

Vasectomy and National Family Planning Programs in Asia and Latin America

Suzanne L. Cohen
Department of Maternal and Child Health
School of Public Health

Introduction

Vasectomy (male sterilization) is one of the least used contraceptive methods in the developing world. Only vaginal barrier methods are less popular (1). Its low use levels reflect the fact that, according to DHS surveys, vasectomy is consistently the least familiar of any family planning method (2). In only fourteen of 44 countries surveyed since 1984 did more than 50 percent of married women of reproductive age say that they had heard of male sterilization, even when prompted with a brief description. In contrast, over half of women in 35 countries (that is, all but nine of those surveyed) recognized female sterilization (1). Vasectomy is also one of the least available methods in developing countries. One way of measuring availability of services is to examine the proximity of possible clients to service providers. Of six countries surveyed regarding availability, only in Thailand did the number of clients within 15 kilometers of vasectomy services approach the number who were close to female sterilization providers and sources of other contraceptive methods like the pill, condom, IUD or injectable (2).

It is possible that vasectomy's underutilization is due to an intrinsic unpopularity of the method. Perhaps the low levels of knowledge of, access to and use of vasectomy are not an important concern in a family planning panorama that is rapidly expanding to include new methods like Depo-Provera and Norplant. However, certain characteristics of vasectomy make it a potentially attractive option within the family planning menu. It is effective (on the individual and population levels), it is a simple procedure with few complications, and it is one of the few available "modern" methods that involve men directly.

Vasectomy has a pregnancy rate of zero to 2.2 percent. Most failure can be controlled by proper follow-up and instructions to the man undergoing the procedure. Men need to understand that they will not be infertile for an as yet undetermined number of ejaculations after the procedure (estimated at fifteen to twenty) and take appropriate precautions. In addition, they need to receive follow-up sperm counts to assure that no recanalization of the vas has taken place (3). Effectiveness compares favorably with most

temporary methods and is similar to the rates for female sterilization (4). Vasectomy is also highly effective “demographically.” That is, it can play an important role in reducing a country’s population growth. The estimates of births averted by vasectomy vary among countries and study years. One review showed a range of approximately 1.3 - 2.5 births averted per vasectomized man. This range compares favorably with female sterilization and is considerably higher than temporary methods (3). Another summary of vasectomy studies stated that men who get vasectomies tend to have smaller families than women who undergo sterilization (5). Therefore, vasectomy would be considered a better method demographically than female sterilization for a country that was attempting to limit family size.

As a medical procedure, vasectomy is less complicated and has fewer health consequences than female sterilization. It is “one of the safest of all surgical procedures” (4) requiring only a minor local anesthetic. The introduction of no-scalpel vasectomy in recent years has made the method more attractive to men and service providers. The no-scalpel method accesses the vas through a small puncture instead of an incision in the scrotum. It was developed in China and has spread to other developing nations and, to a certain extent, to developed countries (2). In trials, the no-scalpel method caused significantly fewer complications and was more quickly performed than the traditional method (6). Much research attention has been given to the question of whether vasectomy causes long-term health problems for men such as an increased risk of heart disease or prostate cancer. Vasectomy has no proven relationship to these illnesses, although some association with prostate cancer was found in two studies (2). The relationship with prostate cancer requires further research.

Finally, an important reason for exploring vasectomy’s unpopularity is that it is one of the few effective contraceptive methods that involves men directly. Since the mid-1980s, some family planning programmers have observed and criticized the overwhelmingly female focus of most countries’ programs (7, 8). They note that programs target activities at women

because women feel the burden of childbearing directly and therefore are more likely to embrace contraception. In addition, contraceptive use in the developed world was perceived as liberating women from “the authoritarian control exercised by male partners and male community leaders, health professionals, etc.” (7, p.3). Finally, provision of family planning services is often placed within the context of maternal and child health care; therefore, women are easier to access than men. As experience in developing countries accumulated, family planners began to realize that women did not necessarily have the freedom to make their own choices about fertility regulation and that men were acting as gatekeepers to their wives (7). This realization, coupled with the spread of AIDS, which can only be prevented through use of a male method (the condom), led to a call for increased male involvement in family planning.¹

Men can be involved in family planning in two ways — as decision makers with their wives about a female controlled method, or as users of a male method. In the latter case, few options are available. Apart from rhythm and withdrawal, which are among the least reliable family planning methods, condoms and vasectomy are the only choices. Efforts are underway to develop additional male contraceptive options. Possibilities include a contraceptive “vaccine,” a hormonal pill or implant, and a medication derived from cottonseed oil. However, none of these is even close to being widely available (9). Therefore, in this context of increased interest in male participation in family planning and a limited set of options, vasectomy is an important topic.

Nonetheless, the proportion of couples who rely on vasectomy in the developing world is not only low, but has decreased or remained constant over the past fifteen years.

¹ It is important to note that this interpretation of family planning program history as having been exclusively focused on women ignores the experience of countries like India that used vasectomy extensively in the early days of their population control programs. This model, perhaps because it was somewhat unsuccessful as well as coercive, is not often mentioned in general discussions of male involvement in family planning. See below for a discussion of Asian family planning programs and the reasons that vasectomy, once among the most prevalent methods in several countries, fell in popularity.

There are currently 8.5 million more vasectomized men than there were in 1983; however, the proportion of couples relying on vasectomy has remained at 5 percent (2). In several Asian countries that had high vasectomy rates in the 1960s and early 1970s, female sterilization outpaced vasectomy by 1980. For example, female sterilizations exceeded vasectomies for the first time in Bangladesh in 1978, in Korea in 1977, and in Nepal in 1979 (3). Concern among vasectomy proponents about the method's decline prompted the organization of the First International Conference on Vasectomy in 1983, which attempted to determine the causes of vasectomy's loss of popularity (10).

In summary, vasectomy is a relatively unpopular and unavailable family planning method that has lost ground to female sterilization since the 1970s. However, the global picture does not tell the entire story. Male sterilization is unevenly distributed among developing countries. In Asia, vasectomy played a dominant role in the early years of many countries' family planning programs. To this day, vasectomy is considered available to more than 75 percent of men in Bangladesh, Hong Kong, India, Singapore, South Korea, Taiwan, and Thailand. In addition, almost three-quarters of men in Sri Lanka have access to vasectomy (2). Male sterilization has also been widely used in Nepal (7) and in certain Chinese provinces. On the other hand, in Latin America, vasectomy has only recently become somewhat available in a few countries (e.g. Mexico), while in others it remains inaccessible. Colombians have the greatest access to vasectomy; more than 50 percent of men can obtain services (2). In other Latin American countries, such as Brazil, there are pockets of availability, but overall access is limited. Male sterilization is almost non-existent in Africa and the Near East (2).

This paper will concentrate on the two regions mentioned above — Asia and Latin America — since they experienced different patterns of vasectomy provision and use. There are many reasons for these differences, including the availability of technology, access to health care, and the interaction between maternal and child health and family planning in each region. In Asia, vasectomy programs were introduced early (often prior to female

sterilization or wide use of spacing methods), concentrated on achieving sterilization quotas and seemed to target men from lower socioeconomic groups. In Latin America, promotion of vasectomy began after female sterilization was already widely available and used. It was marketed to men as an additional family planning option in countries where most female methods and condoms were already widely available. In both regions, vasectomy use rose and fell in response to providers' decisions about promoting the method, rather than its popularity with men.

Asia

At first glance, the importance of vasectomy in Asian family planning programs is surprising. The above-cited reasons for vasectomy's unpopularity would seem to apply to this region as well. At the first International Conference on Vasectomy, a summary list of these objections was compiled. Participants in the conference asserted that vasectomy was unappealing to men because myths persist that it threatens male virility, causes weakness or impairs sexual function. In addition, vasectomy opponents have argued that since women bear children, they feel the burden of large families more and are more willing to endure surgery to limit family size (10). Research on Asian men's attitudes toward vasectomy indicates that some of these objections are indeed operative (7, 10). However, they have not created insurmountable obstacles to making vasectomy a dominant method in Asia during the early years of national family planning programs.

Vasectomy was heavily promoted in certain Asian countries, particularly in the 1960s and 1970s. India is the most striking example. India initiated a government family planning program in 1952, earlier than any other nation. From 1952 until 1977, male sterilization was the most important contraceptive method (11). It was then surpassed by female sterilization. Out of 32.7 million sterilizations registered by the Indian government's family planning program between 1956 and 1980, 65% were vasectomies (5). Vasectomy's importance

diminished after 1977. In 1992, 13 million couples relied on vasectomy for birth control. This number represents 7% of all Indian couples and 16% of contraceptive users (2).

In China, male sterilization has played an important role, although it is unevenly distributed within the country. An estimated 18 million Chinese couples rely on vasectomy (2). Over 50% of these live in Sichuan province, where the method has been more heavily promoted (and where no-scalpel vasectomy was developed). Between 1971 and 1978, 40% of all sterilizations were done on men (5). Again, this reflects the high rates of vasectomy in Sichuan where the ratio of male to female sterilization is almost 5:1 (2).

The other Asian countries with significant numbers of vasectomized men are Thailand, Bangladesh, Nepal, Korea and Sri Lanka. In Thailand, 6% of couples used vasectomy in 1987, while 23% relied on female sterilization (2). Korea had the highest vasectomy prevalence in a developing country outside of India as of 1988 (2). The Korean vasectomy program also started early, with almost half a million men receiving vasectomies by 1973 (12). Nepal does not have a high overall number of sterilizations; however, 44 percent of all sterilizations are vasectomies (7). In Bangladesh, vasectomy is “a routine choice with the family planning program” (10). Like in India, use of vasectomy services initiated early, peaked in the mid-1970s and has since reduced substantially in comparison with female sterilization and other contraceptive methods (5, 10).

Why did Asian programs use vasectomy so extensively, particularly in the early years of their national family planning programs? First and foremost, vasectomy is a simple, outpatient procedure that permanently ends fertility. At the time that many of the Asian programs began in the 1950s and 60s, laparoscopy had not been developed and female sterilization was still major surgery requiring a general anesthetic. Method choice was highly restricted during this period, particularly for programs with clear demographic goals that sought permanent or semi-permanent methods. An effort to introduce the IUD on a massive

scale in India in 1965 failed and created a backlash against this method²; therefore, options became even more limited (11). Another possible reason for the focus on a male method is that many of the Asian programs began before the push to treat family planning as an inseparable element of maternal and child health services. By the mid-1970s, the vision was of “universal care for women during their pregnancy and delivery, with a systematic and simultaneous provision of family planning services” (13, p. 46). There is no room for vasectomy in this model. However, many of the Asian countries established family planning programs before this model gained universal approval. In addition, some may have lacked a substantial maternal and child health infrastructure. Therefore, vasectomy was a logical method choice.

The Asian countries with a significant level of vasectomy have used a range of methods to encourage men to be sterilized. These include outreach to men at workplaces or in rural communities using mobile units, vasectomy “camps” and “festivals,” special clinic hours and settings that are considered more appealing to men, and incentive payments.

Vasectomy camps have been used in several countries. Camps are temporary sites outfitted as surgical facilities and heavily promoted to achieve a high flow of clients in a short period of time. Two camps in India have received significant attention for their success in sterilizing large numbers of men. The Ernakulam camps, held in 1970 and 1971, achieved 78,000 male sterilizations while the camps held in Gujarat in 1971 and 1972 sterilized over 200,000 men in two months (3). In Tamil Nadu state, vasectomy camps were established in schools during holidays (11). Camps have also been used successfully in Bangladesh, where they played a major role in the numbers of vasectomies performed after 1975 (14). In Thailand, large numbers of men receive vasectomies during special festivals held on the king’s birthday (6). Quality of care has been a problem in many of the mass camps. In 1974,

² Srinivasan (1995) attributes this failure to medical professionals’ dislike of the method, resulting in campaigns against it as well as inadequate training of providers in insertion, which caused complications.

in response to post-operative complaints from men vasectomized in the mass camps, India officially switched to “mini-camps” where no more than 25 men could be sterilized (11).

Mobile vasectomy units helped reach men in less accessible areas with sterilization services. Mobile units targeted rural areas in Thailand, bringing vasectomy numbers up to one-fourth the number of female sterilizations in 1979 from a 10:1 ratio in 1977 (15). Both the government family planning program and the Population and Development Association, a non-governmental organization, run mobile vasectomy units (10). Mobile vasectomy teams provide services in Nepal, where they take over local health centers periodically to provide services (7). In Sri Lanka, Malaysia, Korea and Indonesia, mobile units sterilized men at work sites during the 1960s and early 1970s (3).

One of the most important and controversial elements of vasectomy promotion in Asia has historically been incentive payments, both to providers and acceptors. Vasectomy is not the only method for which governments have compensated users. Female sterilization has generally involved payments equal to or greater than vasectomy when incentives are part of a government’s program (3). Nonetheless, evidence suggests that in certain countries, incentives became the primary reason that men underwent vasectomies.

Incentives have played a prominent role in vasectomy promotion in India, Nepal, Sri Lanka, and Bangladesh (16). India first introduced incentive payments early on (1956) in two states. Initially, a small payment was provided to compensate for transportation costs and lost wages (11). According to one author, these symbolic payments increased significantly after 1965 and began to act as true incentives. Thereafter, the numbers of vasectomy acceptors rose and fell with the amount of money distributed as incentive payments (17). In the mass vasectomy camps of the 1970s, incentives were on average equal to half of an acceptor’s monthly salary (18).

A similar situation occurred in Sri Lanka in the late 1970s. In 1979, the government introduced substantial incentive payments for acceptors, as an attempt to reverse a downward trend in the use of sterilization. The incentive amount was raised and lowered several times

over the following few years, with corresponding highs and lows in vasectomy acceptance (19). A study done when the payment was at its peak of 500 Rs. (approximately \$20 USD) showed that the incentive payment was a primary reason for choosing to undergo vasectomy (19). The incentive payment was greater than or equal to the man's monthly salary in 83.5% of the cases. In addition, the men did not have experience with other family planning methods, and refused to consider using temporary methods when these were offered. A substantial proportion of the men interviewed admitted that they had been vasectomized exclusively because they needed the money:

When asked the reasons why the respondent wanted to get a vasectomy done, 216 (39.9%) stated quite frankly that it was to obtain the incentive payment. Some wanted this money quite urgently and gave reasons as 'to purchase a bicycle'; 'to attend to my mother's funeral expenses'; or 'to buy school books for my children'. Many stated, 'I have no steady job and I need the money' as a reason for getting the vasectomy done (19, p. 19).

In Bangladesh, incentives may have motivated men to choose vasectomy. A 50% rise in the amount paid to men coincided with a doubling of the number of vasectomies between 1980 and 1981 (14). One study done in 1977, when incentives were only equivalent to US \$1.10, indicated that between 40 and 60% of clients chose vasectomy rather than another contraceptive method because of the payment (20).

The importance of incentive payments in persuading men to use vasectomy seems to vary according to the clients' socioeconomic profile. In both India and Bangladesh, vasectomy is more likely among men with lower socioeconomic status, whereas the reverse is true in Latin America and developed countries (21). A comparison of Bangladeshi men who had been sterilized with a control group who had not showed that the vasectomy acceptors were less educated, had a higher rate of infant mortality and knew less about other contraceptive methods (22). In Sri Lanka, vasectomy was more popular among men in lower socioeconomic groups (16). Vasectomy in India has also been concentrated among men who are "poor, illiterate, and of low caste" (18, p. 568).

In general, the profile of vasectomy services in Asia at their zenith — from the 1960s through the early 1980s — is of aggressive programs focusing on poor men. The outreach and promotion techniques were designed to sterilize large numbers of men in a short time, which often led to a less than ideal standard of care. In some countries, major incentive payments were used, which bordered on coercion since the sums offered for sterilization equaled or surpassed monthly salaries. Vasectomy was not offered as an option within a spectrum of available family planning services. Instead, it was the one accessible method for certain social groups.

This approach to vasectomy reached a new level during India's Emergency period (1975-77). Over these two years, during which the government took on extraordinary powers and applied many of them toward the goal of reducing population, almost 7% of all Indian couples were sterilized (3). A total of 6.2 million vasectomies were done in 1976, almost five million more than in 1975 (14). This extraordinary task was accomplished through undeniably coercive means. In some Indian states, the police participated in recruiting men to have vasectomies. "Not only the police but a range of other government servants — railway ticket inspectors, school teachers, public-works department contractors, and operators of the fair-price food shops — used whatever means they possessed to meet the sterilization quotas" (17, p.373). Government employees had to produce evidence of their own sterilization during this period (18). The national government encouraged the states not only to use incentive payments, but also to create disincentives for those who refused sterilization (14). When the emergency ended in 1977, the government was preparing laws to make small families compulsory (11).

Reaction against the coercive family planning program helped bring down the Gandhi government in March, 1977 (11, 14). In the ensuing years, the entire family planning program was toned down and vasectomy in particular "lost its credibility and never regained its popularity" (11, p. 138). A very interesting phenomenon took place in the years after the Emergency. Vasectomy, the dominant family planning method in India for twenty years, was

almost entirely replaced by female sterilization. Spacing methods continued to play a relatively small role in contraceptive prevalence throughout this period.

There are several explanations for the change from male to female targets in sterilization campaigns. First, the bad name attached to vasectomy as a result of the Emergency period discredited the procedure. This explanation accounts for the drastic change between the numbers of male sterilizations in 1976-77 (6.2 million) and 1977-78 (188,000). However, a substantial number of female sterilizations were also done during the Emergency (over 2 million in 1976-77). Therefore, this method too should have been tainted by the coercive “motivational” methods. Nonetheless, its prevalence followed a different pattern than vasectomy’s. Tubectomy dropped in the year immediately following the Emergency; however, by 1981-82, female sterilization had surpassed the levels reached in the late 1970s.

In a 1985 article (23), Alaka Basu argued that the switch to female sterilization in India is a result of service providers’ decision to push female over male sterilization. She discusses several reasons why this became appealing to the Indian family planning program in the late 1970s. First, the reaction to vasectomy after the Emergency made it impolitic to continue to promote this method. Second, the introduction of laparoscopy made female sterilization increasingly easy to perform. Finally, increasing numbers of Indian women were giving birth or having abortions in hospitals, which provided an opportunity for simultaneous sterilization. Basu concludes by listing several disadvantages to the post-Emergency emphasis on female sterilization, noting that it is a more complex and costly operation than vasectomy, that an emphasis on spacing methods instead would be more effective demographically, and that complications could seriously harm women’s health.

India’s transition to an emphasis on female sterilization is unique in the dramatic way in which it happened. India is also the only country to have relied to such a great extent on vasectomy prior to switching to female sterilization. However, many of the other Asian countries experienced similar transitions, in which vasectomy’s formerly prominent place in

the program declined in contrast with female sterilization. The swing away from vasectomy and toward female sterilization has some drawbacks, as Basu noted for India. Certainly, the Asian vasectomy programs of the 1960s and '70s were not ideal. Some were coercive; most failed to offer a range of methods and had poor quality of care. Nonetheless, they did distribute the burden of family planning between men and women. Ironically, it was after these vasectomy programs had experienced their decline that the world population community began to talk about the importance of male participation in family planning.

Latin America

This section will look at vasectomy programs in Latin America that arose out of the concern that men should participate in family size limitation. These programs were marked by several characteristics that distinguished them from the Asian programs: high quality of care, targeting of upper income groups, and careful piloting of outreach and service provision activities. These characteristics in many cases also distinguished vasectomy services from programs aimed at women in the same countries.

In contrast with Asian programs, the Latin American family planning programs that began in the 1970s did not consider vasectomy an acceptable option. These programs depended heavily on a model that incorporated family planning into maternal and child health services and therefore largely ignored men. In addition, Latin American men were generally assumed to be too “macho” to accept vasectomy (7). Little empirical evidence is available that male attitudes were a barrier to vasectomy. Nonetheless, this justification for ignoring vasectomy was stated frequently. A prominent Latin American family planning expert made this comment on the appropriateness of vasectomy in the Latin American context:

First of all, Latin American men are — for widely publicized but rather mysterious reasons — difficult to convince on that subject. Secondly, a sterilized woman is a child-source permanently eliminated whilst a man put

out of production may, at least in theory, be substituted by any eager friend (24, p.30)³.

The low levels of vasectomy prevalence in Latin America reflect this attitude on the part of program administrators and service providers. In 1983, only 30,000 couples were using vasectomy in Latin America and the Caribbean (versus 25.6 million in Asia) (14). By 1991, that number had increased to 400,000, or an estimated 0.7% of all married couples of reproductive age (2). The low prevalence of vasectomy is particularly striking when compared with the high use of female sterilization in many Latin American countries. Ten out of the fifteen countries with the highest use of female sterilization in the developing world are located in Latin America or the Caribbean (1). In seven out of sixteen Latin American countries that have participated in recent DHS surveys, more than 20 percent of all married women of reproductive age are sterilized (1).

Since the mid-1980s and the renewed worldwide push to involve men in family planning, vasectomy has experienced a small but significant upsurge in some Latin American countries. Vasectomy has become more available in Brazil, Mexico, and Colombia. In 1991 alone, the organization AVSC supported programs that performed 10,000 vasectomies in these three countries (25). Vasectomy has been offered consistently by the IPPF affiliate in Guatemala since the 1970s (26). The model of vasectomy services used in these countries is in direct opposition to the coercive practices aimed at Asian men in the 1970s. Vasectomy is marketed to men in Latin America through services that offer privacy, convenience, information, “polite, professional attention,” and non-contraceptive services like sexuality counseling (27). Sophisticated publicity campaigns inform men about vasectomy and where it can be obtained. Colombian and Brazilian vasectomy programs run by nongovernmental organizations have been the model for this type of service delivery; a brief description of their programs follows.

³ It is fascinating that Miguel Trias, the Colombian doctor who made this statement in 1974, would later become the driving force behind one of the most innovative and successful vasectomy programs in Latin America.

Profamilia, the Colombian NGO that provides the majority of the country's family planning services, re-started their vasectomy program in the mid-1980s⁴. The first vasectomy clinics opened by Profamilia in 1985 were male-only facilities in Bogota and Medellin (two of Colombia's major cities) (2). From the beginning, the male clinics offered a wider range of services than just vasectomy. Men were also provided with treatment for urologic and sexual problems, infertility and sexually transmitted diseases. These additional services helped attract men to the clinic and helped finance the vasectomy services (27). In addition, the clinic was outfitted to be more attractive than the run-of-the-mill family planning clinic. As the clinic director said in an interview, "We learned that appearance is more important for men than for women. The women are used to coming to family planning clinics. Men have never been to one and their first impression is based to a large extent on how the place looks" (27, p. 16).

In 1988, an operations research project was done to determine if Profamilia needed these expensive male-only clinics to obtain high numbers of vasectomy acceptors. The results showed that traditional family planning clinics (where women also came for services) that heavily promoted vasectomy and offered other male services were almost as successful as male-only clinics in increasing use of vasectomy (28). Therefore, it is not clear that it is necessary to offer men the separate, more attractive settings advocated by the director of Profamilia's male clinics to convince them to use vasectomy services.

However, the Brazilian program very much concentrates on this model. Pro-Pater, an NGO-operated clinic located in the city of Sao Paolo, opened in February, 1981 (10). The clinic immediately achieved a certain degree of success, indicating that demand for vasectomy services existed prior to its opening (29). Pro-Pater serves only men. The quality of care is exceptionally high. A range of sexual and reproductive health services is offered, including sexual dysfunction treatment and education for men about their own and their

⁴ Profamilia had done some vasectomies in the early 1970's, particularly from 1970-73, before they began to offer female sterilization. However, until the mid-1980s, the numbers of vasectomies performed were insignificant (Vernon, Ojeda and Vega)

partner's sexuality (27). Pro-Pater does not distribute condoms or provide HIV testing services. They treat other STDs, but do not publicize these services (27). Clinic personnel fear that identification of vasectomy services with STDs and AIDS would damage the clinic's reputation.

Pro-Pater's vasectomy services are exceptional for their counseling and informed consent component. Men are extensively interviewed about their motivation for wanting a vasectomy and over 20% of prospective clients are rejected (30). Pro-Pater staff believe that "It is probably a rule of thumb that any vasectomy service that does not regularly reject candidates is providing inadequate counseling" (27, p. 19). Men whose wives are currently pregnant or who have a very young child are counseled to wait to have the operation. Post-vasectomy, follow-up services are excellent. The follow-up rate for vasectomy clients is over 75% (27). Pro-Pater has experimented with extensive advertising of vasectomy services. Mass media promotion using television, magazines and billboards effectively increased the numbers of vasectomies performed at several points in Pro-Pater's existence (2, 31). In addition, the clinic has done promotion of vasectomy services in factories (2).

Pro-Pater's model has achieved success in Sao Paulo, where the prevalence of vasectomy among couples of reproductive age increased from 0.2% in 1981 to 5.7% in 1990 (27). However, vasectomy in the rest of Brazil remains almost nonexistent. It is not clear if it would be cost effective to open other clinics with Pro-Pater's exceptional quality of care in other parts of Brazil. Sao Paulo has a larger middle class population than many other areas of Brazil, and Pro-Pater has targeted much of its advertising at middle-class clients in order to achieve self-sufficiency.

The quality of care offered in the Brazilian and Colombian male clinics is admirable. However, it may be difficult and costly to replicate, and may not be entirely necessary as shown by the operations research project done at Profamilia facilities. It is also problematic because it seems to establish dual standards of care — one for men and another, lesser, for women. The Colombian clinic director's comment that the male clinic needed to be more

attractive than facilities for women because “women are accustomed to coming to a family planning clinic” (27, p.15) demonstrates her acceptance of an alternative standard of care. In Sao Paolo, one study showed that 25% of women sterilized regretted their decision and would not agree to do it again (27). Pro-Pater, with its elaborate informed consent procedures, has had only seventeen requests for vasectomy reversal out of 28,000 procedures (27). National surveys in another Latin American country, Mexico, have detected substantial female sterilization regret as well as a large number of women who say that the decision to use an IUD was made for them by a service provider (32). These women are not receiving the same type of counseling as Pro-Pater’s clients before choosing a permanent contraceptive method. Certainly, with the precedent of the coercion used in Asian programs, it is important that vasectomy be done right. However, it would be ideal if the quality of care offered to men were also extended to women in Latin America.

Mexico currently has the only substantial vasectomy program in Latin America administered by a government agency. It will be interesting to study the Mexican program as it progresses, to determine how it confronts issues of quality of care, facilities and promotion. The program has been quite successful in recruiting clients. In 1989, the Mexican Social Security Institute (IMSS) sent five doctors to Pro-Pater for no-scalpel vasectomy training (2). Since then, the number of vasectomies done annually has increased rapidly. In 1993, 17,015 vasectomies were done in IMSS facilities throughout Mexico. The ratio of female to male sterilizations done at IMSS clinics has changed from 21:1 in 1989 to 12:1 in 1993 (33).

Discussion and Recommendations

Vasectomy has played diverse roles within the recent history of family planning programs in developing countries. Looking at this history, it is clear that the prevalence of vasectomy has depended primarily on decisions by policy makers and service providers to promote or not promote this method. This paper has examined the two developing regions where vasectomy programs have been most used. It was not the clients’ decision that

determined the service availability or lack thereof in either Asia or Latin America. In the Asian countries where vasectomy was used extensively in the 1970s, national programs emphasized the method because it met a demographic need and did not require the kind of health infrastructure needed for female sterilization. The decline of vasectomy in Asia again was not due to men's reaction against the method. Instead, by 1980, service providers decided that female sterilization had become a more feasible way of slowing population growth.⁵ In Latin America in the 1980s, introduction of vasectomy services responded to a policy decision that men needed to become more involved in family planning.

Therefore, after 30 years of experience with vasectomy in different regions of the world, it can no longer be claimed that vasectomy is not a feasible method because men are resistant to it. Instead, as a 1992 report pointed out, the low prevalence of vasectomy should be attributed to "policy makers' and providers' lack of attention to vasectomy, and sometimes even prejudices against it" (2, p. 2). As providers grapple with the question of how best to provide vasectomy services so that they become a more common option for controlling fertility, the experience explored in this paper provides several important clues:

The coercive history of vasectomy needs to be overcome:

Some of the methods used by Asian programs to meet sterilization quotas were coercive (particularly in India), depended on large incentive payments, and targeted less informed sectors of society. This situation resulted in a revolt against vasectomy programs (and ultimately against the government) in India. Especially in Asia, this history needs to be confronted if vasectomy programs are to continue to grow rather than stagnating as they have in the past ten years. Men should receive full information about vasectomy as one possible family planning option. Recent reports on vasectomy users in Bangladesh and Sri Lanka indicate that some of the same problems reported in the 1970s persist today. For example,

⁵In India, a negative reaction did take place; however, this resistance was due to the coercive methods used during the Emergency and not to the method itself.

vasectomy users in Bangladesh were of a lower socioeconomic status than non-users. In both countries, vasectomy users had less experience with other contraceptive methods than the control group (34, 35).

Men do not need impractically high standards of care:

On the other hand, service providers need to avoid overcompensating for this coercive history by establishing an impractically high standard of care. If services are to become widely available in regions where vasectomy has historically not been common, like Latin America, the Pro-Pater model is not practical. Evidence from Colombia and Mexico suggests that men do not require separate clinics for vasectomy services. In addition, the exceptionally high quality of care established at Pro-Pater and Profamilia's male clinic creates a standard that should be available equally to women and men. This is not currently the case.

Links between condom use and vasectomy should be explored:

AIDS is one of the greatest public health challenges of our time. Other sexually transmitted diseases also contribute to morbidity and mortality. Prevention of these two problems is through the "other male method" — the condom. Men are thought to be harder to reach with reproductive health information than women, whether it is related to STDs or family planning (27). Therefore, providers who have access to men for any reason should consider offering a full range of services. Vasectomy clinics need to address condom use, and service providers who counsel men on condoms should also educate about vasectomy. At the very least, research should be done to investigate whether incorporating STD prevention into services would reduce family planning effectiveness. A male reproductive health clinic should not ignore STD and HIV screening and prevention in a country with a high AIDS prevalence without substantial research demonstrating that these activities would diminish its abilities to provide vasectomies.

In addition, studies have shown some relationship between a history of condom use and the decision to have a vasectomy (34). Men who have historically taken more responsibility for contraception through using condoms may be more willing to undergo a vasectomy. This hypothesis is worthy of further research. It may bode well for future vasectomy use since condom use is now more heavily promoted because of AIDS.

In conclusion, many interesting issues about vasectomy have yet to be explored. Its current low level of prevalence does not indicate that this method is intrinsically unpopular or impractical. The AIDS crisis has shown that it is possible to raise the use of male methods substantially through a multitude of promotion strategies. Women will probably always bear the greater burden in family planning; however, many men throughout the world are potential clients of vasectomy services. They should have access to non-coercive, well-designed and widely accessible services.

References

1. Robey B, Rutstein S, Morris L and Blackburn R. "The reproductive revolution: New survey findings." *Population Reports*, Series M, No. 11, December 1992.
2. Liskin L, Benoit E and Blackburn R. "Vasectomy: New opportunities." *Population Reports*, Series D, No. 5, March 1992.
3. Ross JA, Hong S and Huber D. *Voluntary Sterilization: An International Fact Book*. Association for Voluntary Sterilization, New York, 1985.
4. Zatuchni GI, Goldsmith A, Spieler JM and Sciarra JJ. *Male Contraception: Advances and Future Prospects*. Harper & Row, Philadelphia, 1986.
5. Ross JA and Huber DH. "Acceptance and prevalence of vasectomy in developing countries." *Studies in Family Planning*, 14(3):67-73. 1983.
6. Nirapathpongporn A, Huber DH and Krieger JN. "No-scalpel vasectomy at the King's birthday vasectomy festival." *Lancet*, 335(8694):894-895. 1990.
7. Meredith P. *Male Involvement in Planned Parenthood: Global Review and Strategies for Programme Development*. Intentional Planned Parenthood Federation, London, 1989.
8. Finger WR. "Getting more men involved." *Network*, 13 (1):4-6, 1992.
9. Herndon N. "Looking for the 'male pill' ." *Network*, 13 (1):20-23, 1992.
10. Atkins BS and Jezowski TW. "Report on the first international conference on vasectomy." *Studies in Family Planning*, 14(3):89-95, 1983.
11. Srinivasan K. *Regulating Reproduction in India's Population: Efforts, Results and Recommendations*. Sage Publications, New Delhi, 1995.
12. Lee HY. "Studies on male sterilization: Acceptability, effectiveness, technology and complications." Paper presented at the *Seminar on Voluntary Sterilization and Post-Conceptive Regulation*, The Planned Parenthood Association of Thailand, Jan. 30 - Feb. 2, 1974.
13. Taylor HC and Berlson B. "Comprehensive family planning based on maternal/child health services: A feasibility study for a world program." *Studies in Family Planning*, 2(2):21-46, 1971.
14. Liskin L, Pile JM and Quillin WF. "Vasectomy -- safe and simple." *Population Reports*, Series D, No. 4, Nov.-Dec. 1983.
15. Varakamin S and Satayapan S. "The expanded sterilization project, national family planning program, ministry of public health.", pp. 15-29 in: Sangsingkeo V, Muangman D, Sriburatham A, and Thunyapon S, eds. *Voluntary Sterilization in Thailand*. Thai Association for Voluntary Sterilization (TAVS) and the Association for Strengthening Information on National Family Planning Program (ASIN), Bangkok, Thailand, 1982.
16. Siripala S. "The pattern of male sterilization in Sri Lanka: A preliminary survey." *The Journal of Family Welfare* 3 4(3): 3-11, 1988.

17. Vicziany M. "Coercion in a soft state: The family planning program of India. Part 1: The myth of voluntarism." *Pacific Affairs* 55(3):373-402, 1983.
18. Vicziany M. "Coercion in a soft state: The family-plan ning program of India. Part 2: The sources of coercion." *Pacific Affairs* 55(4):557-92, 1983.
19. Dias LR and Dias MK. "The motivating factors for vasectomy in Sri Lanka." *Journal of Family Welfare* 34(4): 12-22, 1988.
20. Khan AR, Swenson I and Rahman A. "A follow-up of vasectomy clients in rural Bangladesh." *International Journal of Gynecology and Obstetrics* 17(1):11-14, 1979.
21. Philliber SG and Philliber WW. "Social and psychological perspectives on voluntary sterilization: A review." *Studies in Family Planning* 16(1): 1-29, 1985.
22. Kafiluddin AKM. "Factors influencing the acceptability of vasectomy in Bangladesh." *ICARP Asia Research*, Aug. 1984: 12-16.
23. Basu AM "Family planning and the Emergency: an unanticipated consequence." *Economic and Political Weekly*, 20(10):422-5, 1985,
24. Trias M. "The organization and management of sterilization and post-conceptive regulation programmes." Paper presented at the *Seminar on Voluntary Sterilisation and Post-Conceptive Regulation*, The Planned Parenthood Association of Thailand, Jan. 30 - Feb. 2, 1974.
25. Herndon N. "Making vasectomy attractive." *Network*, 13(1):28-30, 1992.
26. Roca R. "Guatemala: A quiet program." pp 39-44 in: Huber SC, ed. *Social Marketing of Vasectomy Services: An International Review*. Social Marketing International Association, Queretaro, Mexico, 1985.
27. Rogow, D. *Man/Hombre/Homme: Meeting Male Reproductive Health Care Needs in Latin America, Quality/Calidad/Qualite No. 2*. The Population Council, New York, 1990.
28. Vernon R, Ojeda G and Vega A. "Making vasectomy services more acceptable to men." *International Family Planning Perspectives*, 17(2):55-60, 1991.
29. deCastro MPP, Mastrorocco DA, deCastro BM, and Mumford SD. "An innovative vasectomy program in Sao Paolo, Brazil." *International Family Planning Perspectives*. 10(4): 125-130, 1984.
30. de la Macorra L. "Brazil: A success story." pp 45-62 in: Huber SC, ed. *Social Marketing of Vasectomy Services: An International Review*. Social Marketing International Association, Queretaro, Mexico, 1985.
31. Foreit KG, deCastro MPP and Franco EFD. "The impact of mass media advertising on a voluntary sterilization program in Brazil." *Studies in Family Planning*, 20(2): 107-116, 1989.
32. Figueroa Perea JG. "The introduction of new methods of contraception: Ethical perspectives." *Reproductive Health Matters*, No. 3, 1994.

33. Jezowski TW, Alarcon F, Juarez C, et al. "A successful national program for expanding vasectomy services: The experience of the Instituto Mexicano del Seguro Social." *AVSC Working Paper No. 8*, May 1995.
34. AVSC International, Sri Lanka Association for Voluntary Surgical Contraception. *Vasectomy Decision-Making in Sri Lanka. A Global Vasectomy Decision-Making Study: A Six Part Series*. AVSC International, New York, 1994.
35. Faisel AJ, Ward V, Landry E and Mehta M. *Vasectomy Decision-Making in Bangladesh. A Global Vasectomy Decision-Making Study: A Six Part Series*. AVSC International, New York, 1995.