

Operations Research on Promoting Vasectomy in Three Latin American Countries

By Ricardo Vernon

Data from six operations research projects in Brazil, Colombia and Mexico suggest that potential vasectomy clients come from a well-defined population of relatively young, well-educated men who have small families and are already practicing contraception. Clients' wives and other vasectomized men are especially influential in the decision to adopt vasectomy. Promoting vasectomy through mass media campaigns can be particularly effective in urban centers that have high-quality, accessible services. Promotion campaigns might stress the reasons men in these countries give for choosing vasectomy, especially its advantages over female sterilization and temporary methods, men's concern for their wife and her health, their desire to share responsibility for family planning, and the freedom from unintended pregnancy that vasectomy confers.

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Vasectomy is one of the least known and least used family planning methods in Latin America and the Caribbean: Even though vasectomy is simpler and usually less expensive than female sterilization, as of 1991, just 0.7% of Latin American married couples of reproductive age were protected by vasectomy, and the proportion reached at least 1% in only three countries (Brazil, Guatemala and Mexico).¹

The recent success of some programs in promoting vasectomy, however, suggests that the procedure's low prevalence results more from an inadequate supply of services than from a lack of demand. In Colombia, for example, the number of vasectomies performed by Profamilia, the country's primary family planning organization, increased from 92 procedures in 1970 (when the method was first introduced) to 1,064 in 1973; however, after Profamilia began offering female sterilization, the annual number of male operations decreased steadily, falling to 480 procedures in 1981. This number did not increase appreciably until 1985, when Profamilia opened its first two clinics for men; in that year, a total of 1,241 vasectomies were performed. The number of vasectomies continued to increase through 1992, when the annual number stood at 5,872.²

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The situation in Mexico followed a similar pattern. From 1980 to 1988, the Mexican Social Security Institute (the Instituto Mexicano de Seguro Social, or IMSS) performed fewer than 5,000 vasectomies per year. In 1989, the IMSS launched a program to open at least one no-scalpel vasectomy training center in each state. By September 1994, 44 centers had been established, 116 physicians had been trained in the technique and 93 outpatient clinics offered no-scalpel vasectomy. Consequently, the number of vasectomies performed by the IMSS increased from 6,283 in 1989 to 16,882 in 1993. At the same time, the ratio of female to male procedures decreased from 21:1 in 1989 to 10:1 in 1993.³ Thus, the experiences in Colombia and Mexico suggest that men respond when vasectomy services are made accessible.

This article presents information collected in six operations research projects in Brazil, Colombia and Mexico:

- The Brazilian agency Promoção de Paternidade Responsável (PROPATER) evaluated a mass media vasectomy promotion campaign by one of its São Paulo clinics in 1985.⁴
- The Colombian agency Profamilia evaluated male-oriented clinics and promotion campaigns at six clinics in medium-sized cities in 1988–1989.⁵
- The Mexican fertility research organization Centro de Investigación Sobre Fertilidad y Esterilidad (CIFE) assessed the effects of worksite talks and brochure distribution on clients of a Mexico City clinic in 1988–1989.⁶
- The IMSS, which provides medical services to employees and their families, examined the effectiveness of information-

al videos and of male promoters at six of its clinics (four in Mexico City and two in provincial cities) in 1994.⁷

- The International Planned Parenthood Federation affiliate in Mexico, MEXFAM, conducted a small follow-up survey of vasectomy acceptors in a Mexico City clinic in 1988.⁸

- The Mexican social marketing research organization Mercadotécnica Social Aplicada (MSA) evaluated the impact of a vasectomy promotion campaign at a Mexico City clinic in 1988.⁹

The main characteristics of the projects are presented in Table 1. These projects tested various vasectomy promotion strategies, collected service statistics and conducted quantitative and qualitative follow-up studies of acceptors. The data collected may prove useful in the design and marketing of vasectomy services in these and other Latin American countries, specifically by identifying the market segment of potential vasectomy clients, describing the vasectomy decision-making process, and assessing the effectiveness of several service delivery and promotion strategies.

Characteristics of Acceptors

Identifying the characteristics of potential vasectomy clients is an indispensable first step in targeting promotional campaigns and designing appropriate service delivery strategies. To uncover who potential acceptors might be, we have only to look at current users. The service statistics and follow-up studies in the six operations research projects show that acceptors average 32–35 years of age, with over 70% aged 28–40. Men who choose vasectomy have relatively high levels of education (at least some secondary schooling) and relatively small families of fewer than three children, with their youngest child aged 2–5 (i.e., beyond the peak ages of child mortality). They tend to live in large cities. Almost all vasectomized men are married or in a union and their spouses are, on average, five years younger than they are.

A high proportion of vasectomy clients or their wives (ranging from 56% to 98%) were practicing contraception at the time they decided to have the operation, with 18–39% using methods that require male

Table 1. Selected characteristics of six operations research projects on vasectomy in Brazil, Colombia and Mexico

Country and agency	Interventions tested	Service delivery sites	Data sources
Brazil PROPATER (see reference 4)	4 ads ran in monthly news magazines with an estimated target readership of 4.4 million men >30 years of age. A precampaign promotion (using news reports and interviews on radio, TV, daily newspapers and advertising weeklies) was conducted to coincide with international conference on sterilization counseling.	1 São Paulo clinic	Clinic admission forms for 10,266 clients; clinic records of 7,403 vasectomy acceptors and records of 4,393 telephone calls and 386 letters.
Colombia PROFAMILIA (see reference 5)	Male services (urology, vasectomy, sexually transmitted disease treatment, ambulatory surgery) were offered by specialized personnel in two settings—an exclusively male context (1 male clinic and 1 clinic that followed a male-only, segregated schedule) and a traditional, female-oriented context (2 clinics). Each conducted a media campaign with radio and newspapers, and a promoter conducted information, education and communication activities. Two clinics were designated as controls.	1 clinic each in 6 mid-sized cities—Manizales, Ibagué, Pasto, Pereira, Neiva and Bucaramanga	Clinic histories of 628 vasectomy acceptors; follow-up survey of vasectomy acceptors (N=306); 3 focus groups (1 group each in 3 clinics); service satisfaction survey with clients at all six clinics (N=736); clinic accounting records.
Mexico CIFE (see reference 6)	Worksite talks and brochures given by 8 promoters to publicize vasectomy services offered by a private physician.	1 Mexico City clinic	Survey of persons who attended talks or received brochure (N=3,589); follow-up survey of vasectomy acceptors (N=50).
IMSS (see reference 7)	In 2 clinics, vasectomy information video shown in waiting rooms; in 2 clinics, acceptors were trained to promote vasectomy and refer friends for information and services; delivery personnel of these 2 clinics and nearby ones also received a talk and survey manual on vasectomy, and were asked to refer potential clients. 2 clinics served as controls. (All six used promotional posters and brochures.)	4 Mexico City clinics, 1 clinic in Pachuca and 1 clinic in Ciudad Juárez	Follow-up survey of vasectomy acceptors (N=444); survey of married male clients aged 18–55 at all 6 clinics (N=421); survey of married women clients aged 18–49 at all 6 clinics (N=524).
MEXFAM (see reference 8)	None.	1 Mexico City clinic	Follow-up survey of vasectomy acceptors (N=37).
MSA (see reference 9)	Advertising on billboards and in community newspapers; male promoter for clinic's services for men, and for vasectomy in particular.	1 Mexico City clinic	Clinic records of 259 vasectomy acceptors; 3 focus-group sessions conducted with middle-class couples not protected by sterilization; surveys of men who had requested vasectomy information (N=25) and of acceptors one hour before their operation (N=25); a follow-up survey of men who had had a vasectomy 1 month to 1 year earlier (N=50).

participation—i.e., the condom, withdrawal or periodic abstinence. Moreover, these men appear to feel comfortable talking with their wives about contraception and display a high sense of family responsibility and concern for their wives' health and well-being.

According to this profile of vasectomy acceptors, men who elect vasectomy do so at a younger age and have fewer children, on average, than men who chose vasectomy a decade ago.¹⁰ Moreover, early acceptors of vasectomy tended to be of comparatively high socioeconomic and educational status, and proportionately more were protected by a contraceptive method at the time of the operation. It thus appears that as vasectomy has become more widely known and used among Latin American men, the characteristics of acceptors have moved closer to the average.

The Decision-Making Process

The vasectomy decision-making process, as revealed in the surveys, follow-up studies and focus groups conducted in conjunction with the six projects, follows the four stages that accompany the adoption of any innovation in general¹¹—awareness, information-

seeking, evaluation and adoption.¹¹

Early events in the awareness stage include realizing that one has reached or exceeded the desired number of children and that continued use of temporary methods is inconvenient. Another key event is finding out about vasectomy. Most vasectomy acceptors in the six operations research projects first became acquainted with the procedure through friends and other relatives, their wives, health personnel, and radio and TV.

During the information-seeking and evaluation stages, the men most often consulted their wives (74–88% of men in four projects), followed by health personnel (more than 40% of men in two projects) and relatives and friends (more than 20% in four projects). In addition, at least 11% of acceptors in four projects mentioned that they had talked with a vasectomized friend at this stage, and 26–66% of men in four projects said they knew other vasectomized men. This relatively high proportion, given the overall low prevalence of vasectomy in these countries, confirms the importance that information provided by other vasectomized men plays in the decision-making process. In fact, some

focus-group participants in Colombia mentioned that the information given by vasectomized friends had been the deciding factor in their contraceptive choice.

Although vasectomy candidates also seek information from the media during the decision-making process, it is not easy to predict when the media will provide information on vasectomy. Thus, materials produced by vasectomy providers themselves are important sources of information during this stage. In the IMSS project in Mexico, for example, 62% of acceptors read the brochures they were given by their provider before they made their final decision, more than double the proportion who were exposed to information in the mass media. Finally, 44–51% of respondents in all six projects said their wife influenced their decision most, followed by the service delivery staff. Other sources

*According to one U.S. researcher, almost all vasectomy acceptors experience six significant events in the decision-making process—becoming aware of vasectomy, talking with a man who has had a vasectomy, deciding to have no more children, seriously considering vasectomy, deciding that temporary methods are no longer acceptable and considering vasectomy to be the best method. In addition, more than half of the men who elect vasectomy do so after a pregnancy scare (see reference 12).

seem to have had little influence in the final decision-making process.

In the Profamilia, MSA and CIFE projects, clients were asked how long they had thought about having a vasectomy before making their final decision. One-third of men in the MSA study and two-thirds of those in the Profamilia project decided within four months; fewer than 20% in both studies said the decision had taken more than one year. Thus, the length of the decision-making process seems to have been relatively short, especially compared with the mean duration revealed in a U.S. study (approximately 20 months).¹²

Since the projects used a variety of techniques and questions to explore men's reasons for having a vasectomy, their results are not strictly comparable. The data, however, suggest several important reasons. When asked to state the advantages of vasectomy, 40–90% of acceptors in the CIFE, MSA and MEXFAM projects mentioned the method's permanence and effectiveness, since they had had all of the children they wanted. The method's permanence, in fact, was the main reason for obtaining a vasectomy among just under half of the respondents in these three projects; their wife's health was cited as the main reason among 21–57% of acceptors.

In four projects, the proportions who said they had considered female sterilization ranged from 51% (in the Profamilia project) to 81% (in the IMSS project). Thus, for a majority of these men, vasectomy was the more attractive alternative. The reasons given most often for choosing vasectomy over tubal ligation were that vasectomy was simpler, easier, quicker and more comfortable (cited by 39–60% of those who had considered female sterilization). In addition, 39% of IMSS acceptors mentioned the greater safety of vasectomy compared to female sterilization as most important.

The next most commonly cited reason for preferring vasectomy over female sterilization was concern over the wife's health, mentioned by proportions ranging from 20% (CIFE) to 44% (MSA). Finally, about 10% of the respondents also mentioned a desire to collaborate with their wife and to take responsibility in planning their family. Focus-group participants talked about their wife's health, their love for their wife and the convenience of vasectomy over female sterilization and over temporary methods as reasons for preferring vasectomy.

Another influential factor in the decision was the specific surgical technique used. Thirty-nine percent of IMSS vasectomy acceptors said the no-scalpel technique made

their decision easier because they feared surgery in general. Focus-group sessions conducted with nonsterilized couples by the MSA and with vasectomized males by MEXFAM also revealed fears of surgery; the no-scalpel technique could thus be an important promotional feature.

Although 10–20% of respondents in all six projects reported side effects, such as swelling and pain, almost all of the men were satisfied with the services and with the method itself. In the three projects that asked about the quality of sexual relations after the procedure, 35–52% of respondents said sex had improved. Conversely, only a negligible proportion said that the quality of their sexual activity had worsened, a finding confirmed in focus-group discussions conducted by Profamilia and MEXFAM.

Only 1% of men in the Profamilia project and 2% of acceptors in the MSA project regretted having had a vasectomy. About 75% of participants in five projects talked about vasectomy with other men or recommended it to others, and 82–96% indicated they would do so in the future. This suggests that vasectomy acceptors could be actively recruited and encouraged to be promoters for the method.

In the United States, vasectomized men are the key component of the vasectomy information diffusion network,¹³ in the three Latin American countries studied here, however, family members seem to have a greater influence. In most countries, reaching the desired family size, financial reasons and dislike for other methods are the most common reasons men give for choosing vasectomy.¹⁴ Concern for the wife's health, love for the wife and the desire to take more responsibility in family planning seem to be of particular relevance in the three Latin American countries studied. Finally, previous studies conducted in developing countries (Bangladesh, Colombia, Guatemala, India, Korea and Malaysia) and developed countries (Australia, United Kingdom and the United States, including Puerto Rico) have reported the same positive or neutral effects on libido and on the quality of sexual relations after vasectomy, and the same low proportions of men who said they regretted the procedure.¹⁵

Effectiveness of Strategies

The results of the promotion strategies tested in the operations research projects are not strictly comparable, for several reasons. First, the projects tested a different mix of promotional strategies, and some did not try to assess the relative contribution of each or did not employ a strong

experimental design that would have enabled them to do so. Second, although most projects that used an experimental design asked acceptors how they learned about the operation, each project used different data-collection instruments, which did not systematically list the same information sources, so some men may have been offered a more limited choice than others. Thus, the proportions of men who relied on such nonlisted sources may be underestimated. For these reasons, the results presented in this section should be considered suggestive only.

The projects that used at least a quasi-experimental design to evaluate the effects of promotional strategies found the campaigns to be effective. PROPATER, in São Paulo, Brazil, conducted a 10-week advertising campaign in weekly and monthly magazines for men, using four different ads. In the year before the campaign, PROPATER performed a mean number of 11 vasectomies per day; during the campaign, that mean rose by 76%, to nearly 20 procedures per day. In the year that followed, this number stabilized at about 17 daily, a level 54% higher than that in effect before the campaign.

Examining men's sources of information about vasectomy showed that during the 10-week campaign, 18% of new clients had seen a magazine ad about vasectomy, compared with 4% in the year following the campaign. In contrast, during the campaign, 74% of new clients said they had spoken to a clinic patient, compared with 88% in the postcampaign period, and a smaller proportion of new clients had spoken with the traditional sources of information (relatives and friends) during the campaign than afterwards.

In the Colombia project, Profamilia conducted a five-month radio and newspaper campaign to promote men's services (including vasectomy), which were offered by four clinics in four cities; each clinic had also hired a promoter to give talks in the clinics and in the communities. For comparison purposes, two clinics that used routine interpersonal promotion only were designated as controls. The average number of vasectomies performed in the four experimental clinics increased by 120% from the previous year (means of 57 and 125 procedures, respectively), while the number of procedures performed in the two control clinics increased by just 59% (from 40 to 63 per clinic).

Patient records showed that while a much larger proportion of men at the experimental clinics than at the control clinics mentioned radio as their information

source (22% vs. 5%), the situation was reversed for other sources of information: clinic staff (23% vs. 27%), newspapers (3% vs. 9%) and the clinic sign (3% vs. 5%). There was virtually no difference, however, in the proportions who cited relatives and friends as their referral source (39% vs. 40%).

In the IMSS project, two clinics tested a one-year intervention using vasectomized men as volunteer promoters and an interclinic referral system from within the wider IMSS network. This intervention increased the number of vasectomies by 25% (from 375 to 470 procedures), while a comparison technique used by two clinics of making an informational video available in the waiting room increased vasectomies by 8% (from 495 to 534 procedures). Moreover, the number of vasectomies increased by 6% in two control clinics over the same period (from 694 to 738 procedures).

Other promotional campaigns in Latin America have also increased the demand for vasectomy services. For example, the family planning organization in Guatemala, APROFAM, compared three promotional approaches in 1983–1984—radio only, radio and promoter, and promoter only. In all three interventions, almost three times more vasectomies were performed than would have been expected in the absence of such a promotion.¹⁶ Furthermore, an evaluation of a six-week multimedia campaign conducted by PROPATER found that the number of vasectomies performed increased by 80% over the course of the campaign period, and remained 55% higher than pre-campaign levels in the six months following the end of the campaign.¹⁷

Most of the experience accumulated in Latin America shows that traditional sources (relatives, friends and provider staff) usually account for the largest proportion of referrals. One way to gauge the effectiveness of promotional campaigns, especially when clinics open, is to examine the proportion of vasectomy clients who cite the campaign as their referral source. In the MSA project, a Mexico City clinic was launched with a promotional campaign that included advertisements in community newspapers and on billboards, as well as the services of a male promoter. More vasectomy acceptors reported having learned about the clinic through the billboards (44%) than by means of the clinic sign (22%), the newspaper ads (21%), the promoter and other clinic staff (15%) or relatives and friends (15%).

What makes for successful vasectomy promotional campaigns and programs? Experience in the region shows that strong program leadership is essential for suc-

cess. This leadership is often achieved by setting up a team to expand vasectomy or male services. The team conducts activities that effectively show the importance the institution places on vasectomy as a method, such as establishing clinics or schedules exclusively for men, starting a strong vasectomy training program, expanding services for men, and conducting information, education and communication campaigns. In large programs, the effect that a single enthusiastic person can have on the number of vasectomies performed is often noticeable.

The experiences documented in these six operations research projects suggest that increases in the numbers of vasectomies often reflect a campaign's ability to reach large numbers of individuals who may be interested in vasectomy. Both the PROPATER and Profamilia projects showed that the social and demographic characteristics of men who responded to the campaigns did not differ substantially from those of men who came to the clinics prior to the campaign. Men who heard about vasectomy through the campaign were also very similar to those who learned about it through a traditional source. This suggests that, at least in the initial stages of the diffusion of vasectomy, promotional campaigns tend more to reach clients who are similar to previous clients, rather than to attract a new, different population of men.

The importance of targeting the appropriate audience is perhaps best illustrated by projects that have failed to do so. Unfortunately, few experiences of promotional failure have been adequately documented, and even fewer have attempted to explain the reasons for the failure. The CIFE project is an exception, however. Eight promoters were hired for one year to publicize vasectomy services offered by a private physician. The promoters gave talks and handed out brochures to mixed audiences at factories and offices. Only 55 men received vasectomies over the course of the project, and of these, only two mentioned the promoters as their referral source.

In testing the hypothesis that the campaign failed because of an inadequate targeting strategy, researchers compared the social and demographic characteristics of the target audience with those of vasectomy acceptors in the MEXFAM, Profamil-

ia, PROPATER and MSA projects; according to the researchers' definition, men who had at least one characteristic that was not shared by 80% of the acceptors in the four other projects should not have been considered a target of the promoters' messages.

More than two-thirds (69%) of the 3,589 individuals who attended the promoters' talks or received brochures had at least one characteristic that disqualified them from the composite audience and should not have been targeted for the campaign in the first place—i.e., they were younger than age 24 or older than 52, they had not yet had at least two children, their youngest child was older than age 19, they

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had fewer than four years of schooling, they were unmarried or not in a consensual union, or they were already protected by sterilization (male or female).

Thus, the ineffectiveness of this interpersonal promotion strategy seems to have resulted largely from poor audience segmentation and targeting. This conclusion is strengthened when one considers that Mexican law requires all employees to be affiliated with the IMSS, which provides vasectomy at no cost to subscribers of social security insurance. This audience of factory and office workers would seem to be an inappropriate target for the services of a private physician.

The cost-effectiveness of promotional strategies is usually estimated as a ratio of vasectomies, or couple-years of protection (given that each vasectomy confers an average of 12.5 couple-years of protection), to program costs. In analyzing the cost-effectiveness of the PROPATER project, for example, researchers first assumed that the number of vasectomies would have remained at the same level in the absence of the promotional campaign; they then attributed the 54% increase to the campaign. They divided the total campaign costs by the additional number of vasectomies performed and estimated the cost per each additional vasectomy acceptor recruited by the magazine ad campaign to be US \$39 (or \$3.12 per couple-year of protection).

The Profamilia project provides another

er example. Using the same methodology, the authors estimated the cost-effectiveness of the campaign, which used radio, newspapers and promoters, to be US \$750 per each additional couple-year of protection. These are both just one-year returns, however. The researchers point out that cost-effectiveness needs to be estimated for longer periods of time, given the cumulative effects of referrals made by satisfied vasectomy acceptors and of staff training over the following years.

Potential Demand

What is the potential future demand for vasectomy in these areas of Latin America? The IMSS project attempted to answer this question by surveying 421 male and 624 female clinic patients in the waiting areas of six of its clinics. All respondents were either married or in union; the women were aged 15–49 and the men, 20–59. Only 15% of the men and 19% of the women had fewer than six years of schooling; about 50% and 61%, respectively, had two or fewer children. Overall, more than 80% of respondents knew about vasectomy, and around 20% knew about the no-scalpel method.

Regarding contraceptive use among the women, 31% were protected by female sterilization, 2% by their husband's vasectomy and 42% by a temporary method; 25% were using no method at all. Among the men, 33% were protected by their wife's sterilization, 4% by their own vasectomy and 37% by temporary methods; 26% used no method. Among respondents protected by female sterilization, more than 11% said they had considered vasectomy during the decision-making process.

To assess the potential demand for vasectomy, respondents not protected by a permanent method were asked if they thought that they or their spouse would be sterilized in the future. A larger proportion of women than men (73% vs. 52%, respectively) replied affirmatively. When asked if they would likely choose vasectomy over female sterilization, 31% of the men said they would, but only 22% of the women said their spouse would likely do so. However, just 30% of the men and 55% of the women reported having actually discussed vasectomy with their spouse, and 21% overall said they knew a vasectomized man.

Further analysis showed that men were more likely to say they would adopt vasectomy in the future than women were to say their husband would do so. The potential demand for vasectomy is higher among men who are comparatively young, who are more educated and who

have fewer children, and it is also slightly higher among current users of temporary methods than among nonusers.

Conclusions

The data collected in these six operations research projects suggest some of the following conclusions and implications for promoting vasectomy in Latin American cities.

- *Potential clients are a well-defined segment of the population.* These men tend to be relatively young and comparatively well-educated and have small families, steady jobs and a stable family life. Most are already using a contraceptive method, and a large proportion use methods that require their active participation, such as the condom and natural family planning. Thus, vasectomy programs should design service delivery and promotion strategies that reach and meet the needs of this specific population.

- *Informal interpersonal sources, especially wives and vasectomized men, are very influential during the decision-making process.* Vasectomy promotion efforts thus need to involve wives and vasectomized men more effectively. For example, vasectomy might be presented to women as an alternative to female sterilization—especially when they would be most receptive to such information, such as in the postpartum period. In turn, all vasectomy acceptors should be invited to collaborate in promotional efforts, taught to identify friends who may be interested in vasectomy and provided with promotional materials to distribute to friends as needed. Mechanisms for maintaining contact with these acceptor-promoters and for handling their referrals need to be developed.

- *Health care personnel are among the most consulted sources during the evaluation stage of the adoption process.* Staff thus need to be well-trained in counseling techniques and more involved in promoting vasectomy and referring potential clients. Providing minimal training to all clinic staff appears to be more effective than offering training only to those who provide vasectomy services; some clinics also tend to be much more effective in referral networks than others.¹⁸

- *Mass media promotional strategies tend to be effective, particularly in large cities where there are high-quality clinic services.* Because vasectomy is still in the early stages of diffusion in Latin America, mass media that reach the largest possible number of potential acceptors should be emphasized. Media that have been most effective include men's magazines, evening TV shows that cater to a male audience and radio newscasts; media with a smaller market

share and those aimed at a more diversified audience, such as newspaper ads, appear to be less effective. The failure of promotional strategies seems to be more often a consequence of poor media selection rather than a lack of response among men. Efforts to identify and test other efficient media and formats should be made.

- *The reasons men give for adopting vasectomy suggest a well-defined set of vasectomy campaign themes.* These themes include: that vasectomy—and no-scalpel vasectomy especially—has many advantages over female sterilization and over temporary methods; that men elect vasectomy out of love for their wife and concern for her health, as well as out of a desire to take responsibility for and collaborate in planning their family; and that vasectomy confers peace of mind and greater sexual enjoyment by eliminating worries about unwanted pregnancy.

- *Some couples who currently do not rely on sterilization will consider vasectomy when they achieve their desired family size.* Although this conclusion is based on a relatively small IMSS study in six clinics in three cities, the strong potential demand for vasectomy in Latin America is suggested by the rapid increase in services in the few institutions in the region that have made a strong effort to popularize the method, including the IMSS and Ministry of Health in Mexico, Profamilia in Colombia and PROPATER in Brazil. Although these three countries have moderate-to-high contraceptive prevalence rates and relatively high socioeconomic indicators, the fact that the countries differ so much culturally suggests that similar demand may exist in cities of over 100,000 throughout this highly diverse region. Further studies need to be conducted to assess this potential demand.

References

1. L. Liskin, E. Benoit and R. Blackburn, "Vasectomy: New Opportunities," *Population Reports*, Series D, No. 5, 1992.
2. Profamilia, "Informe de Actividades de Servicio, Año 1993," *Boletín de Evaluación y Estadística*, No. 72, Bogotá, Colombia, 1994.
3. C. Juárez and F. Alarcón, "Prestación de Servicios de Planificación Familiar a Varones en el IMSS," paper presented at the Second Latin American Operations Research Conference, Ixtapa, Mexico, Sept. 19–22, 1994.
4. M. P. P. de Castro, B. M. de Castro and K. G. Foreit, "Measuring the Effectiveness and Cost-Effectiveness of Mass Media Promotion of Vasectomy Services," *Promocão de Paternidade Responsável (PROPATER) and The Population Council*, São Paulo, Brazil, 1987; and K. G. Foreit, M. P. P. de Castro and E. F. Duarte Franco, "The Impact of Mass Media Advertising on a Voluntary Sterilization Program in Brazil," *Studies in Family Planning*, 20:107–116, 1989.

5. R. Vernon, G. Ojeda and A. Vega, "Operations Research on Different Approaches for Vasectomy Service Provision in Colombia," final technical report, Asociación Pro-Bienestar de la Familia Colombiana (Profamilia) and The Population Council, Bogotá, Colombia, 1989; and —, "Making Vasectomy Services More Acceptable to Men," *International Family Planning Perspectives*, 17:55–60, 1991.
6. L. Nuñez et al., "The Effectiveness of the Private Physician and Male Promoter in the Implementation of a Male-Only Clinic," final report, Centro de Investigación Sobre Fertilidad y Esterilidad (CIFE) and The Population Council, Mexico City, Mexico, 1989.
7. C. Juárez et al., "A Strategy to Increase the Acceptance of No-Scalpel Vasectomy in Out-Patient Clinics of the Mexican Social Security System," final technical report, Academia Mexicana de Investigación en Demografía Médica (AMIDEM) and The Population Council, Mexico City, Mexico, 1994.
8. A. López Juárez et al., "A Follow-up Survey of Men Undergoing Vasectomy," final technical report, Fundación Mexicana para la Planeación Familiar (MEXFAM) and The Population Council, Mexico City, Mexico, 1988.
9. L. de la Macorra, R. Sánchez and L. Varela, "The Effectiveness of Social Marketing Strategies in the Implementation of Male-Only Clinics," final technical report, Mercadotecnia Social Aplicada (MSA) and The Population Council, Querétaro, Mexico, 1989.
10. R. Santiso, J. T. Bertrand and M. A. Pineda, "Voluntary Sterilization in Guatemala: A Comparison of Men and Women," *Studies in Family Planning*, 14:73–82, 1983; S. G. Philliber and W. W. Philliber, "Social and Psychological Perspectives on Voluntary Sterilization: A Review," *Studies in Family Planning*, 16:1–29, 1985; and M. P. P. de Castro et al., "An Innovative Vasectomy Program in São Paulo, Brazil," *International Family Planning Perspectives*, 10:125–130, 1984.
11. J. M. Bohlen, "Research Needed on Adoption Models," in W. Schramm and D. F. Roberts, eds., *The Process and Effects of Mass Communication*, revised edition, University of Illinois Press, Urbana, Ill., 1977.
12. S. D. Mumford, "The Vasectomy Decision-Making Process," *Studies in Family Planning*, 14:73–82, 1983.
13. Ibid.
14. S. G. Philliber and W. W. Philliber, 1985, op. cit. (see reference 10).
15. R. Santiso, J. T. Bertrand and M. A. Pineda, 1983, op. cit. (see reference 10); S. D. Mumford, 1983, op. cit. (see reference 12); S. G. Philliber and W. W. Philliber, 1985, op. cit. (see reference 10); M. P. P. de Castro et al., 1984, op. cit. (see reference 10); and K. Ringheim, "Factors that Determine Prevalence of Use of Contraceptive Methods for Men," *Studies in Family Planning*, 24:87–99, 1983.
16. J. T. Bertrand et al., "Evaluation of a Communications Program to Increase Adoption of Vasectomy in Guatemala," *Studies in Family Planning*, 18:361–370, 1987.
17. L. Liskin, E. Benoit and R. Blackburn, 1992, op. cit. (see reference 1).
18. A. Estrada, senior medical advisor for the Association for Voluntary Surgical Contraception, personal communication, June 1994.

Resumen

Datos recabados en seis proyectos de investigación operativa realizados en Brasil, Colombia y México, sugieren que los potenciales interesados en la vasectomía provienen de una población bien definida, relativamente joven, de buen nivel de educación, que tienen familias pequeñas y que ya practican la anticoncepción. Sus esposas y otros individuos que previamente se sometieron a la vasectomía influyen particularmente en la toma de decisión para someterse a este procedimiento. La promoción de la vasectomía a través de campañas publicitarias puede resultar particularmente eficaz en los centros urbanos donde se ofrece

acceso a estos servicios de alta calidad. Las campañas de promoción pueden destacar las razones por las cuales los hombres de estos países se deciden por la vasectomía, especialmente sus ventajas sobre la esterilización femenina y los métodos temporales, la preocupación del hombre por su esposa y su salud, su deseo de compartir la responsabilidad de la planificación familiar, y la libertad que les ofrece la vasectomía con respecto al embarazo no deseado.

Résumé

Les données tirées de six projets de recherche opérationnelle au Brésil, en Colombie et au Mexique suggèrent que les clients potentiels de vasectomie proviennent d'une population bien définie d'hommes relativement jeunes et bien instruits qui ont de petites familles et pratiquent déjà la contraception. Les épouses des clients et les autres hommes vasectomisés sont particulièrement influents dans la décision d'adopter la vasectomie. La promotion de la vasectomie par le biais de campagnes dans les médias peut être particulièrement efficace dans les centres urbains qui offrent des services accessibles de haute qualité. Les campagnes de promotion pourraient mettre en valeur les raisons qu'invoquent les hommes dans ces pays pour choisir la vasectomie, surtout ses avantages par rapport à la stérilisation féminine et aux méthodes temporaires, les préoccupations des hommes pour leur épouse et la santé de cette dernière, leur désir de partager la responsabilité du planning familial, et la protection que procure la vasectomie contre une grossesse non désirée.

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