KP San Diego

We compared abortion rates and live birth rates before and after the introduction of ECP in KP San Diego with those available in the rest of KPSC during the same period (Table 8). Abortion rates decreased in San Diego from 1994-1997 and from 1994-1998 but not in the rest of KPSC for 1994-1997 (the latest date for which non-San Diego data are complete). The estimated difference in change (decrease) in abortion rates between San Diego and other KPSC Service Areas from 1994-1997 was 1.6 (95% CI 0.3, 2.9). Live birth rates increased both in San Diego and in other KPSC Service Areas. The estimated difference in the increase in live births rate between San Diego and other Service Areas was also 1.6 (95% CI 0.6, 3.7). The change (decrease) in the abortion rates in San Diego was statistically significantly greater than change (decrease) in other Service Areas ($p = 0.002$), whereas the change (increase) in live birth rates in San Diego was not statistically significantly different from the change (increase) in other Service Areas ($p = 0.18$).

During the period of the ECP demonstration project, San Diego had an Unintended Pregnancy Task Force. This Task Force made a number of other interventions to decrease unintended pregnancy, and the decline in abortion rates in San Diego cannot be attributed solely to provision of ECP.

Monitoring of Number of ECP Kits Provided by Month and Assessment of Institutionalization

Figure 1 shows the number of ECP kits provided in San Diego during the demonstration project by month along with some of the external events that may have influenced knowledge and attitudes of members and providers about ECP. By December 1997, when all components of the program were fully institutionalized, the number of kits provided per month was about 60, but there was no evidence that the increasing trend in numbers of kits dispensed had leveled off.

Table 9 shows the number of ECP kits provided in KPSC by medical center since the availability of ECP became "institutionalized" through the assumption of responsibility for repackaging by Pharmacy Operations.

Cost-Effectiveness Analysis

We estimated the savings to KP from provision of ECP upon request using published information on the effectiveness of ECP in preventing pregnancy,

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Table 9. Number of ECP kits provided in KPSC by medical center

Medical Center	Period			Total
	Up to 11/1/98	11/1/98 - 5/31/99	6/1/99 - 12/31/99	
Baldwin Park	128	248	186	562
Bellflower	148	240	223	611
Fontana	12	55	36	103
Harbor City	84	236	258	578
Los Angeles	152	252	329	733
Orange County	0	136	183	319
Panorama City	0	100	106	206
Riverside	0	24	218	242
San Diego	346	596	534	1476
West LA	97	189	341	627
Woodland Hills	0	47	94	141
Total	967	2123	2508	5598

the cost to KP of ECP kits, and the cost to KP of providing abortions. The initial estimate considered only the costs to KP of abortion, and not those of births, since preventing abortion results in direct and immediate savings to KP, as the services are generally contracted at a per procedure rate.

It has been estimated that the ECPs used in this project are 75% effective in preventing pregnancy. That is, of 100 women who have unprotected intercourse, eight of them would become pregnant without using ECP and two with use of ECP. We used the literature to estimate that half of all unintended pregnancies will end in abortion and that all pregnancies in women who would seek ECP are unintended. Thus, ECPs prevent three abortions for each 100 women who receive them.

It has been estimated that the ECPs used in this project are 75% effective in preventing pregnancy.

The cost to KP for abortion is estimated to be $300 per procedure based on the contracted cost of abortion in San Diego. The cost to KP of 100 ECP kits is $385. Thus, provision of ECP saves $2.3 for every dollar invested.

Based on the experience in San Diego, we estimate that the demand for ECP will be 30,000 EC Kits per year. If 30,000 kits were provided Programwide at $3.85/kit, the savings to KP from prevented abortions would be $154,500 (900 abortions prevented @ $300 – 30,000 kits @ $3.85 each).

A new kind of ECP that contains only levonorgestrel was recently evaluated against the combined estrogen/progestin regimen used in this demonstration project (Task Force on Postovulatory Methods of Fertility Regulation. Randomised controlled trial of levonorgestrel versus the Yuzpe regimen of combined oral contraceptives for emergency contraception. Lancet 1998;352:428-33). The new regimen, which was recently approved for marketing in the United States, has a much lower rate of side effects and is more effective in preventing pregnancy (only 1% of women became pregnant after using the new ECPs). Using these data, we estimate that 3.5 abortions are prevented for every 100 women who use the new levonorgestrel-containing ECPs.

Based on these data, Programwide provision of 30,000 commercial, levonorgestrel-containing ECPs is estimated to prevent 1050 abortions per year and save $315,000 in abortion costs. The levonorestrel-containing ECP product has been priced at $14.00/kit, and provision of 30,000 commercial kits would cost $420,000. The net cost of providing ECP to Kaiser Permanente would be $105,000/year, considering only abortions and not considering collection of any co-payment. If the cost of the 1050 averted births is considered, and assuming a reduction in pregnancies from 8% to 1% with half of the unintended

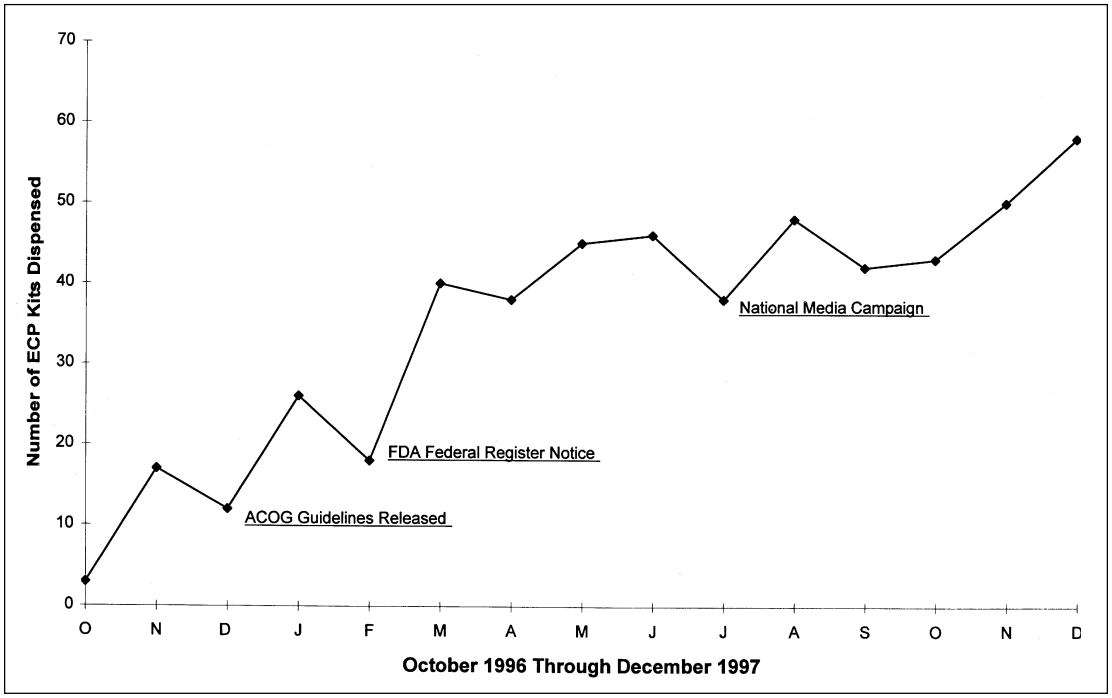

Figure 1. Number of ECP Kits provided in the San Diego Service Area during the demonstration project by month and external events that might have also affected ECP Kit provision.

pregnancies resulting in abortion and half in birth, provision of commercial ECP at $14.00/kit will be cost-saving as long as the cost of births to KP exceeds $100 per birth.

Institutionalization, Replication and Dissemination

The repackaging of oral contraceptives has been "institutionalized," and the ECP kits that were developed and piloted in the project are now available throughout the KP program. The project has been replicated throughout KPSC, and ECP is available and being provided in all Service Areas in KPSC.

The Toolbox developed in the project was distributed to Chiefs of Obstetrics and Gynecology, Family Medicine, Internal Medicine, Pediatrics, and Pharmacy in all Regions of KP throughout the KP Program. Altogether, 210 Toolboxes were distributed.

Over 200 tool kits, which have been made available at cost to persons outside KP, have been distributed outside KP. Over 100 toolboxes, also made available at cost to persons outside Kaiser Permanente, have been distributed.

Conclusion

The objectives of the ECP Research and Demonstration Project were achieved. The project showed the feasibility and acceptability of providing ECP directly to women within KP. Providers exposed to project materials increased their knowledge about the correct use of ECP. ECP was delivered to women in San Diego through the project. Women who received ECP were highly satisfied with this service. There was some evidence that abortion rates decreased more in San Diego than in other Service Areas in KPSC, although this change cannot be attributed solely to provision of ECP.

The repackaging of oral contraceptives was "institutionalized" in KP San Diego and the ECP kits that were developed and piloted in the project are now available throughout the KP program. The program has been replicated throughout KPSC, and ECP are available and being provided in all KPSC Service Areas. Toolboxes, which contain all of the materials to replicate the project, have been distributed throughout the Program. A cost analysis showed that provision of ECP would be cost-saving to KP even if a commercial product were substituted for the ECP kits used in this project. ❖

The project showed the feasibility and acceptability of providing ECP directly to women within KP.

Publications

Petitti DB, Harvey SM, Preskill D, Beckman LJ, Postlethwaite D, Switzky H, Sherman C. Emergency contraception: preliminary report of a demonstration and evaluation project. J Am Med Womens Assoc 1998;53(5 Suppl 2):251-4.

Harvey SM, Beckman LJ, Sherman C, Petitti D. Women's experience and satisfaction with emergency contraception. Fam Plann Perspect 1999:31:237-240, 260.

Find Yourself

I expect that along the way you'll uncover lost and forgotten pieces of yourself that have been buried like valleys filled in by years of accumulating snow.

Richard Stone, "The Healing Art of Storytelling"