

Social Marketing Final Report: Three Country Overview



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The *Institute for Reproductive Health*, with Georgetown University in Washington, D.C., is a leading technical resource and learning center committed to developing and increasing the availability of effective, easy-to-use, natural methods of family planning.

The purpose of the AWARENESS Project was to improve contraceptive choices by expanding natural family planning options and developing new strategies and approaches to increase the reproductive health awareness of individuals and communities in developing countries.

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EXECUTIVE SUMMARY

While unmet need is growing in sub-Saharan Africa, where contraceptive prevalence is lowest, unmet need remains even in countries where contraceptive prevalence is high, such as in Latin America. Due to rapid growth in the population and increase in the numbers of couples interested in planning and spacing births, reproductive health programs in developing countries face a major challenge: to provide a greater variety of products and services to a rapidly increasing number of users. This challenge must be met in the context of stagnant or decreasing donor funding for contraception. Thus, efforts to meet this unmet need must involve cost-effectively expanding options and access to couples. Social marketing concepts have been successfully applied to increase access and use of many modern contraceptives. The present study was conducted to research the potential of socially-marketing the Standard Days Method® (SDM) in three countries.

The study conducted in Ecuador, Benin and the Democratic Republic of the Congo (DRC), sought to assess feasibility of providing the SDM through social marketing programs in different contexts. In Benin and the DRC, IRH worked with Population Services International (PSI) and their local affiliates, Association Béninoise pour le Marketing (ABMS) in Benin and Association Santé Familiale (ASF) and the local non-governmental organization (NGO) Conduite de la Fécondité in the DRC. In Ecuador, The Centro Medico de Orientación y Planificación Familiar (CEMOPLAF) collaborated with IRH in as both implementer and researcher. In each country the implementing partner created a social marketing campaign to raise awareness of the SDM, the benefits of CycleBeads® tool that supports the SDM, and where to obtain it. Although the campaign differed in each country in terms of the media used, it was targeted to women of reproductive age and their husbands/partners who wanted to space their births but who did not want to use other methods. It sought to encourage women and their partners to either seek more information about the method or request the method itself in health clinics or pharmacies. Sensitization sessions were held with key health partners and policymakers; and local providers, including clinic personnel and pharmacists, were trained in the SDM. Provider and pharmacist training was adapted to the context of their work.

Research objectives and design

The impact of mass media campaigns on knowledge, sales and distribution of the SDM, quality of information provided by pharmacists and providers, and correct use by pharmacy and clinic SDM users was assessed.

The aim of the study was to answer the following research questions:

- What is the impact of a mass media campaign on knowledge, attitudes, sales and free distribution of the SDM?
- Can pharmacists and health providers provide high quality information about the SDM?
- How do characteristics of women who purchase the SDM from pharmacies compare with those obtain it at a lower or no cost from a clinic?

- Can women who purchase the SDM from a pharmacy use the method correctly?

Each country also used a simple time series research design to compare data before, during and after a mass media campaign. A community survey was conducted, and service statistics and sales data were collected. Simulated client visits to pharmacies and clinics were conducted. Follow-up interviews were conducted with SDM users who obtained the method from pharmacies and clinics.

Some variation between countries occurred in the implementation of the study. In Ecuador, the time devoted to training pharmacists was reduced. Instead of the eight hours planned, pharmacists received only two hours using the CycleBeads insert as training material, along with a five-point service protocol.

Impact of the campaign

The mass media campaign increased knowledge of the SDM in all three countries, with substantial increases observed in the endline survey compared to the baseline in Ecuador (from 5% to 30%) and Benin (35% to 64%). Television was the major source of information about the SDM in Ecuador, while in Benin it was both television and clinic personnel. In DRC, where television was not used, the clinic was the major source of information. In both Benin and Ecuador, more than a quarter of the SDM clients were new family planning users. Very few were using family planning in the months preceding SDM use.

Sales of CycleBeads by pharmacies and clinics were also influenced by the campaigns in all three countries, and increased awareness was accompanied by a dramatic rise in CycleBeads sales. In Ecuador, clinics sold more CycleBeads; but pharmacy sales increased substantially as a result of the campaign, and they remained high following the campaign while clinic sales returned to their pre-campaign level. Benin had the highest sale of CycleBeads among the three countries, and clinic sales continue to increase at the end of the campaign, while pharmacy sales started to drop. In contrast to Ecuador and Benin, sales in the DRC were generally higher in pharmacies, but sharp declines were observed in the DRC following the end of the campaign.

In all three countries, women preferred to obtain the SDM at the clinic, though an increased number of women cited the pharmacy in the endline survey. In addition, the simulated client visits and follow-up of SDM users demonstrated that socially marketing the SDM through pharmacies is a feasible and successful strategy. A major concern that women voiced, however, was that pharmacists do not have time to properly instruct women on the method. Even though pharmacists gave less information about the SDM, results from the users follow-up showed no difference in client ability to use the method correctly. Pharmacy users were slightly more educated and more willing to read instructions and ask questions. Respondents also indicated a willingness-to-pay for CycleBeads ranging from \$1 in the DRC, \$2 in Benin and to \$5 in Ecuador, reflecting the costs of other methods in the country.

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ACRONYMS

ABMS	Association Béninoise pour le Marketing Social et la Communication pour la Santé
ABPF	Association for Family Promotion (Benin)
APHA	American Public Health Association
ASF	Association Sante Familiale (DRC)
BDOM	Medical branch of the Catholic Diocese (DRC)
CEMOPLAF	Centro Médico de Orientación y Planificación Familiar
CERRHUD	Centre de Recherche en Reproduction Humaine et en Demographie (Benin)
CRS	Catholic Relief Services
DHS	Demographic and Health Survey
DRC	Democratic Republic of Congo
ECC	Eglise du Christ au Congo (DRC)
FAM	Fertility Awareness-Based Methods
IEC	Information, Education, and Communication
IESS	Ecuadorian Social Security Institute
IMA	Interchurch Medical Assistance, Inc.
IPPF	International Planned Parenthood affiliate
IRB	Institutional Review Board
IRH	Institute for Reproductive Health, Georgetown University
JGI	Jane Goodall Institute
LEADD	Laboratory for Applied Studies in Development
MOH	Ministry of Health
NGO	Non-governmental Organization
OR	Operations Research
OSV-Jordan	Organization for Service and Life
PSI	Population Services International
SANRU	Santé Rurale
SDM	Standard Days Method®
USAID	United States Agency for International Development
WTP	Willingness-to-pay

1. INTRODUCTION

1.1 Broad issue

The need for appropriate, high-quality family planning services is substantial and growing in many parts of the world, especially in sub-Saharan Africa¹. Studies of unmet need show that many couples who want to avoid a pregnancy or delay the next pregnancy, are not using an effective method of contraception, or are using an otherwise effective contraceptive incorrectly. The likelihood of experiencing an unwanted, unintended or mistimed pregnancy for these couples is high. The reasons given for not using an effective contraceptive include lack of knowledge, lack of access, disapproval by the husband or provider, experience of, or fear of experiencing side effects, and cost. Efforts to respond to this unmet need must involve expanding the options available to women and couples. Increasing the accessibility of fertility awareness-based methods (FAM) of family planning, which are not currently widely offered, represents one viable strategy for expanding choice in Africa² and elsewhere.

While unmet need is growing in sub-Saharan Africa, where contraceptive prevalence is lowest, unmet need remains even in countries where contraceptive prevalence is high, such as in Latin America. Due to rapid growth in the population of reproductive-aged women from past high fertility, and growth in the numbers of couples interested in planning and spacing births, reproductive health programs in developing countries face a major challenge: to provide a greater variety of products and services to a rapidly increasing number of users and to meet the diverse needs of users with varying socio-economic, cultural and religious profiles³. This challenge must be met in the context of stagnant or decreasing donor funding for contraceptives. Thus, efforts to meet this unmet need must involve cost-effectively expanding options and access to couples. Possible strategies would be to help those women already using a method to use it more effectively by providing them with accurate information about its use, informing women about different methods if they are dissatisfied with their current method, and educating women about alternative sources of contraceptive supply⁴.

Social marketing concepts have been successfully applied to increase access and use of many modern contraceptives. The present study was conducted to research the potential of socially-marketing the Standard Days Method[®] (SDM) and CycleBeads[®], the visual tool that supports SDM use, in three countries.

¹ "Sub-Sahara's Unmet Need." *Popline* 2000. Vol. 22. Population Institute. Washington, DC.

² Malle B. (2000). Augmenter l'Acceptation et l'Usage de la Planification Familiale Naturelle: Une Etude Diagnostique. CEFORP and Institute for Reproductive Health.

³ Vargas, T. and Bratt, J. (2001). A Profitability Analysis of the CEMOPLAF Social Marketing Programs. Washington, D.C.: Population Council.

⁴ Jain, Anrudh. (1999). Should eliminating unmet need for contraception continue to be a program priority? *International Family Planning Perspectives* 25(suppl), S39–S43, S49.

1.2 Immediate problem

Ecuador, Benin and The Democratic Republic of Congo (DRC) represent three dissimilar environments, each facing its own challenges in expanding access to methods of family planning.

Benin

A country of about 8.5 million people, Benin is characterized by very low literacy among adult women (23%) and low contraceptive prevalence. Although there has been a reduction in the fertility of women in Benin over the last 20 years, the total fertility rate remains high due, in large part, to a lack of access to contraceptives. A new Demographic and Health Survey (DHS) was conducted in 2006 and results are still being analyzed. The most recently available data show that women have on average 5.6 births.

While almost 92% of women report having heard of a method of family planning, 81% of women in Benin report not using any method according to currently available data⁵. Over one-third of women have used a method at some point in their lives⁶. Research indicates that, even when knowledge of family planning methods is high and these methods are readily available, many Beninese women prefer to use natural or traditional methods for fear of side effects and complications attributed to modern methods⁷.

Data from Benin's most recently available DHS (2001) show that traditional methods such as periodic abstinence and withdrawal are well known and widely used, and that FAM may be culturally appropriate. The study reported that 25.6% of sexually active women had ever used periodic abstinence, and 7.2% were currently using periodic abstinence as their method of family planning at the time of the study⁸. Other data from Benin show that approximately 12% of all Beninese women, 36% of unmarried, sexually active women, and 24% of all men report using either periodic abstinence or a "traditional" method as their current method of avoiding pregnancy. Approximately 17% of married women who are not currently using family planning, yet desire to use some method in the future, identified FAM as their method of choice⁹.

⁵ Institut National de la Statistique et de l'Analyse Economique (INSAE) and ORC Macro. (2002). Enquête Démographique et de Santé au Bénin 2001. Calverton, Maryland, USA.

⁶ Kodjogbé, N., Gora M., Justin T., et al., (1997). Enquête Démographique et de Santé, République du Bénin 1996. Calverton, MD USA: Institut National de la Statistique et de l'Analyse Economique and Macro International Inc.

⁷ Capo-chichi, Virgile. 1999. "Fertility transition in Benin : New reproductive patterns on traditional behaviours?" University of London. Doctoral Dissertation.

⁸ Institut National de la Statistique et de l'Analyse Economique (INSAE) et ORC MACRO, op cit.

⁹ Kodjogbé et al, Op. Cit.

Women in monogamous relationships strongly preferred natural and traditional family planning methods mainly because there are no side effects. These methods of family planning were also viewed as easy to use and facilitated a quick return to fertility. However, it was also found that 50% of all women cannot correctly identify their fertile period, thus seriously hindering their ability to effectively rely on a natural method for pregnancy prevention.

Despite the existence of a significant potential demand for FAM of family planning in Benin, access to these methods has been limited. Most family planning institutions state that they offer “natural” methods, but in reality, these methods have rarely been integrated into existing family planning services. This may be due to a number of factors, including health providers' lack of information and training, misconceptions about FAM, and lack of political commitment and financial resources¹⁰. High rates of discontinuation of family planning methods, often due to side effects or fear of side effects, socio-cultural factors, and men's opposition, are also of concern. Introduction of a fertility awareness-based method has the potential to address the needs of couples who are dissatisfied with the current family planning options available.

Democratic Republic of the Congo (DRC)

Like Benin, the DRC is a poor country located in the Western Central region of Africa. At 65 million people, the DRC is a much larger country, growing at a rate of three percent per year. This indicates a population doubling time of less than 25 years, - very rapid growth even by sub-Saharan Africa standards. The total fertility rate at last survey was 6.3 births per woman. The results of the new DHS conducted in 2007 (preliminary summary just released) show a slight decline in fertility (6.0) indicating hardly any improvement over the past 30 years. The contraceptive prevalence rate (21) in the DRC, while higher than in Benin, is in large part based on natural or traditional methods used without correct knowledge.

Although data on population issues in the DRC are limited, a qualitative study conducted in Kinshasa prior to the recent 2007 DHS suggests the existence of a potential demand for the SDM. For example, the report shows an interest in effective, low cost methods that do not have side effects¹¹. Integration of the SDM would extend the range of effective FP options available to Congolese couples. Data from the U.S. Agency for International Development (USAID) Country Health Statistical Report of March 2003 indicates that 98% of Congolese women in union do not use a modern method of FP. The Population Reference Bureau's 2003 World Population Data Sheets lists traditional method use in DRC as eight percent. While data on unmet need for family planning and demand for spacing methods is not available, the Association Sante Familiale (ASF) study findings indicate that attitudes toward family planning are positive

¹⁰Capo-Chichi V, Op. cit

¹¹ Ecole de Santé Publique. (2003). Etude Qualitative sur Les Connaissances, Perception et Pratiques des Méthodes Contraceptives Modernes a Kinshasa. Kinshasa, République Democratique du Congo: Association de Santé Familiale.

overall, although rumors and misconceptions about side effects abound and need to be addressed. Knowledge of the woman's fertile period is also very low, leading to incorrect use of periodic abstinence, subsequent pregnancies, and lack of confidence in fertility awareness-based methods⁴.

Ecuador

In sharp contrast to Benin and the DRC, fertility in Ecuador has fallen rapidly to 2.7 births per woman and contraceptive prevalence is 73%. Yet, in Ecuador as in other countries in Latin America, unmet need remains high, particularly among certain populations. Furthermore, because of past high fertility and a growing demand for family planning, reproductive health programs face a major challenge: to provide a greater variety of products and services to a rapidly increasing number of users¹². This challenge must be met in the context of stagnant or decreasing donor funding. Thus, efforts to meet this unmet need must involve expanding options and access to couples. Ecuador's 2005 DHS shows that between 1999 and 2004, prevalence among women in union at the national level increased from 66% to 73%. Modern methods represented 51% of total prevalence during this period, increasing to 59% in 2004. There was no change in natural method users during this period with prevalence remaining at 14%. However, the natural methods cited as most commonly used with a higher prevalence than the injection and condom were withdrawal and rhythm—the least effective methods¹.

As of 2005, the public sector in Ecuador was meeting 39% of the demand for family planning services, while the private sector provides 61%. Within the private sector, the for-profit private sector covers about 48%, and not-for-profit institutions, including the Centro Médico de Orientación y Planificación Familiar (CEMOPLAF), cover about 13%. The economic, social, and political crisis of the country has significantly reduced financial capability, especially among middle and lower income groups. Consequently, many more families now obtain health services from the Ministry of Health (MOH) or from pharmacies. In addition, suspension of donated contraceptives to CEMOPLAF increased the price of contraceptive methods. These factors may have contributed to more couples using natural methods. One impetus for this study is to help those already using a method to use it more effectively by providing them with accurate information about its use (including how to identify the fertile period), informing couples about different methods if they are unsatisfied, and educating them about alternative sources of contraceptive supply.

¹² Vargas, T and Bratt, J. (2001). A Profitability Analysis of the CEMOPLAF Social Marketing Programs. Washington, D.C.: Population Council.

Table 1. Demographic information on three study countries

Country	Total Population (million)	Total Fertility Rate	Contraceptive Prevalence Rate	Adult Literacy Rate-Women
Benin	8.4	5.6	19	23
DRC	64.6	6.3	21	79
Ecuador	13.2	2.7	73	90

Source: Benin 2001 DHS; DRC 2007 Preliminary DHS report; Ecuador 2005 DHS; International Census reports 2007 for all three countries

1.3 Justification for study

The SDM is a modern method that can help respond to the unmet need for family planning in countries such as Benin, DRC and Ecuador. The Institute for Reproductive Health, Georgetown University (IRH) developed the SDM and tested its efficacy through a multi-site clinical trial. The method was found to be 95% effective when used correctly and 89% effective with typical use¹³. Providers and clients found the method easy to teach and use, and the number of pregnancies in the pilot studies was very low¹⁴. Following the trials, the Institute in collaboration with CEMOPLAF in Ecuador, and with the Laboratory for Applied Studies in Development (LEADD) (a research and technical assistance non-governmental organization [NGO]), in Benin, conducted operations research (OR) studies which tested strategies to expand access to the SDM.

In Benin, the OR study was conducted in Cotonou and Parakou between 2002 and 2004. LEADD partnered with the MOH/Maternité Lagune, the Beninese Association for Family Promotion (ABPF) and the NGO Organization for Service and Life “OSV-Jordan”. The study examined the demand for the SDM; provider ability to offer the SDM; client ability to use the method correctly, and client satisfaction and continuation with the method. Results from the Benin study determined that strong demand for the method exists. The study revealed that “counting the days”, the essential basis for the SDM method, is already quite common, and that the SDM is culturally acceptable¹⁵. The SDM could be effectively offered to the community through existing service delivery channels, there was a high degree of acceptability and continuation with use of the method; and the SDM could be used correctly and consistently. Particularly in Benin, men were found to have a high level of interest in the method.

The OR study in Ecuador showed that the SDM attracted a range of users, including those who had not previously used a method: up to 87% of the users had never used a

¹³ Arevalo, M., Jennings V., Sinai, I. (2002). Efficacy of a new method of family planning: the Standard Days Method. *Contraception* 65, 333-338.

¹⁴ Lundgren R, et al., (2000). Provider and client satisfaction with the Standard Days Method.

¹⁵ Capo Chi-Chi, V. (2001). Analyse de la Faisabilité de l'étude d'efficacité de la Méthode des Jours Fixes de Planification Familiale au Benin, Consultant Report for the Institute for Reproductive Health, Georgetown University.

method prior to the SDM. The typical SDM user in Ecuador was nearly as likely to be educated as to be illiterate. There was high user satisfaction, with 90% of women and men indicating they would recommend the method to others. The results suggested that the SDM could improve informed choice and quality of care, as well as expand the client base and increase contraceptive prevalence.

Supported by these OR results, the current study aimed to bring the SDM from research to practice by scaling up the methods in three countries and increasing access to the SDM through training and social marketing efforts. In each country, the study examined the feasibility of adding the SDM to the current family planning method mix at selected health facilities, and pharmacies. It also examined the extent to which providers accepted this new method and their willingness to offer it to clients. In addition, the project monitored provider and pharmacist performance in SDM provision, including their ability to counsel clients to use the method correctly according to their service delivery protocol. Training and follow up activities were complemented with information, education, and communication (IEC) activities that involved mass media interventions, the adaptation and distribution of client, provider and promotional materials that have been successfully used in other countries, and the development of additional materials as required and appropriate.

1.4 Objectives

The aim of this study was to answer the following research questions:

What is the impact of a mass media campaign on knowledge, attitudes, sales and free distribution of the SDM?

1. Can pharmacists and health providers provide high quality information about the SDM?
2. How do characteristics of women who purchase the SDM from pharmacies compare with those obtain it at a lower or no cost from a clinic?
3. Can women who purchase the SDM from a pharmacy use the method correctly?

Based on these research questions the objectives of this study were to:

Measure changes in family planning knowledge and use resulting from the social marketing activities

- Determine the cost-effectiveness of different types of promotion
- Determine the quality of information provided to SDM users by pharmacists and health care providers
- Compare the profiles of SDM users from pharmacies and clinics
- Compare correct use and continuation of the SDM with users who purchase the method in pharmacies with those who obtain it in clinics

1.5 Implementing partners

Benin

In Benin, IRH partnered with Population Services International (PSI) as the strategy implementation partner. PSI has been involved in family planning and health initiatives

in developing countries around the world since 1976, with a special emphasis on social marketing. In Benin, PSI worked through its local affiliated project, Association Béninoise pour le Marketing Social et la communication pour la santé (ABMS). ABMS has also been successful in bringing family health issues and commodities into mainstream Benin society since 1990. IRH and PSI/ABMS partnered with the Centre de Recherche en Reproduction Humaine et en Demographie (CERRHUD) and OSV-Jordan, which is a community health NGO, to conduct the social marketing study in which the SDM was incorporated into PSI/ABMS's pilot social franchising "network" of clinics and pharmacies called *ProFam*. Family planning and reproductive health organizational partners included HOMEL (an MOH clinic), the Beninese Association for the Promotion of the Family (ABPF - an IPPF affiliate) and Foundation Regarde d'Amour, as well as faith-based organizations.

DRC

IRH also worked with PSI in the DRC, in collaboration with its local affiliate, ASF and the local NGO Conduite de la Fécondité, to implement the strategy. BEM was the research partner. Other partners included Catholic Relief Services (CRS) and the MOH. Sante Rurale, or SANRU, affiliated with Interchurch Medical Assistance, Inc. (IMA), is a non-profit association of 12 Protestant relief and development agencies throughout the world. In the Congo, IMA's partner in the SANRU project was Eglise du Christ au Congo (ECC), which comprises 61 Protestant church communities of several denominations, representing millions of parishioners. Other partners include the Jane Goodall Institute (JGI), a conservation group, the local International Planned Parenthood affiliate (IPPF) and BDOM, the Medical branch of the Catholic Diocese, (only in Bukavu).

Ecuador

CEMOPLAF in Ecuador collaborated with the Institute as both research and implementing partner. CEMOPLAF had previously collaborated with IRH on operations research to test strategies to expand access to the SDM. It was responsible for providing, monitoring, and evaluating training and technical assistance, as well as developing and testing a social marketing strategy through the MOH, other NGOs, private health providers, and pharmacists in selected sites throughout the country.

2. SOCIAL MARKETING STRATEGY

In each country, the implementing partners were responsible for creating a social marketing campaign targeting women and couples in faithful relationships who did not want to use hormonal methods but who wanted to space births using safe natural, effective, methods of family planning. These campaigns were conducted somewhat differently in each country depending on the local context, but each with the goal of raising awareness of the SDM and encouraging women and their male partners to seek more information or obtain the method itself through health clinic and pharmacies in which trained providers would be able to answer their questions and provide the method. Each partner organization also worked with a well-established network of affiliated pharmacies.

2.1 Building support for the SDM

Sensitization sessions were held with key health partners and policymakers in all three countries. During the preparatory phase of the project IRH organized meetings and interviews with key reproductive health stakeholders, including the MOH as well as other family planning/reproductive health organizations, and faith-based organizations. These meetings and interviews were used to share information about the results of the SDM and OR efficacy studies and solicit feedback about the planned social marketing campaign and expanded access for SDM. Findings and recommendations collected from these individuals and organizations were used to guide the adaptation of the training program and the provider and client materials.

Benin

IRH held preparatory meetings with its key partners, the MOH and PSI, and provided promotional materials in French for translation into local languages as necessary, in addition to CycleBeads for promotional/demonstration purposes. The press and local broadcast media were contacted to stimulate interest in the method through a series of workshops, development of press releases and offers to provide content and interviews.

DRC

During the preparatory phase, IRH oriented USAID/DRC, PSI/ASF, CRS, and other partners about ongoing work to expand access to SDM, and aims for this study. Since the method was new to DRC, IRH supported its locally-hired country coordinator to undertake a study visit to Rwanda, where a program had been active for more than a year and demand continues to grow. Current policy in DRC requires at least partial cost recovery for services offered. In consultation with IRH, each site set a price for the SDM that would compare well with the price for pills and injections (In DRC, this price was approximately 500 F or \$1.25).

Ecuador

IRH collaborated with CEMOPLAF, its research and implementation partner, in organizing awareness-raising sessions for 55 directors of the MOH, and other representatives from the Ecuadorian Social Security Institute (IESS), municipalities, NGOs working in health, and other interested groups. During the preparatory stage of the project, IRH worked in coordination with CEMOPLAF in the selection of suitable sites, promoters and suppliers for the implementation study. It was decided to offer the method in the 11 provinces where CEMOPLAF has medical centers at the local level and to use CEMOPLAF's network of pharmacies.

2.2 Training

In each country, local trainers designed the training, tailoring it to meet the needs of each type of provider. Consequently, the duration and content of each type of training varied. While clinic providers and pharmacists received the same training in two of the three countries, the expectations of how they would counsel clients interested in the SDM differed. At the end of their training, pharmacists were expected to be able to explain the basic aspects of the SDM, key features of CycleBeads, and cycle length

variation. It was expected that a pharmacist would be able to make the entire brief explanation in not longer than five minutes, as compared to a clinic based counseling session that takes about 20 minutes.

A number of resources were available to support SDM training including online and video SDM training for providers, provider training manual and job aids, reference guide and CycleBeads for counseling clients, an informational video on the SDM, and a five-point service protocol to help pharmacists provide key aspects about the SDM to clients.

Benin

In Benin, IRH trained a total of 586 providers during 25 training sessions for participating organizations not yet familiar with the SDM. Trainers received a three to four days of training, while clinic-based providers and community health workers participated in an eight hour training workshop, immediately followed by service delivery activities to reinforce learning. By the end of the training, these providers were competent to counsel clients on the SDM. Specifically, they learned how to screen clients for SDM eligibility, teach the method using CycleBeads, counsel on couple issues and communication, and help clients identify indicators of cycle length variation. PSI/ABMS trained 29 pharmacists and 71 pharmacy agents during a one-day training, covering the same content as providers received.

DRC

As in Benin, providers, whether in health clinics or pharmacies, received a one day training course.

Ecuador

CEMOPLAF and IRH collaborated in the training of a total of 768 persons in the SDM method. CEMOPLAF trainers (35) and social marketing detailers (22) received two days of training, while public and private sector trainers received eight hours and service providers (545) at the public and MOH clinics and other health centers received four hours of training. Pharmacists (166) received two hours of training using the CycleBeads insert and the five-point service protocol used in all countries.

2.3 Implementation of social marketing strategy

Women of reproductive age (15-49) who wanted to space their births, but who did not want to use other methods, and their partners, were the target group for SDM and CycleBeads. This group included current users of periodic abstinence, many of whom have been found to be unable to correctly identify the fertile period. Social marketing of the SDM aimed to raise awareness among this population about the SDM method, the benefits of CycleBeads, and where to obtain it.

The social marketing strategies varied by country according to the media most widely available and accessible. In each country, partnering organizations promoted and marketed the method in the context of varying IEC activities. After training, pharmacists displayed CycleBeads in their stores. If a client expressed interest in the SDM, the

pharmacist or their assistant provided a brief explanation of the method and pointed out the user instructions included in the package. Clients were instructed to return if there were questions or to seek a clinic-based provider if a problem was encountered.

Benin

In Benin, PSI/ABMS developed a community-based and mass media campaign adapted to Benin's specific country setting. PSI/ABMS used existing channels of IEC, both within the clinics and at the community level. The integrated communication strategy also targeted providers in clinics and pharmacies, since they are the primary distributors of the product. IRH and PSI/ABMS collaborated to interpret existing formative and marketing research in Benin. ABMS supplemented existing messages and materials, created TV and radio spots in local languages, point-of-sales materials and other educational material about the SDM. Three radio spots were developed, each about 40 seconds in length, which told a continuing story about SDM use. A 30 second TV spot simulated a talk show host presenting the method to two couples. Both radio and TV spots were aired for three months. The IEC campaign included billboards, posters and fliers, ads on promoter shirts, community theater and community talks. Marketing incentives in both Benin and the DRC included t-shirts, caps and note pads.



DRC

In the DRC, IRH materials that had been developed, modified and translated for use in the introduction of the SDM in several countries were pre-tested and adapted. These materials included a service provider training curriculum, provider cue cards, client cards and calendars, as well as supervision and data collection tools. Other communication materials were developed or adapted for use by providers and community health workers during sensitization and promotional activities. Some SDM-specific materials were developed, while IRH also worked with partners to include the SDM in their packages of materials.

In the DRC, where access to television was limited in the study areas, mass media marketing was done via radio. IEC included open house events where pharmacies allowed clients to come and ask questions about their products during that time, community theater shows and community talks. A flier was developed providing a three-year calendar with SDM information. SDM was over-branded with the *Confiance (Trust)* label, a brand that incorporates four other contraceptives, including the pill and Depo®. The CycleBeads box and insert were adapted to accommodate overbranding. At pharmacies and clinics, community members were invited in to ask questions about family planning products, including the SDM.



Ecuador

CEMOPLAF used existing SDM materials developed by IRH, for clinic services. For the MOH, other private health providers, and retail providers, CEMOPLAF developed generic materials, including posters, brochures, and other print materials for the SDM and CycleBeads, for use by both clinic and retail-based providers. The materials were reviewed by providers and pharmacists, and their opinions on the message and design of the print and media materials were considered. CEMOPLAF promoted the SDM and CycleBeads using in-store/on-site informational materials for retail providers to distribute to interested users. The materials carried the *Collar del Ciclo* brand logo (the brand that was already registered in Ecuador).

Since the majority of households have television, a mass media campaign was run on national television for three months. CEMOPLAF used customized and pre-tested media to enhance the scope of information coverage among potential users. A press conference was held to announce the campaign. A slogan, “There are accidents that can be avoided,” was developed to promote the SDM and inform potential users where to obtain further information. CEMOPLAF worked with national television stations to run three to four twenty second spots run during peak TV viewing times. A total of 220 ads were run over three months. In addition, a 20 second ad was broadcast on three national TV channels for a month, for a total of 88 times. The TV spots aimed to motivate the audience to seek additional SDM information and services.



Radio ads were broadcast over local radio stations for three to six months after the large TV mass media campaign. CEMOPLAF authorized spokespersons to handle radio and TV interviews. Large and small posters displayed the method’s slogan in strategic locations, such as bus stations, college campuses, educational institutions, MOH clinics, other government institutions, doctors’ offices, pharmacies, and other retail vendors. A high-impact campaign was developed for newspapers, and 24 ads were placed in major national magazines.

Promotional items with the CycleBeads logo were distributed to providers. These items included pens, T-shirts, caps, and picture frames as a reward/incentive based on the number of CycleBeads they purchased. Pricing schemes such as two boxes of CycleBeads at a lower cost than one was also used as incentives with pharmacists. IEC activities included educational meetings, home visits, community talks, health fairs, and use of loud speakers.

3. METHODS

3.1 Design

The same design, a simple time-series, was used in each country to compare data before, during and after a mass media campaign. The study began with a three-month baseline period when only traditional methods of promotion were used, including press

releases, posters, pamphlets and a hotline (only in Ecuador). The baseline was followed by a three-month media (radio and TV or combination) campaign. During the campaign, distribution of traditional methods of promotion continued, with the exception of press releases. Data were collected from a community survey, and service and sales statistics. Sales and sources of information were measured for several months before and after the campaign period.

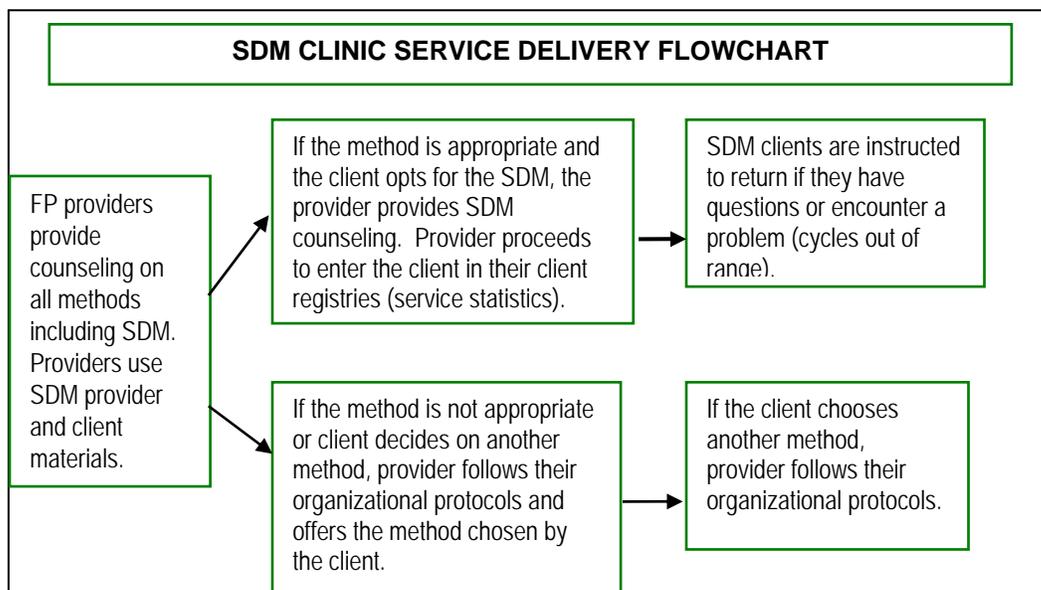
During the media campaign, a post-test only design was used to evaluate the quality of information given in the two distribution channels, pharmacies and clinics, in each country. Simulated clients visited pharmacies and clinics to ask about the SDM. Data was collected through a checklist completed by the simulated client after visiting the establishment.

Three months after the campaign, the ability of pharmacists to provide the SDM was assessed through a prospective study that included following-up SDM clients for six months, and measuring correct use in comparison with clinic-based providers.

Counseling and information

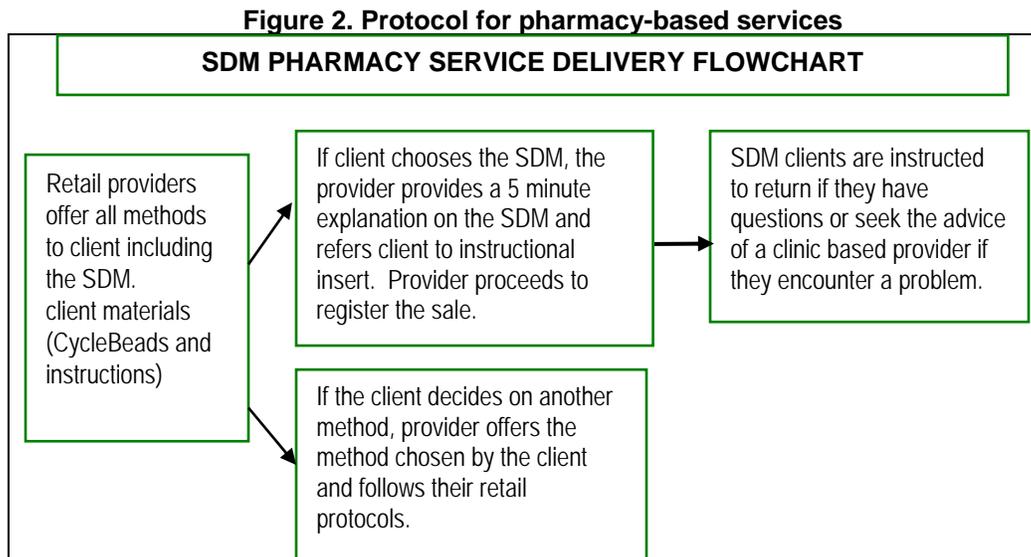
In general, women seeking reproductive health services in clinics first meet with health personnel (typically a nurse or auxiliary nurse) in a consultation room. The provider presents all of the available Family Planning methods to her, discussing how they are used, and the advantages and disadvantages of each. This procedure remained unchanged once the SDM was introduced. However, the SDM was now included among the available methods presented by the provider during the counseling session, using the SDM educational and promotional materials developed by the partner organizations.

Figure 1. Protocol for clinic-based SDM services



Pharmacies

After training, pharmacists displayed CycleBeads in their stores. If a client expressed interest in the SDM, the pharmacist or his/her assistant was to provide a five-minute explanation of the method. After this explanation, providers were to point out the user instructions included in the package, instruct the user to return if she had questions or refer her to a clinic-based provider if she encounters a problem.



3.2 Informed Consent

Informed consent was obtained from the client/respondent for each research component. Researchers were required to respect the privacy and confidentiality of all participants through the informed consent process. All study participants signed an informed consent form that explained: 1) the purpose of the study; 2) what the client's participation required; 3) the risks and benefits of the SDM and the availability of other family planning methods; 4) how the confidentiality of the participant would be maintained; 5) the right to refuse to participate in the study without affecting the client's relationship with the institution or with individuals affiliated with the research; 6) the client's right to refuse to answer any question during the interview; and 7) the client's right to leave the study at any time.

Confidentiality and anonymity were maintained through standardized study procedures, including the storage of the instruments with personal identities in locked file cabinets.

IRB approval for the study was obtained from Georgetown University Institutional Review Board (IRB) and locally in Ecuador, Benin, and DRC.

Variables, data collection and analysis plan

Data were collected through: 1) community surveys; 2) service statistics and sales data; 3) SDM client user data; 3) simulated client visits; and 4) follow-up interviews with pharmacy and clinic users.

Pre-post community survey

Baseline and end line surveys were conducted to determine the impact of the social marketing activities on the SDM. The surveys took place before and after the campaigns in purposely selected areas representing urban and rural areas. Within each area, a stratified cluster sampling of city blocks and random sample of sample of men and women in each household were selected. Results for men were comparable to those of female respondents thus they were not included in this report but are available in individual country reports.

Independent variables: men and women of reproductive age, (15-49 for women), married or in union.

Dependent variables: knowledge, attitudes, and practices, sources of information, exposure to the mass media campaign and IEC messages regarding the Standard Days method, willingness-to-pay (WTP) module.

Table 2 shows the number of women interviewed by country in the pre and post community surveys.

Table 2. Number of women interviewed in community surveys at pre and post intervention by country

Country	Women Interviewed	
	Baseline	Endline
Ecuador	798	802
Benin	400	400
DRC	528	511

Service statistics and sales data

During the last week of every month, the pharmacies and clinics were visited to determine the amount of product sold in the past 30 days. 100% of all participating clinics, pharmacies and private practitioners who purchased the product were monitored. The marketing department also kept records on sales to pharmacies and other commercial outlets, including the number of products sold and the number of commercial outlets recruited, before, during and after the TV campaign.

Independent variables: clinic or pharmacy.

Dependent variables: number of new users by month, number of CycleBeads sold by month, sources of information about the product, and user characteristics.

SDM client user data

Data on the profile of SDM users were collected from a small sample of the clinics participating in the study in Ecuador and Benin. All clients interested in the SDM that came to one of the participating clinics were interviewed.

Independent variables: clinic clients interested in the SDM.

Dependent variables: interested client profile, sources of information about the SDM, eligible for the SDM, and whether they purchased the product (CycleBeads).

Study Sites

Benin

In Cotonou, Parakou and Djougou, IRH partnered with PSI and its local affiliate ABMS to distribute CycleBeads to 39 clinics and 89 pharmacies. Assistance was provided by The Foundation Regarde d'Amour and other faith-based organizations.

DRC

In the DR Congo, study sites were Kinshasa, Bukavu and Lumumbashi. IRH partnered with PSI and its local affiliate, Association Santé Familiale (ASF). A large number of other partners participated in the distribution and supply of CycleBeads to 203 clinics and 161 ASF pharmacies. These included CRS and the MOH. Santé Rurale (SANRU), and organizations affiliated with Interchurch Medical Assistance, Inc, (IMA), a non-profit association of 12 Protestant relief and development agencies throughout the world. In the Congo, IMA's partner in the SANRU project was Eglise du Christ au Congo (ECC), which comprises 61 Protestant church communities of several denominations, representing millions of parishioners in the DRC. Other partners include the Jane Goodall Institute (JGI), a conservation group, the local International Planned Parenthood affiliate (IPPF) and BDOM, the medical branch of the Catholic Diocese (only in Bukavu).

Ecuador

Eleven provinces where CEMOPLAF has 27 health centers were selected for the study. During this period, clients had access to the SDM through a variety of outlets (CEMOPLAF health centers, MOH clinics and hospitals, private clinics, pharmacies, other commercial retailers, and community organizations). CEMOPLAF provided training and assistance to these other public, private, and community centers interested in offering the SDM.

Table 3. Number of participating clinics and pharmacies by country

	Clinics	Pharmacies
Ecuador	27	44
Benin	39	89
DRC	203	161

Simulated clients

Simulated client visits were made to pharmacies and clinics to determine the quality of information given to clients asking for the SDM by pharmacists and clinic-based providers in all three countries. A *Service test* was applied to measure the quality of information. This test consists of a client script that depicts a contraceptive history, conjugal circumstances, method preferences, and other client characteristics; a trained simulated client who pretends to be the woman of the script as she requests services and responds to questions from a provider who believes she is attending a real client, and an observation checklist in a Yes-No format that the simulated client completes upon exiting the clinic. Trained simulated clients visited a randomly selected sample of trained pharmacists to determine if the training they received made a difference in the information given to clients. Also, all clinics pilot testing the method were visited. Two

visits were made to each outlet. Each visit consisted of a simulated client playing a different role, including: (1) a woman who has regular menstrual cycles, wants to space her pregnancies but dislikes hormonal methods (This role determined if providers give correct information when asked and provided the method spontaneously.); (2) a woman who does not have regular menstrual cycles and should not use the method (this role determined if providers screen for the most important contra-indication to the method).

Independent variable: Simulated client.

Dependent variables: client interaction, contraindications, method information, use instructions, and follow-up.

Follow-up study

Data collected on the correct use of the SDM among clients who obtained the method from a pharmacy were compared with clinic user follow-up data from a prior OR study¹⁹ in Benin only and collected simultaneously in the DRC clinics. Pharmacy SDM users were contacted after purchasing the method and recruited after they consented to participate. The study participants were interviewed four times during a six month period (at admission (within one week of counseling session), after one, four, and seven cycles of use. Ecuador is not included in the follow-up study because women who purchased the method from pharmacies did not want to be interviewed.

Independent variable: SDM pharmacy user.

Dependent variables: user profile, contraceptive experience, indicators of correct use, and management of the fertile days.

Table 4 shows the number of users admitted and follow-up to the follow-up study by clinic and pharmacy.

Table 4. Number of users admitted to the study by clinic and pharmacy

	Benin		Congo	
	Clinic	Pharmacy	Clinic	Pharmacy
Admission	219	79	206	14
Follow up	183	59	180	10
Exit	81	52	172	8
Pregnancy	21	4	9	7

3.3 Monitoring the research

Monitoring and evaluation of SDM services was coordinated at different levels by IRH and its partners in each country. IRH staff provided direct support to the core training team of each primary partnering organization by assisting during the first training of trainers for the MOH and the social marketing team, and assisting in the development of research instruments. IRH conducted periodic visits to clinics and other organizations trained by partners to assess their efforts in providing technical assistance and training.

In Ecuador, proposed training times for pharmacists were reduced, and pharmacists had less training time than those in Benin and the DRC. Pharmacists were originally to

receive eight hours of training; but this proved unfeasible, and they instead received two hours of training. This may have had an influence on the ability or willingness of pharmacists to spontaneously mention the SDM or to provide information to women who were interested in using it.

4. RESULTS

In this section, the results of the study examining the feasibility of adding the SDM to the current family planning method mix at selected health facilities and pharmacies are organized by study objectives and by data source to measure A) impact of the campaign, B) quality of information given by providers and pharmacists, and C) compare correct use among SDM pharmacy and clinic users.

4.1 Impact of the social marketing campaign

Respondent characteristics

In an effort to assess the impact of the social marketing campaign, community surveys were conducted before and after the campaign in each country. These cross-sectional surveys did not interview the same respondents at both times (although previously interviewed respondents were not screened out from participating in the endline survey). Results are only presented from the female sample here because the male sample yielded the similar results.

Table 5 presents demographic characteristics of the survey respondents by country. No statistical difference was observed in these parameters, therefore only the end line results are presented. The majority of women surveyed in Ecuador and DRC had at least a high school education, while nearly two-thirds of women surveyed in Benin had only primary schooling or less. Respondents in Ecuador were predominantly Catholic, while those in Benin were predominantly Muslim and those in DRC were Protestant.

Table 5. Characteristics of the community survey respondents

Characteristic	Ecuador (n = 802)	Benin (n = 400)	DRC (n=412)
Marital Status			
Married	85.1	66.0	70.9
Union	14.9	34.0	26.5
No response			2.6
Total	100%	100%	100%
Level of Education			
Primary or less	33.4	64.3	13.9
High School	45.9	34.3	74.2
University +	20.7	1.6	11.9
Total	100%	100%	100%
Religion			
Catholic	88.5	34.8	22.7
Protestant	6.2	4.0	66.2
Muslim	0.0	45.5	0.0
No Religion/ no response	2.0	2.3	2.5

Other	3.2	13.6	8.6
Total	99.9%	100.2%	100.1%

Table 6 shows family planning use among women interviewed at baseline and endline. We show both baseline and endline results because, surprisingly, there was a difference after the three-month campaign period. In Benin, nearly a fourth of women interviewed had never used a method of family planning, and more than a quarter were not using a method at present. The percentage of those indicating they were currently using a method is much higher than among the general population, and can be assumed to include traditional and ineffective methods. The situation is similar in the DRC, while the percentage of women currently using a method of family planning in Ecuador is much higher. These results are similar to national survey data.

Table 6. Family planning profile

	Ecuador		Benin		DRC	
	Baseline (n =798)	Endline (n =802)	Baseline (n =400)	Endline (n =400)	Baseline (n =524)	Endline (n =412)
Never used FP	10.3	5.0	23.8	23.8	15.3	24.8
Have used FP in past, but not anymore	13.8	12.6	27.5	32.3	30.5	25.0
Currently using FP	75.9	82.4	48.7	44.8	54.2	50.2

Knowledge of SDM

A key purpose of the endline survey was to determine whether the mass media campaign had increased knowledge of the SDM among the general population. As shown in Table 7, women interviewed at endline in all three countries were more likely to be aware of the SDM than those interviewed at baseline. This was especially true in Benin, where, by the endline survey, a majority of women (64%) had heard of SDM as compared to roughly one-third at the baseline. The SDM was known among less than six percent of women interviewed in Ecuador prior to the campaign, but nearly 31% of women knew of the method at endline. Respondents in the DRC were least likely to have heard of SDM by the end of the campaign, although a nearly five percentage point increase was seen between baseline and endline.

Table 7. Awareness of the SDM

Country	Women Respondents			
	Baseline		Endline	
	N	%	n	%
Ecuador	798	5.6	802	30.9
Benin	400	35.5	400	64.0
DRC	524	17.4	412	22.1

Source of information about SDM

In Ecuador, CEMOPLAF ran a free hotline for people interested in SDM. The hotline was advertised on their posters, fliers, and television ads. This service was offered to provide information and also to measure the amount of interest generated by the campaign and to determine the main source of the caller's information. SDM clients at the clinics and respondents in the community survey were also asked where they heard

about SDM. According to data from the community survey, clinic user forms, and hotline calls, the majority of respondents said they had heard about SDM on television. Fewer women heard about the SDM from posters and fliers (10% - 28%).

In Benin, clinic and community surveys showed TV and clinic personnel as equally likely to be the source of SDM information (Table 8). Respondents also learned about the SDM through radio, social networks and printed materials. (Multiple answers permitted).

Table 8. Source of SDM information from clinic and community surveys in Benin

	Clinic (n=123)	Community (n=254)
TV	47.2	61.8
Clinic personnel	47.2	36.2
Radio	11.4	3.5
Poster/brochures	11.4	7.9
Parents/friends/SDM users	12.2	7.5
Pharmacy	1.6	4.3

In the DRC, where television was not used to promote the method, the clinic was the most common source of information about SDM. Parents, friends and other users were another source of information about the SDM in all three countries.

Demand for the SDM

Respondents were asked whether they would be interested in learning more about the SDM. Those who answered affirmatively were asked about their interest in using it (potential demand) and their intention to use it. According to the results of the baseline survey, interest in learning more about the SDM was very high in the DRC and reasonably high in Ecuador and Benin. As Table 9 illustrates, potential demand (interest) for the SDM was already very high in the DRC among women who were interested in learning more about the method (above 92%) and changed very little as a result of the campaign.

Table 9. Interest in learning more about the SDM

Interest in learning more about SDM				
	Baseline		Endline	
	n	%	N	%
Ecuador	798	74.2	802	67.0
Benin	400	81.7	400	84.8
DRC	524	97.3	412	92.5
Interest in using SDM				
Ecuador	592	27.2	537	32.0
Benin	327	58.7	339	69.6
DRC	512	93.0	382	93.7

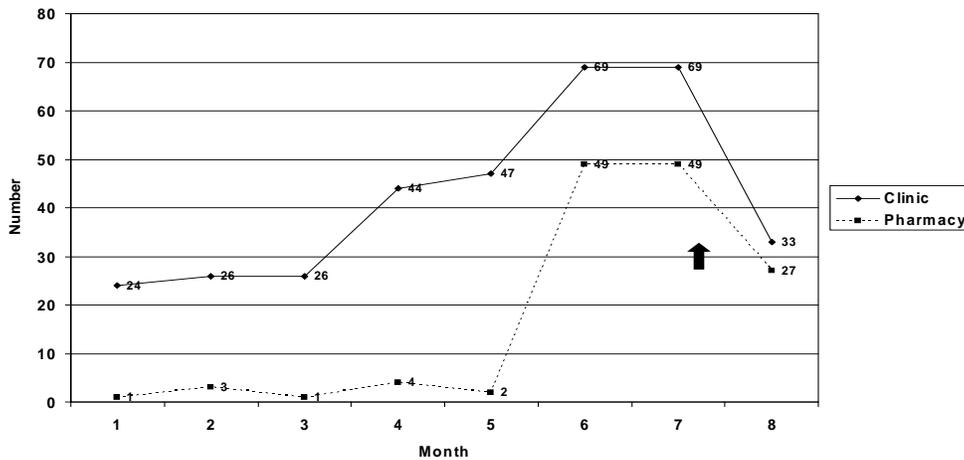
Sales of CycleBeads by pharmacies and clinics

Figures 3 through 5 show the number of CycleBeads sold by pharmacies and clinics by month before, during and after the campaign. Data were collected for several months before and after the campaign. In Ecuador, sales in both clinics and pharmacies had a similar pattern and reached their peak in months six and seven corresponding to the

third month of the campaign and part of the next month. Clinic sales were higher overall, but pharmacies sales remained much higher after the campaign ended, while clinic sales returned to their pre-campaign level.

Figure 3. CycleBeads sales in pharmacies and new users at clinics in Ecuador

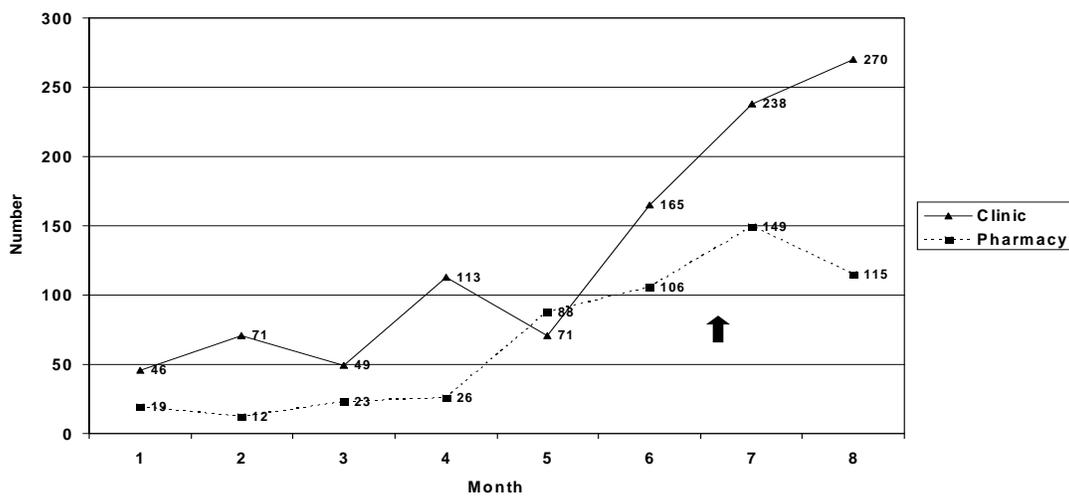
CycleBeads Sales in Ecuador



In Benin, where total sales of CycleBeads were the highest of the three countries, sales in clinics were still climbing when data collection ceased in month eight. While pharmacy sales had begun to decline, they were much higher than at the onset of the study, and higher than during most of the mass media campaign.

Figure 4. CycleBeads sales in pharmacies and new users at clinics in Benin

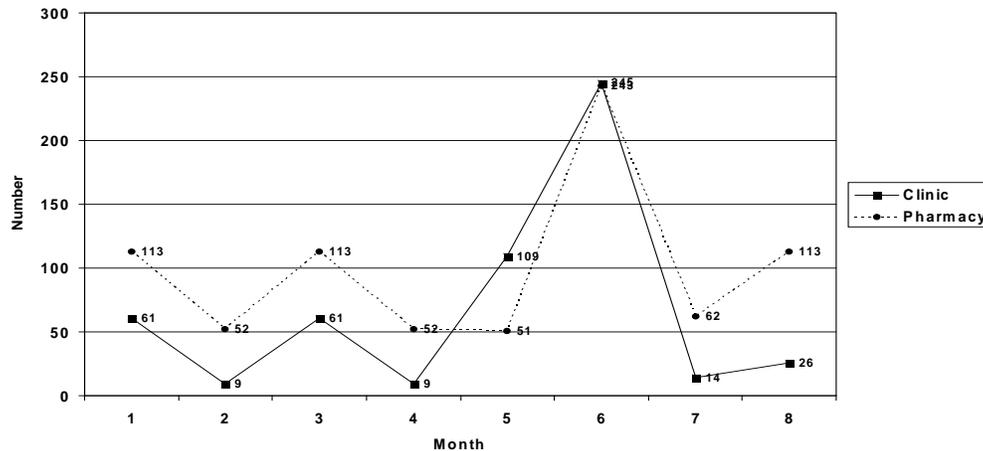
CycleBeads Sales in Benin



In the DRC, in contrast to Ecuador and Benin, sales were generally higher in pharmacies than in the clinics. Sales increased rapidly in clinics and pharmacies until month six and then fell off sharply corresponding with the end of the mass media campaign. At the end of data collection, pharmacy and clinic sales had returned to their pre-campaign levels.

Figure 5. CycleBeads sales in pharmacies and new users at clinics in DRC

CycleBeads Sales in DRC



Current use of SDM among survey respondents

At this point of SDM introduction, the method captures only a small percentage of the contraceptive market in the three study countries. As such, few users of the SDM were interviewed in the community surveys at either baseline or endline (Table 10).

Table 10. Current use of the SDM among female respondents

	Baseline		Endline	
	n	%	n	%
Ecuador	798	0.00	802	0.00
Benin	400	0.25	400	1.25
DRC	279	2.5	207	1.4

Profile of women requesting SDM counseling

In Benin and Ecuador, a form was completed for women who came to a clinic with interest in using the SDM. This form provided information on demand for the SDM at clinics as well as basic information on interested women.

A total of 137 client forms were completed in clinics in Benin. Fourteen (10.2%) clients who wanted to become pregnant were dropped from the analysis. Among the remaining 123 clients, the typical client interested in SDM had a mean age of 28.5, was married or in union, and had a high school or higher level of education. More than half were Catholic, (55.3%) and most (87.5%) had a previous pregnancy. Clients were evenly distributed between those who had paid employment and those who did not.

In Ecuador, a total of 248 clinic client forms were completed. The typical client was aged 20-29 (58.4%), had high school or higher level of education (67.7%), came from an urban area (76.2%), and had previously had at least one pregnancy (76.8%).

Table 11. Profile of requesting SDM counseling at clinics

	Benin	Ecuador
Characteristic	Percent (N=123)	Percent (N=248)
Aged 20 – 29	52.0	58.4
Married/ in union	81.7	N/A
High school or higher education	55.3	67.7
Catholic	55.3	N/A
Urban	N/A	76.2
Previous Pregnancy	87.5	76.8

Many of the SDM clients in Benin and Ecuador had never used family planning previously or had used an ineffective method (27.6% and 30.7% respectively). Among those who had used family planning previously, the most commonly used methods were hormonal methods.

Table 12. Prior Family Planning Method Usage by Benin Clinic SDM users

	Benin	Ecuador
Last FP Method Used/Using	Percent (N=123)	Percent (N=244)***
Never used	27.6	30.7
Ineffective methods (periodic abstinence, withdrawal)	17.1	6.2
Hormonals (pills, injection, Norplant)	37.4	47.5
Barrier (condoms, female condom, spermicides)	15.4	15.6
Emergency Contraception	3.3	0.0
SDM	2.4	0.0
LAM and Billings Method	2.4	0.0
Why stopped last method	N=74*	N=158****
Health/Side effects	37.8	17.7
Failures/ Reliability/Would like to switch methods	25.7	18.4
Inconvenience/Husband refuses	20.3	44.3
Other**	16.2	19.5

*12 missing responses

** Each response only given once (incl. religion and determine fertile period.)

*** 4 missing responses

**** 15 missing responses

Factors related to health and side effects (37.8% and 17.7%), concerns about the reliability of the methods (25.7% and 18.4%), and inconvenience/husband refuses (20.0% and 44.3%) were the most commonly reported reasons for discontinuing their last method. The category of “other” reasons for discontinuation included include religion, to determine the fertile period, forgotten appointment, advice of midwife, and personal preferences among others.

Many of the clients stated that they wanted to use the SDM because they felt it was easy to use, would not affect their health, and/or they wanted a natural method. (Multiple answers permitted).

Table 13. Reasons for requesting SDM (Benin Clinics)

Reason	Benin Percent (N=123)
No side effects, doesn't affect health, natural	82.9
Easy to use	44.7
Husband opposed to other methods	11.4
Affordable	82.9
Other (want to know fertile days, infrequent intercourse, etc.)	44.7

These responses were similar to those of respondents to the community survey in Ecuador who expressed an interest in, but were not yet using the SDM. Among women (N=171) with an interest in using the SDM, 40.9% indicated that they were interested because the SDM was natural, 21.6% because it appeared safe and 19.9 % because it was easy to use.

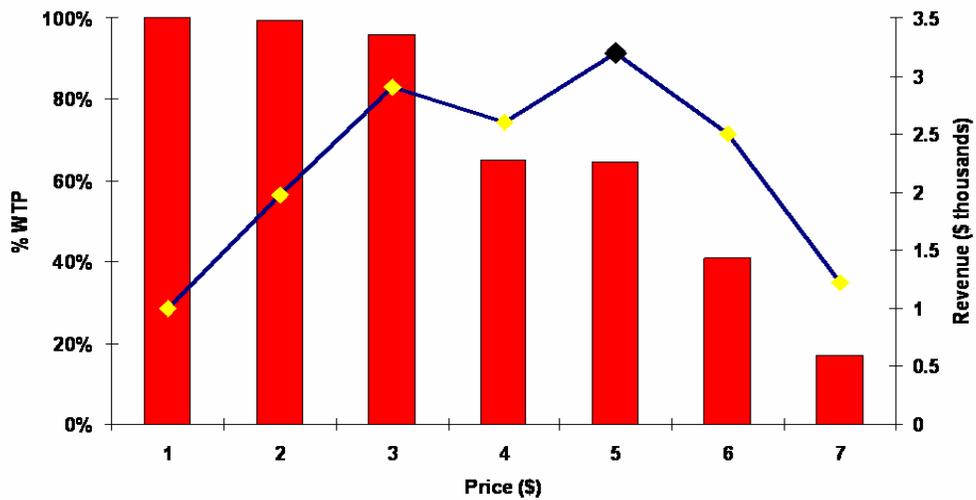
Willingness-to-pay for the SDM

Respondents in the baseline and endline surveys were asked what they would be willing to pay for CycleBeads. The price set for the SDM in each country was based on the costs of other methods. While women in Ecuador were willing to pay upwards of \$5 for the necklace, those in Benin were willing to pay an average of \$2 and women in the Democratic Republic of the Congo were willing to pay on average only \$1. The median price potential users were willing to pay did not change as a result of the campaign. As a point of reference, the cost of a packet of pills was \$0.20 in the DRC, \$1.25 in Benin at PSI network pharmacies, and \$2.83 in Ecuador through CEMOPLAF affiliated pharmacies.

Determining the price that maximizes revenue according to demand for the SDM

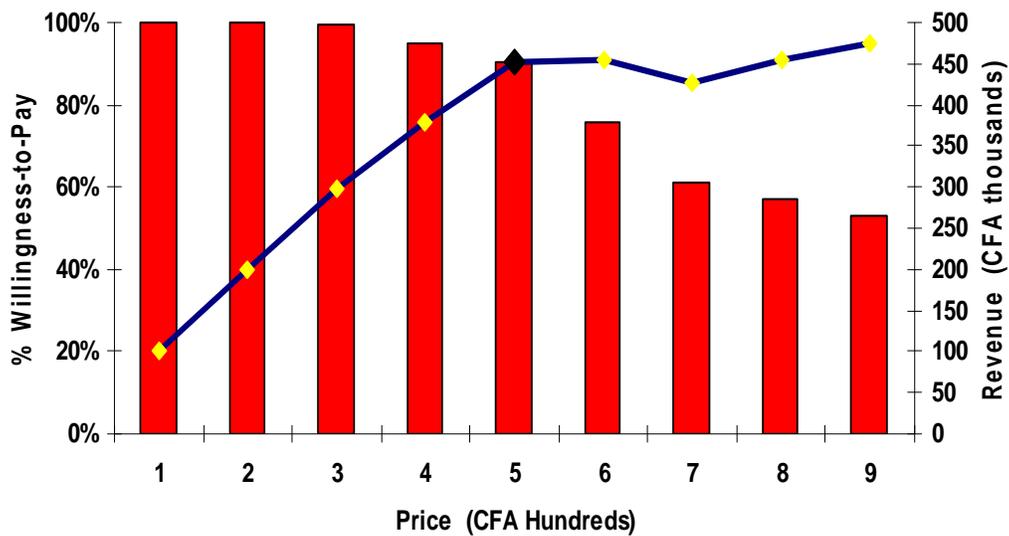
The study also investigated how the price for the SDM should be set according to the price that maximizes revenue for the clinic or pharmacy, according to the demand for the product. Figure 6 shows that in Ecuador, income from sales of CycleBeads continues to rise even after a sharp decline in the percent of clients willing to pay, until the price reaches \$5. Income at that point falls off steeply, indicating that setting a price of \$5 would maximize revenue for the vendor.

Figure 6. Ecuador: Price that maximizes income by demand (by 1000 persons)



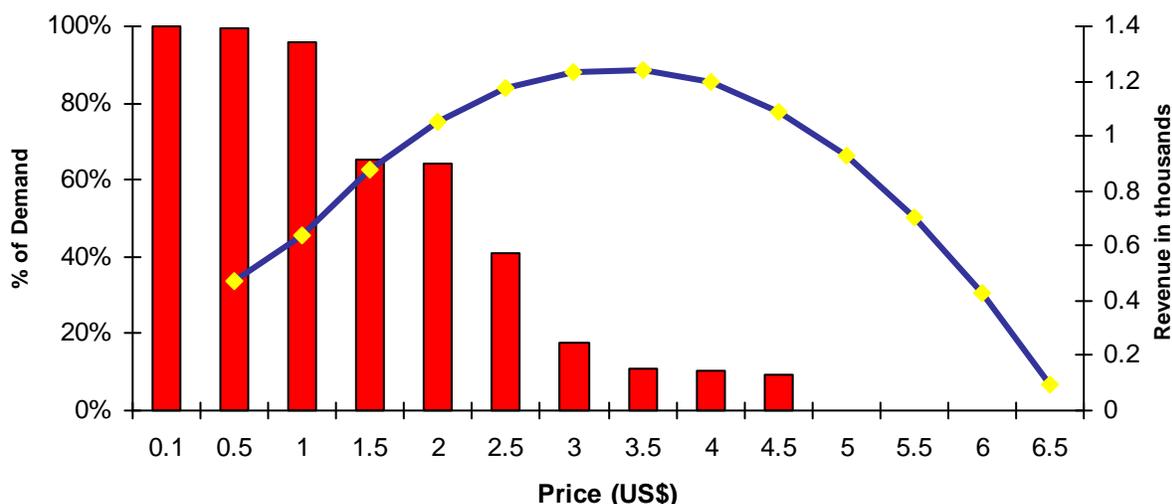
For Benin, Figure 7 shows a somewhat different pattern. Willingness to pay declines more gradually after \$5 and revenue remains fairly stable even up to a price of \$9.

Figure 7. Benin: Price that maximizes income by demand (by 1000 persons)



In the DRC, the much lower price clients are willing to pay is reflected in Figure 8. The price that maximizes revenue and maintains at least 75% of demand is \$2.

Figure 8. DRC: Price that maximizes Income by demand (by 1000 persons)



Where women prefer to obtain the SDM

In all three countries, most women interviewed preferred to obtain CycleBeads at a health center (public mostly). The second preference was for pharmacies. Fewer people expressed a preference for a hospital or private family planning clinic. However, the percentage of women who would like to obtain the method at a pharmacy increased from baseline to endline, presumably due to greater awareness of its availability through pharmacies.

Table 14. Where women would prefer to obtain CycleBeads

Source	Ecuador		Benin		DRC	
	Baseline N=180	Endline N=185	Baseline N=192	Endline N=236	Baseline N=478	Endline N=360
Health center (public/private)	71.6	46.0	64.1	58.9	75.9	69.5
Private physician	10.6	13.5	15.2	10.6	NA	NA
Pharmacy	16.7	34.6	3.6	36.4	22.2	29.4
Other	1.1	2.2	2.6	11.5	1.7	0.8
Don't know	0.0	3.8	13.5	1.3	0.2	0.3

4.2 Quality of information given by pharmacists and providers

Some program managers are concerned that the quality of information provided to clients who obtain the SDM in pharmacies will be poor. In each country, simulated clients visited a sample of pharmacies and clinics offering the SDM to compare the quality of information provided to potential SDM users.

A simulated client playing the role of an eligible and ineligible SDM user visited both clinics and pharmacies. Each simulated client used a checklist to score the provider or pharmacist on the exchange of information including the topics of general information on the method, screening for method eligibility, instructions on method use, and follow-

up instructions. For the purposes of this report, key indicators from the checklist were selected.

Eligible profile

As indicated in Table 14, clinic-based providers provided more information than pharmacists in all three countries. In Ecuador, almost all (96%) providers gave spontaneous information about the SDM and mentioned the fertile day requirement but did not always screen for cycle length. Although pharmacists in Ecuador did not provide information spontaneously or completely, 61% referred the client to the instructional insert if they had questions. This point was stressed during their one-hour training, and it was included in their five-point service protocol. As in Ecuador, fewer pharmacists in both African countries provided spontaneous and correct information when asked than did clinic-based providers. Overall, pharmacists in Benin scored better than their counterparts in DRC and Ecuador, a result that can perhaps be attributed to the more thorough training they received.

Table 15. Percent of providers and pharmacists covering essential items (eligible profile)

	Ecuador		Benin		DRC	
	Clinic N=44	Pharmacy N=27	Clinic N=24	Pharmacy N=24	Clinic N=58	Pharmacy N=60
Gave spontaneous Information	96	20	100	63	90	38
Mentioned requires abstinence or condoms	96	34	96	67	67	35
Determined cycle length	78	9	96	38	96	35
Showed instructional insert	89	61	58	41	40	52

Ineligible profile

The checklist for the simulated clients playing the role of an ineligible client was similar to the checklist for the eligible profile in the first items (giving spontaneous information and method requirements) in each country. However, the ineligible SDM client was also asked if the provider or pharmacist told her that the method was not appropriate for her, to determine whether they were screening clients correctly. Virtually all providers in Ecuador and DRC screened clients for eligibility. Pharmacists in Benin were also better at screening ineligible clients than were pharmacists in Ecuador and the DRC – again a possible effect of the one-day training pharmacists received.

Table 16. Percent of providers and pharmacists covering essential items (ineligible profile)

	Ecuador		Benin		DRC	
	Clinic N=44	Pharmacy N=27	Clinic N=24	Pharmacy N=24	Clinic N=58	Pharmacy N=60
Gave spontaneous Information	93	7	96	63	90	38
Mentioned requires abstinence or condoms	96	64	83	67	67	35
Said method not appropriate	93	9	79	67	96	35

4.3 Acceptability and correct use by pharmacy and clinic SDM users in Benin and DRC

SDM enrollment and exclusion criteria

In response to program managers' concerns about the ability of women who obtain the SDM from a pharmacy to use it correctly, a new study comparing follow-up interviews with SDM pharmacy users with previously collected clinic users was conducted in Benin.

Initially, 147 clients purchased CycleBeads a pharmacy and completed the study contact information card. Among these, 102 clients were located and consented to participate in the study in the three study sites (Parakou, Cotonou, and Djougou) in Benin. Following a review of the screening criteria in the admissions questionnaire, 23 women who did not meet the criteria were excluded from the study. The most common reason for exclusion was menstrual cycles outside of the range of 26 to 32 days.

Demographic profile of SDM users and their partners

Women between the ages of 19 and 49 were eligible to be enrolled in study. There were no significant differences between the mean ages of users of clinics or pharmacies in Benin (29 years). There was a significant difference in the educational level of users of both clinics and pharmacies. On average, women had two children. Slightly less than half of pharmacy users had ever used a contraceptive prior to choosing the SDM, in comparison to clinic users. There was a statistically significant difference in ever contraceptive use between clinic and pharmacy users. However, most clinic users were not using a method or using a traditional family planning method two months before starting the SDM.

Table 17. Profile of users entering the study, by clinic and pharmacy for each country

Characteristics	Benin	
	Clinic (n =219)	Pharmacy (n =79)
Age (SD)	29.43 (7.74)	29.91 (6.24)
Level of Education		
None	13.3	10.1
Primary	33.3	25.3
Secondary	42.4	40.5
Technical	6.2	6.3
University	4.8*	17.7*
Parity (SD)	2.05 (1.95)	1.97 (1.46)
Ever Modern Contraceptive Use	31.5	48.1*
No family planning use or used only traditional methods 2 months before SDM acceptance	78.5*	55.2

* Significant difference ($p \leq .05$)

Reasons for choosing the SDM

Women from clinics and pharmacies were asked why they chose the SDM. Respondents were able to provide multiple responses, and the reason most often given by both clinic and pharmacy users was that the method had no side effects. Fear of side effects was significantly higher among pharmacy users (Table 18).

Table 18. Reasons for choosing the SDM

Reason	Benin	
	Clinic (n =219)	Pharmacy (n =79)
Does not affect health	72.4	55.7
Fear of side effects	8.3	20.3*
Husband opposed to other methods	6.3	5.1
Inexpensive	0.5	2.5
Does not affect breastfeeding	0.5	10.1
No need to use or take anything	4.7	2.5
Religious/moral reasons	1.0	3.8

* Significant difference ($p \leq .05$)

Source of information on SDM use

Women who bought the method at pharmacies were asked how they learned to use the SDM given that pharmacists normally do not provide counseling on any of the family planning methods that they sell. Most women in Benin (58.1%) learned how to use the method from the pharmacist or their assistant (Table 19). Their husbands, friends or neighbors also played a role by reading the insert to women in Benin. Women who obtained the SDM in a clinic were not asked this question, because they were provided counseling by the clinic-based provider.

Table 19. Source of information on SDM use among pharmacy users

	Benin
Source of knowledge	Pharmacy (n=62)
Pharmacist/assistant	58.1
Husband	16.1
Friend/neighbor	14.5
Read the instructions themselves	11.3

Managing the fertile days

The following analysis compares the acceptability, correct use, and continuation of the SDM among pharmacy and clinic users. Clients enrolled in the study were seen after one, four, and seven cycles of use. Results are presented comparing clinic and pharmacy clients at the fourth cycle follow-up visit. The fourth cycle follow-up visit was chosen to maximize the amount of time of SDM use while minimizing loss to follow-up.

Two indicators were selected to assess correct method use: 1) inspection of the necklace shows that the ring is on the correct bead; and 2) whether the woman reported if she had unprotected sex during the white bead days during the last three months. At

the fourth cycle visit, both clinic and pharmacy users demonstrated high levels of compliance with SDM instructions. The majority of clinic (87.7%) and pharmacy (93.2%) clients in Benin were using the method correctly according to these two indicators (Table 20). There were no significant differences between clinic and pharmacy.

Table 20. Indicators of correct use

Indicators of Correct Use	Benin	
	Clinic (n =157)	Pharmacy (n =55)
Ring was on the correct bead	87.7	93.2
No unprotected sex on white bead days	85.8	93.3

Reasons for exiting the study

Most women exited the study because they completed the last follow-up interview. A higher percentage of pharmacy users than clinic users left the study because they had two or more cycles out of range than clinic users. This is not surprising given that the simulated client results suggest that pharmacists were not as thorough as clinic-based providers in screening women for cycle regularity.

Table 21. Reasons for exiting the study

Reasons for leaving the study	Benin	
	Clinic (n =183)	Pharmacy (n =75)
Completed 7 cycles; not pregnant	81.2	61.9
Had 2 cycles out of range	14.9	25.0
User or husband no longer wants participate	3.9	5.2
Other reasons		7.9

Satisfaction with the SDM

Satisfaction, measured by the stated desire to continue during the interview after cycle four, was very high among both women and their partners. No significant differences were found between clinic and pharmacy users.

Table 22. Satisfaction by desire to continue using the SDM

Desire to continue using the SDM	Benin	
	Clinic (n =177)	Pharmacy (n =42)
She wants to continue using the method for the next 3 months	98.3%	93.3%
He wants to continue using the method for the next 3 months	97.2%	91.1%

Problems managing the fertile days: pregnancies

Four pregnancies were reported by the 79 pharmacy users, and 21 pregnancies were reported by the 219 clinic users. These individuals were interviewed to establish to the extent possible the reason for the pregnancy.

Of the four pharmacy users who became pregnant, two said they were using the SDM when they became pregnant, while two stated they had stopped using the method because they wanted to become pregnant (or used the method to become pregnant). Among the two who were using the SDM, both women had unprotected sex during white bead (fertile) days. Among the 21 clinic pregnancies, four said they were not using the SDM when they became pregnant. Of the remaining 17, five used the method correctly and still became pregnant (possibly method failure) and 12 had unprotected sex during the white bead days. Seven of the 12 used another method during the fertile days: two used condoms, three used withdrawal, one used spermicides, and one used emergency contraception.

Follow-up study in the DRC

The follow-up study also was conducted in the DRC but only 14 SDM pharmacy users were admitted and followed. Thus comparative analysis with Benin was not possible. However, some analysis of the pharmacy data revealed similar trends in the user profile, correct use, and satisfaction.

5. DISSEMINATION OF STUDY RESULTS

IRH, and its partner organizations, CEMOPLAF, PSI/ABMS in Benin and PSI/ASF in the DRC, and the commercial retail pharmacies participating in this project, assessed the results of this project as a basis for expansion of the SDM through the private/retail sector. This involved an in-depth assessment of the experiences and data from the intervention with an emphasis on the importance and feasibility of including the SDM in FP services, as well as the extent to which providing the SDM diversifies and expands the choices available to couples. Based on this assessment, CEMOPLAF increased traditional low cost IEC activities (fliers, brochures, and posters) at the community level to raise awareness of the availability of CycleBeads in pharmacies, introduced the SDM into additional pharmacies in areas with a greater potential demand, and withdrew the method from some pharmacies with no sales after several months. In Benin, where the mass media campaign had the greatest impact, PSI/ABMS expanded the SDM to more pharmacies in their network, and IRH transitioned responsibility of social marketing the SDM to them. PSI/ASF assumed responsibility of socially-marketing the SDM, and at the time of this report was preparing to expand to new/additional pharmacies.

Dissemination of study results was carried out through workshops, conferences (several oral and poster presentations at the American Public Health Association [APHA] in the past three years), presentations to Cooperating Agencies working with the private sector such as PSI/Washington and Abt Associates, publications and an assessment report with recommendations. The focus of dissemination activities has included: 1) MOH in each country 2) participating organizations; 3) international development agencies; and 4) the international reproductive health community. Lessons learned were highlighted to guide the broader incorporation of the SDM into reproductive health, social marketing, and other development programs in a manner that enhances quality of care and informed choice.

In addition, IRH has shared results with PSI/Washington and field offices and Abt Associates to guide social marketing initiatives in Madagascar, India, Rwanda, Mali, DRC, and the Philippines. IRH has also reported key findings to stakeholders from USAID/Washington to formulate next steps. The assessment report with recommendations will be shared with USAID/Washington.

6. CONCLUSION AND DISCUSSION

Impact of the social marketing campaign

The social marketing campaign succeeded in raising awareness of the SDM among men and women in all three countries, but most successfully in countries in which television augmented information provided by clinics and other sources. By the end of the campaign, nearly a third of women in Ecuador and two thirds in Benin had heard of the SDM. In the DRC, radio and other IEC activities has less of an impact on increasing knowledge of the SDM. Because the method is used with CycleBeads – a very visual tool – radio listeners might be more challenged in recognizing or recalling the method during the endline survey. Increased awareness was accompanied in all three countries by a dramatic rise in CycleBeads sales, largely during the three month media campaign. Although the sales fell predictably in Ecuador and the DRC as the campaigns ended, they stabilized above pre-campaign sales. Sales in Benin, where awareness was highest, continued to increase in clinics after the campaign had ended, and sales in pharmacies remained well above their pre-campaign level.

Although the prices in Benin and the DRC were subsidized, respondents in the survey felt that the one-time purchase was feasible.

Conducting the social marketing campaign in two very different regions of the world – Latin America and Africa – provided IRH with the opportunity to assess the feasibility of social marketing the SDM in different contexts. In a setting such as Ecuador with high contraceptive prevalence, potential SDM users become harder to reach; thus IRH tested a social marketing strategy in which there was a potential for pharmacists to make a profit. Willingness-to-pay data from Ecuador confirmed the potential for programs to make a profit, when women said they were willing to pay more than the set price for the method. Sales from CycleBeads in Ecuador were set at cost recovery prices, and this profit could potentially cross-subsidize community-based distribution programs. In contrast, in countries with a high market potential such as Benin and DRC, pharmacies can be an effective channel, but programs will have to subsidize the product because interested clients may not be able to pay the markup price.

The simulated client visits and follow-up of SDM users demonstrated that socially marketing the SDM through pharmacies is a feasible and successful strategy. Even though pharmacists gave less information about the SDM to their clients than did providers, results from the follow-up of users showed no difference in their ability to use the method correctly. However pharmacies users reach a slightly different segment of the market. Pharmacy users were slightly more educated and willing to read the package insert to learn how to use the method they had just purchased. Women asked

the pharmacists, their partners or friends for help in reading the insert and learning to use the method.

More research is needed on the most appropriate training strategies and service delivery protocol for pharmacies to achieve optimal information exchange within the constraints of the pharmacy setting.

Value of adding SDM to contraceptive mix

Women expressing a desire to use the SDM have often been using less effective natural methods, including periodic abstinence and withdrawal. Those who have tried modern methods report dissatisfaction, particularly with injections. Reasons given for dissatisfaction include side effects and health concerns. These findings are consistent with other studies examining satisfaction with hormonal methods and indicate that a particular niche for the SDM exists among women and couples who are dissatisfied with modern methods, or unwilling to use a hormonal method because of fear of side effects and health concerns.

The eligibility criteria for the SDM need to be revised to expand access to the method, especially in the case of unknown cycle length. Discussion with participants from clinics and other service providers suggest that women who do not know their cycle length should be provided CycleBeads and counseled to return to the clinic for follow-up visits in the first two months following adoption to monitor cycle length. They should also be taught how to use CycleBeads to monitor their cycle length. There is little to lose with this strategy as most of those interested in the SDM are unwilling to use any other modern method.

The results of this study could lead to consideration of the following larger issues in these and other countries, such as how to:

- Foster commitment to the SDM among the MOH, nongovernmental organizations and participating clinics and commercial retailers, e.g. development of a cost-recovery program to support sustained provision of CycleBeads;
- Identify and put into practice strategies for successful community education/mobilization regarding the SDM e.g. counseling and distribution of the SDM by community agents from the private and public sector; and
- Explore the potential for eventual expansion of social marketing of the SDM.