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Vasectomy: The Unfinished Agenda

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EXECUTIVE SUMMARY

Although the need for family planning remains widespread and its health and economic rationales remain valid, family planning has been neglected in the face of competing health and development priorities. Given the need for “repositioning family planning” (i.e., for raising the priority of and resources for family planning), vasectomy services in particular need more attention and support. Vasectomy, the only highly effective male method of contraception, is safe, simple to perform, and economical—yet in most countries it is the family planning method that is the least known, understood, or used.¹¹

We have learned many lessons about how to program effectively for vasectomy, but a great many barriers to vasectomy’s widespread use remain, at multiple levels—client, community, provider, facility, program and policy. A better understanding of what causes these barriers and how they can be removed, and of how to program effectively for vasectomy services, coupled with sustained commitment of attention and resources, can result in greater use of vasectomy. Increased use of vasectomy can help individuals and couples meet their reproductive health intentions and can help countries better serve their citizens while meeting development goals. In every region of the world and in nearly all social and cultural settings, men will use vasectomy services, provided these are appropriately offered. Increases in vasectomy use will likely be quite modest initially; in time, however, vasectomy in developing countries can reach levels seen in many developed countries. Sustained attention to and investments in vasectomy are warranted on both programmatic and equity grounds.

INTRODUCTION

This paper is meant to inform programming for vasectomy* as well as to advocate for greater attention to vasectomy services within family planning programs. We consider the status of vasectomy today and situate vasectomy within the context of the need for “repositioning family planning.” This presentation offers important lessons learned over the past several decades about effective vasectomy services, as well as what causes the widespread barriers to vasectomy’s greater availability and use and how best they can be removed. A better understanding of these barriers and lessons learned, coupled with sustained commitment of attention and resources, can result in greater use of vasectomy.

* Throughout this paper, “vasectomy” refers to no-scalpel vasectomy (NSV), an innovative vasectomy technique developed in China in the 1970s and introduced and diffused in the 1980s in developing countries by EngenderHealth and other cooperating agencies. NSV has been proven to have significantly fewer side effects such as bleeding, pain, and infection.



Family Planning: Neglected but Needed

Family planning saves lives. Economic development, human rights, and global health all have deep but often overlooked roots in family planning. More than half a billion people will use family planning in developing countries (excluding China) by 2015, an increase of 100 million people over 2005 levels. Already, more than 100 million in the developing world have an unmet need for contraception, almost half of which is for limiting.^{4, 18} The estimated commodity cost of meeting these growing needs is great—nearly \$7.5 billion dollars over the next 10 years.²² Despite the widespread and growing need, programmatic attention to and support for family planning has largely stagnated in the face of such competing health priorities as HIV and AIDS, tuberculosis, malaria, and avian flu. In addition, while events such as the 1994 Cairo International Conference on Population and Development, the promulgation of Millennium Development Goals, and the structural changes attendant upon decentralization of authority and integration of health services have been effective in broadening the reproductive health, global health, and development agendas, they have also diverted or diluted programmatic attention and human and financial resources for family planning.

Why Vasectomy? A Great Method That Is Not Being Used

Within the sphere of family planning, vasectomy is very often ignored, despite its being one of the safest, simplest, most highly effective, and least-expensive contraceptive methods. Vasectomy remains the family planning method that is least known, understood, or used, a fact confirmed in Demographic and Health Survey (DHS) studies conducted in 21 countries over the past five years. For example, in Sub-Saharan Africa, except for Ghana, Kenya, Malawi, and Uganda, the majority of men had not heard of vasectomy.

The use of vasectomy in the world varies significantly by region and country. Almost three-fourths of the 37 million couples who use vasectomy[†] live in Asia (Table 1), with China and India alone accounting for more than two-thirds of this total. Four and one-half million men in the developing world outside of these two countries use vasectomy. Vasectomy use in Latin America has increased four-fold in the past 10 years. Prevalence remains less than 1% in most of the region, with the exception of Brazil,¹⁴ Colombia,¹⁹ Guatemala,⁷ and Mexico,¹² where programs benefited from donor support in the 1980s and early 1990s. Vasectomy rates in almost all of Africa are 0.1% or less, although vasectomy services have been introduced within a number of Sub-Saharan African countries, such as Ghana, Kenya, Malawi, and Tanzania.

Table 1. Estimated % of Married Women of Reproductive Age Protected by Vasectomy and Total Number of Users of Vasectomy, by Region, 2005

| Region | % of MWRA using | Number of users (in millions) |
|-------------------------|-----------------|-------------------------------|
| Africa | 0.1 | 0.1 |
| Asia | 3.7 | 27.2 |
| Latin America/Caribbean | 1.6 | 1.4 |
| Europe | 2.8 | 3.0 |
| North America | 13.4 | 5.6 |
| Oceania | 8.2 | 0.4 |
| World | 3.4 | 37.7 |

Source: Reference 21.

[†] By contrast, worldwide, more than 225 million couples use female sterilization, a less simple procedure.

Still, vasectomy has been adopted by at least some men in every country where it has been introduced. Vasectomy, which can be provided in a variety of primary care settings, has a potentially important role to play in helping individuals and programs meet the ever-growing family planning and reproductive health needs outlined above, especially as donor support declines and national family planning programs increasingly need to focus on cost-effective services and methods.

Many lessons have been learned about how to program effectively for vasectomy, but a great many barriers to vasectomy's widespread use remain at multiple levels of the service-delivery system—client, community, provider, facility, program, and policy. A better understanding of what causes these barriers and how they can be removed, and of how to program effectively for vasectomy services, coupled with a sustained commitment of attention and resources, can result in greater use of vasectomy. These subjects are addressed in the following two sections.

BARRIERS TO VASECTOMY AVAILABILITY AND USE

Although we know what needs to be done, circumstances rarely permit us to put theory fully into practice. Vasectomy programs in most countries are constrained by barriers at the service-delivery level, within the culture and community, and at the level of government and donor policies and priorities. These barriers impede the design and sustained support of comprehensive vasectomy service programs and the routine provision and use of vasectomy services.

Service-Delivery Barriers

Vasectomy services obviously must be available for people to use them. However, it is not enough merely for these services to be *offered*. They need to be affordable and accessible—i.e., provided at a place and time that is convenient and in a setting that is comfortable for potential users. Male-friendly service sites must be staffed by competent, committed professionals who can communicate effectively with men, who can perform clinical procedures to standard, and who have a positive attitude toward vasectomy. They—and their colleagues who provide family planning services to women—need routinely to inform clients that vasectomy is an available option. These providers must be supported by effective supervision and by a commodity logistics system that ensures a steady supply of the equipment and materials required to provide high-quality services.

***Ideal vasectomy services:
available, accessible,
affordable, ...and used.***

Unfortunately, we rarely reach the ideal. There are many barriers at the provider, facility, and program levels. Common barriers include:

- **Programs' failure to consider the providers' perspective.** What would motivate providers to provide vasectomy services or discourage them from doing so? What's in it for them? The organization of work and programs should "reward" vasectomy providers via supportive organization of work and job expectations. What gets rewarded gets done.
- **Provider indifference to or bias against vasectomy.** Health care providers commonly overlook vasectomy and fail to inform clients that it is an available option. Some actually discourage clients from considering vasectomy due to personal bias, either because they believe family planning is a woman's responsibility or because they have misgivings about the method.

***Provider level:
What gets rewarded
gets done.***

- **Shortage of committed and competent service providers.** It may be that too few providers with requisite clinical and counseling skills are actively providing services.
- **Inadequate client counseling.** There is ample evidence that only a small percentage of clients in many countries receive information about vasectomy, even though they express a desire to limit subsequent births.
- **Poor infrastructure and facilities.** Many facilities lack a dedicated space for counseling and surgical procedures, utilities, and adequate or well-maintained equipment needed for safe vasectomy provision.
- **Poor location and organization of services.** Vasectomy services are often not convenient to potential clients and not male-friendly.
- **Inadequate training capacity and approaches.** Low client caseload is a constraint in many settings. In addition, traditional training approaches tend to be inefficient and not strategic, often training a large pool of trainees who may or may not be interested in becoming (or able to become) active vasectomy providers. Training also needs to go beyond knowledge and skills-building to fostering positive attitudes and behaviors.
- **Nonexistent or ineffective supervision.** This is a common, critical gap in family planning programs. Viable vasectomy programs require actively engaged supervisors to mentor and support service providers.
- **Gaps in the contraceptive security system, resulting in a lack of necessary supplies and/or equipment.** Vasectomy requires specialized instruments that are rarely included in lists of essential commodities and equipment.
- **Poor understanding of real costs.** To improve financial sustainability, there is a need to better understand the cost of providing services, as well as the consumer's willingness and ability to pay for vasectomy. Many public and private facilities charge the same price for a vasectomy as they do for a tubal ligation (or an even higher one), even though a vasectomy costs considerably less than tubal ligation in terms of supplies, equipment, and staff time.

**Facility level:
Male-friendly
services are critical.**

**Program level:
Train smarter,
better, fewer.**

Cultural and Community Barriers to Use of Services

Prevailing cultural norms and beliefs undermine vasectomy use in numerous settings. For available vasectomy services to be used, vasectomy must be perceived to be socioculturally compatible and must have a positive image. In addition, people need to be aware of the method, to understand what vasectomy is (and is not), and to know where services are available.

Perception = Reality

- **Sociocultural and gender influences.** In many cultures, men are the main decision makers regarding the choice and use of family planning methods but take little responsibility for contraception themselves, often believing that this is the woman's role.^{9,10} In some societies, family planning in general and/or sterilization in particular may be (or is believed to be) prohibited by religion.
- **Lack of information.** Men and women are less aware of vasectomy than they are of other family planning methods. Even when they know of vasectomy, the information they have frequently is incomplete or incorrect.
- **Myths and misconceptions.** Myths about vasectomy are widespread in many communities. The beliefs that the procedure equals castration, that it negatively affects men's sexual function, and

that it diminishes men’s physical strength and ability to perform manual labor are widely held by both men and women, across all geographic regions.

- **Bias and misinformation.** Clients obtain much of the information on which they base their family planning decisions from sources within the community, such as family members and friends, whose knowledge may not be accurate and complete.

Policy and Priority Barriers to Comprehensive, Sustained Programs

For programs to routinely provide vasectomy services, political will, policy support, long-term commitment from policy makers and donors, and sustained attention and resources for all essential program components are needed. These requisites for success are rarely all in place, due to:

- **Lack of political will and leadership to sustain vasectomy.** This relates to the need for governments and donors to reposition family planning in general, and vasectomy in particular, on the priority and resource agenda. Vasectomy programs need champions at multiple levels.
- **Perception of minimal cost/benefit.** Vasectomy has suffered from the limited number of sustained success stories around the world and from concern that its low prevalence does not warrant the needed investment in vasectomy programs.
- **Shifting government and donor focus.** Competing health and development priorities and new initiatives have diverted attention and resources from family planning programs, including vasectomy.²
- **Fragmented program support.** Technical assistance agencies are rarely given the mandate or the funding to support all required elements of a successful vasectomy program.
- **Short funding duration.** Change takes time, and overcoming the many barriers to establishing vasectomy as an ongoing family planning service is a long-term project. Donors and governments typically underestimate the duration of the commitment this requires.
- **Restrictive policies about who can provide services.** Policies often restrict provision of vasectomy to high-level health care professionals, which limits access.
- **Inappropriate incentive policies.** Incentives for vasectomy acceptance have sometimes led to abuse, damaging the reputation of the program and causing the use of vasectomy to decline.

*Perseverance,
perseverance,
perseverance*

VASECTOMY PROGRAMMING—CONDITIONS FOR SUCCESS

Evidence from the past two decades has demonstrated that in every region of the world and in nearly all social and cultural settings, men will use vasectomy services, provided they are offered appropriately.^{5, 8} When program managers and providers take an active role in addressing men’s needs, rather than simply making vasectomy services available, men will respond, and more will request vasectomies.

Ensure That Services Are Appropriately Tailored to Men—Create Male-Friendly Services

Vasectomy programs have used a variety of strategies to make men feel comfortable and to tailor services to meet their needs—that is, to create programs that are “friendly” and inviting to men. The strategy selection depends upon what is acceptable and possible in the local context, given the culture, men’s

What men want...

preferences, the structure of existing health care services, and available resources. Options include male-only settings to support vasectomy programs and integrated services with separate hours for men. The latter may offer broader men's reproductive health services, such as urology, infertility treatment, testing for and treatment of sexually transmitted infections, and counseling for sexual problems.⁸ An alternative approach is to make family planning programs for women friendlier to men as well. Creating *male-friendly* services requires engaging all staff who have contact with clients, to foster a welcoming environment for men.¹ Whatever the model, the location and timing of services should be convenient for potential users.

Men are more likely to return to facilities where they are treated well. The quality of counseling is especially important to men's perceptions of their health care experience. Men are particularly concerned about confidentiality when discussing reproductive health matters. Some men prefer to travel to a distant site, to avoid being seen entering a reproductive health facility in their community.¹⁵

Utilize a Holistic-Systems Approach—Link Supply and Demand

We know that training vasectomy service providers does not a program make. Developing service capacity is certainly necessary, but it is not sufficient. It is also obvious that public education and interpersonal communication are essential program components that cannot stand on their own. Yet, historically, we have approached vasectomy programs in a fragmented fashion, failing to create the synergy between supply and demand that comes from coordinating a package of integrated interventions. In addition, we do not always ensure that the support systems necessary to sustain quality services are in place and functioning well. Evidence shows that a holistic, synchronized program has the best chance to achieve sustainable impact.

Supply: Take a Whole-Site, Whole-System Approach

Taking a whole-site approach to developing vasectomy services has proven benefits.¹² It creates a positive service environment and engages all staff as members of the service team. As the linchpins of vasectomy service delivery, clinical providers and counselors must be competent and motivated. They require adequate training, supportive supervision, and the space, equipment, and supplies needed for safe clinical procedures and high-quality, confidential counseling. Too often we fail to consider their perspective—including their attitudes about vasectomy and their needs and motivations for providing vasectomy services. Where providers are reluctant to offer the method, we need to understand and address the basis for their resistance and apply principles of change theory¹⁷ to promote the adoption of new practices—helping them to understand the simplicity and benefits of vasectomy.

***The whole is greater
than the sum of its
parts.***

Other staff at the service site—and at sites that might inform or refer clients—play an important role in vasectomy services as well. Managers, nurses, paramedical staff, registrars, lab technicians, social workers, guards, sweepers, and anyone else who has contact with clients can help to inform them—and their partners—about vasectomy.^{15, 16} Conversely, the same staff can spread misinformation and discourage men from obtaining the service.²⁰ A whole-site training approach for vasectomy that orients all staff at a service site and at referring sites about the method not only imparts information, it also affects attitudes and creates support for vasectomy.

For services to be sustained, programs need to create ongoing training capacity and systems—to develop the skills and knowledge of new providers, and to foster positive attitudes about vasectomy.

Supportive supervisors need to routinely support and mentor provider performance. Vasectomy services also require adequate physical facilities and a good contraceptive logistics system to ensure a regular supply of specialized instruments and expendables. For settings in which only a limited number of sites can reasonably offer vasectomy services, effective referral systems are an important element of successful programs.

The program design must consider both client and provider perspectives and must incorporate best practices for fostering and sustaining behavior change on both the supply and demand side.

Demand: Use Integrated Communications Strategies

A combination of mutually reinforcing communication strategies with impact on knowledge, attitudes, and (ultimately) behavior has been shown to yield the best results.¹³ Evidence tells us that it is best to use several channels to deliver consistent messages. The messages need to be relevant to men’s actual concerns—and to those of their wives. Satisfied vasectomy clients can be powerful messengers or champions.

“Vasectomy is as much an IEC operation as a surgical operation.”
— R.C.M. Kaza, Indian urologist

We know that the mass media are effective in creating knowledge and that interpersonal communication has a greater impact on attitudes that influence behavior. Individuals who are exposed to a message via multiple sources are more likely to take action than are those exposed to a message from a single source. Programs in Brazil,¹⁴ Colombia,¹⁹ and Guatemala⁷ were able to double their vasectomy caseload through multimedia campaigns.

Men have less contact with health workers than do women, and personal contacts—friends, relatives, and co-workers—are key to introducing new ideas and providing support for behavior change. Involving satisfied clients to inform men on vasectomy is an excellent strategy.

Communications strategies for vasectomy must be designed (through formative research) to address the issues that are most pertinent to men in the local setting. Successful communications campaigns combine factual information with messages that focus on the perceived benefits of vasectomy.

Evidence from Pro-Pater’s program in Brazil suggests that without a “critical mass” of satisfied clients to accelerate diffusion of a procedure, periodic mass media promotions are necessary to maintain or increase the prevalence of vasectomy.¹³

Advocacy for Change: Use Evidence to Change Policies and Practices at Multiple Levels

Increasing the availability and use of vasectomy services involves change at many levels. Evidence-based advocacy is an important program component that can effect change in attitudes and practices among donors, policy makers, program managers, service providers, and potential clients. In addition, champions are needed at all levels—policy, service delivery, and community—to establish and sustain vasectomy programs.

Program Strategically to Foster and Sustain Behavior Change

Much is known about processes that foster and sustain successful behavior change.¹⁷ This knowledge needs to be incorporated into the various programming interventions meant to increase accurate understanding, availability, and use of vasectomy. Vasectomy (or any new behavior) will be adopted

when the potential adopter—client, provider, facility, or program—perceives such adoption to be beneficial, socioculturally compatible, and simple. The *perceived* benefit of vasectomy (i.e., “What’s in it for me”) is the single and most important variable at play in the provision and adoption of vasectomy.

“What’s in it for me?”

These are some of the salient programmatic implications of the evidence supporting behavior change as it pertains to vasectomy:

Identify and Nurture Champions at the Policy, Program, Facility, and Provider Levels

Political commitment and leadership for vasectomy programs are key elements of program success, although they are generally not addressed in the design and implementation of vasectomy programs. In large programs, the effect that a single enthusiastic person can have on the number of vasectomies performed is often noticeable.⁵ At the head of almost every energetic vasectomy program is a director who is personally interested in involving men in family planning and who is committed to the program’s success. This lesson appears to be true at the donor and facility levels as well. “Early adopter” facilities (i.e., those already performing vasectomies, even in limited numbers) may be more likely candidates as “champion facilities,” given that they already house champion service providers (at least relative to facilities and providers not providing vasectomy at all).

At the head of every energetic vasectomy program: a director committed to the program’s success.

Ensure That the Structure of Work Rewards Vasectomy Providers

From the provider perspective, the structure of work can have a lot of influence upon his/her behavior. This is particularly true with respect to the typically overworked and/or underpaid providers in family planning facilities. The provision of surgical methods such as vasectomy is perceived as more time-consuming than is the provision of resupply methods. If vasectomy provision just represents “extra” work (especially extra work for which a provider is not paid extra), it is unlikely to be done. Besides an easing of other work responsibilities, additional structural “rewards” can include such nonmonetary recognition as being publicized as an excellent provider, being called upon to teach or train others, being sponsored on study tours, and so on.

“Reward,” don’t “punish.”

Understand That Many Vasectomy Activities Will Be “Pilots” and Program Accordingly

If vasectomy activities are modest, as they often are where vasectomy is little-known, they will be pilot activities, whatever their formal designation. This is the situation for all of Sub-Saharan Africa and for many of the other countries where the U.S. Agency for International Development works. In such early-stage situations, where small, initial activities ideally will catalyze further efforts (i.e., behavior change will diffuse), then the lessons of good pilots should be followed:

1. The activities should be made “visible” (i.e., conducted in the capital or another large urban setting).
2. They should be held at a respected, early-adopting institution.
3. They should be conducted by influential, respected providers.
4. The providers should be supported by the donor and technical assistance agency.
5. Such support should be offered for a considerable length of time.

Plans for “demonstration” and replication/“scale-up” should be part of the initial effort, with future decision makers and implementers involved from the start. Whatever is designed should not only be holistic and based on sound, proven programming principles, but it should also be consistent with current and ongoing program realities.

Communicate Strategically...and Often

The field of marketing is largely based upon principles of communication and on an understanding of how behavior change occurs and how new behaviors spread. Key evidence-based lessons about effective communication for behavior change must be borne in mind in the design and implementation of communications activities in support of wider availability and use of vasectomy services. For example, we know that mass media are more effective at *creating knowledge* of innovations, but interpersonal communication is more effective at *forming and changing attitudes* that influence the behavior of accepting (or rejecting) a possible new behavior, such as adoption of vasectomy.¹³ And even in the mass media sphere, efforts to promote vasectomy (like any successful advertising) need to be repeated often. We also know that most individuals depend on the subjective evaluation of “near-peers” who have already adopted the new behavior (or method), not on the basis of scientific studies or expert opinions. It is potential adopters’ modeling and imitation of behavior already adopted by people they know that accounts for the spread of a new behavior. This is true for both providers (on the supply side) and users (on the demand side). Thus, both mass media as well as interpersonal channels of communication need to feature satisfied users who combine the respected qualities of early adopters with the trust that accrues to “near-peers.” (Providers would be well advised to engage the services of satisfied users even for simple information sessions at the facility.)

Program Managers and Donors Need to Commit to the Long Term

Program managers and donors need to recognize that “change takes time,” especially in medical settings, which are generally conservative, hierarchical, and change-resistant. This is even more the case when the change entails adoption and provision of an unknown or widely misunderstood procedure, such as vasectomy. In early stages of vasectomy efforts, in countries where use of vasectomy is minuscule, expectations of service uptake, let alone of programmatic and financial sustainability, need to be realistic, as increases in vasectomy use will likely be initially quite modest. When we consider that it took 13 years for half of American cardiologists to follow the proper standard of care for treating heart attacks,³ and 20 years for half of the vasectomy procedures in the United States to be performed with the demonstrably better NSV technique (which has been adopted by only one-third of U.S. vasectomists),⁶ it is unrealistic to expect vasectomy to become widespread in shorter periods in the developing world, where people are less-educated and health resources are more scarce). Program managers and donors interested in expanding vasectomy services need to have realistic expectations and to commit both attention and resources to the long-term.

**Change takes
(a lot of) time...
and effort**

Improving financial sustainability also involves a need to better understand both the cost of providing vasectomy services as well as the consumer’s willingness and ability to pay for the procedure. Many public and private facilities charge the same for a vasectomy as for a tubal ligation (or even more), even though the cost of vasectomy in terms of supplies, equipment, and staff time is considerably less.

MOVING FORWARD—A CALL TO ACTION

Despite the prevailing belief that men are to blame for vasectomy's poor uptake, the truth is that the method suffers largely from neglect. Barriers to its provision and use are numerous and real, but they are not insurmountable. The common perception that men do not want to take responsibility for family planning and that vasectomy, therefore, is a nonstarter is contradicted by the evidence: Men do care about avoiding pregnancy and want to share the responsibility for family planning with their partners.^{9, 10} Worldwide, one in every four couples who are using contraception use a method—vasectomy, condoms, withdrawal, or periodic abstinence—that requires men's active cooperation or participation. We have also learned from experience that at least some men in almost every part of the world and every cultural, religious, or socioeconomic setting find vasectomy acceptable.^{5, 18} Resistance from potential users is not necessarily the problem. Rather, program planners, administrators, and providers have allowed this method to languish, through a lack of commitment and leadership.

In a time of reduced resources for family planning, of decentralization of services, and of growth in the numbers of couples who want to limit their families, vasectomy is an attractive option with several intrinsic benefits. Its characteristics make it a feasible, accessible option in low-resource primary health care settings. It is not too late to challenge unproven assumptions about what men think and want. We need to work at multiple levels, starting by addressing the barriers imposed at the policy and program levels that undermine the success of vasectomy programs. We need to raise awareness of the method and confront and correct misconceptions. We also need to invest strategically to establish vasectomy as a routine option among family planning method choices.

Increases in vasectomy use will likely be modest initially. Nonetheless, in time, vasectomy in developing countries can reach levels seen in many developed countries. Sustained attention and investments are warranted as a matter of good programmatic sense and on the grounds of choice and equity.

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