Revitalizing Underutilized Family Planning Methods
Assessing the Impact of an Integrated Supply-Demand Vasectomy Initiative in Ghana

Background
In Ghana, as in many countries, vasectomy has been a relatively “invisible” method. Not surprisingly, the prevalence of vasectomy is less than 0.1%, and vasectomy has been more difficult to obtain in Ghana than other family planning (FP) methods. One in four married women say they do not want any more children, yet fewer than half of these women are using a contraceptive method. This translates to nearly 350,000 Ghanaian couples with an unmet need for limiting births. Despite this high unmet need, awareness of vasectomy services is low compared with awareness of other methods: Ninety-eight percent of women and 99% of men in Ghana know of at least one FP method, yet fewer than half of women and only three out of five men have heard of vasectomy (GSS, NMIMR, & ORC Macro, 2004). Additionally, men and women who are aware of vasectomy frequently have incomplete or incorrect information about it.

Overall, research found that the underutilization of vasectomy in Ghana and elsewhere can be attributed to four key factors: 1) a lack of awareness of vasectomy as an FP option; 2) incomplete and incorrect information; 3) a lack of access to services; and 4) provider indifference and bias (Pile, 2008).

Developing an Integrated Supply-Demand Component
In 2003, the Ghana Health Service, the U.S. Agency for International Development (USAID) Mission in Ghana, and EngenderHealth (under its former cooperative agreement) collaborated on an initiative in the Accra and Kumasi metropolitan areas to improve acceptance of vasectomy by coupling site interventions that focus on quality and access (supply-side interventions) with effective and strategic interventions aimed at increasing public awareness (demand-side interventions). The ACQUIRE Project later provided technical assistance to design and carry out the communications campaign and community outreach and to evaluate the results of the supply-demand approach.
In early 2004, ACQUIRE launched the first phase of the demand strategy for vasectomy, through a communications campaign called “Vasectomy: Give Yourself a Permanent Smile.” To understand the impact of these communications efforts on awareness about, knowledge of, and attitudes toward vasectomy, ACQUIRE also conducted a panel study among 200 men in Accra. The demand for vasectomy services increased significantly immediately following introduction of the campaign (ACQUIRE Project, 2005). Although the campaign was largely concentrated in the first two quarters of 2004, demand for vasectomy services continued at increased levels through 2004 and the first quarter of 2005. Demand decreased significantly in the second quarter of 2005, however, suggesting that the six-month campaign was able to create demand but could not sustain it over an extended period of time, at least without additional communications support.

In 2008, in collaboration with the Ghana Health Service, ACQUIRE relaunched the “Permanent Smile” campaign, with support from the Reducing Maternal Mortality and Morbidity (R3M) Project (also managed by EngenderHealth). The primary goal of the project was to assess whether minimum investments could be used to cost-effectively stimulate vasectomy awareness, knowledge, and use. ACQUIRE periodically fielded a randomized consumer panel survey (using a pooled cross-section methodology) throughout the 2008 campaign. Three waves of research were conducted in Accra, Kumasi, and Takoradi before and after each mass media burst. For each of the three surveys, the panel study interviewed 240 respondents—160 men and 80 women. The ultimate goal was to learn whether programs can sustain past gains with intermittent, low-level communications support. (While these surveys were not directly comparable to the 2004 panel study, due to differences in methodology, the results of the 2004 survey are described here for purposes of discussion.)

The Ghana Vasectomy Initiative
The Ghana Vasectomy Initiative sought to provide a comprehensive approach to addressing the gaps in the health care environment by addressing provider biases and the lack of availability of services (both supply-side issues) and the low level of knowledge about vasectomy and the myths and misinformation surrounding it (demand-side issues).

The integrated supply-demand approach focused on a selected number of sites and consisted of these key interventions:

1. Strengthening the supply of vasectomy services
   - Training of physicians in no-scalpel vasectomy (NSV)
   - Whole-site training to create “male-friendly” service sites
   - Follow-up training and supervision

2. Increasing awareness of and demand for vasectomy services
   - Community outreach
   - The “Permanent Smile” media campaign oriented to potential clients
   - Establishment of a vasectomy telephone hotline

Addressing Supply-Side Needs
In 2003, in Accra and Kumasi, seven public, nongovernmental, or private-sector sites were selected for inclusion in the intervention—four Ministry of Health facilities (La General Hospital and Ashaiman Health Center, in Accra, and Komfo Anokye Teaching Hospital [KATH] and Kumasi South, in Kumasi), one nongovernmental service provider (the Planned Parenthood Association of Ghana [PPAG] Link Road Clinic, in Accra), and two private-sector facilities (Okanta Memorial Clinic and Nyaho Clinic, in Accra). In 2007, in addition to continuing support in Accra and Kumasi, ACQUIRE added a third city (Takoradi), where FP and vasectomy services were supported at Effia Nkwanta Regional Hospital.

1. Clinical Training of Providers in NSV
In 2003, seven service providers were trained or retrained in the NSV technique. The five-day training included didactic and practical sessions and was conducted at an international NSV training center in New Delhi, India. In the practicum, trainees observed vasectomies, practiced on scrotal

1 Direct support to the PPAG clinic ended in September 2003, but their activities and services continued to be monitored and reported during project implementation.
models, and performed procedures on their own. All trainees performed a minimum of 25 vasectomies. At three of the participating sites, the trained NSV providers were on staff; at the remaining three sites, a trained provider was on call to provide services. In 2008, seven more doctors were trained in NSV (including the fascial interposition technique) in New Delhi. In addition, facility staff received refresher training in client counseling.

2. Whole-Site Training in “Male Friendly” Services
The second key component of the supply-side strategy was whole-site training (WST),\(^2\) which involved personnel at all levels in the provision of quality information, counseling, and NSV services. From January to March 2003, four four-day workshops were conducted in Accra and Kumasi\(^3\) for all levels of clinic staff who could either facilitate or hinder client access to services (i.e., “gatekeepers” to vasectomy services). These participants included doctors, nurses, midwives, and health educators, as well as receptionists, cleaning staff, and guards. The overall goal was to ensure health workers’ active participation in and sustained commitment to serving existing clients and reaching out to new clients. Each site developed a detailed action plan for vasectomy provision that included community outreach work. Nurses and FP counselors at all project sites were also oriented to the project’s data collection forms, which were used to compile basic data about clients, the information that clients sought, and their recall of when they first heard about vasectomy and about the site that performed vasectomies.

3. Training Follow-Up and Supervision
Staff at participating sites received refresher orientations in February 2004 to ensure that facilities were fully ready at the time that the communications campaign launched. Following the orientations and training, EngenderHealth-Ghana staff conducted periodic visits to the sites to assess the quality of service provision, the adequacy of record keeping, the availability of print materials, and other aspects of the project.

Creating Demand through Communications
The overall objectives of the 2004 and 2008 communications campaigns were to raise people’s awareness of vasectomy, to increase their awareness of the availability of services, and to serve as a catalyst for men considering vasectomy. The demand-side activities included a mass media campaign, distribution of various print materials (posters, brochures etc.), community outreach by clinic staff, use of satisfied clients as spokespersons in the community, and a telephone hotline. ACQUIRE partner Meridian Group International, Inc., provided technical assistance with the strategy for the communications campaign, the development of communication plans, and the execution and integration of messages into the overall project.

1. Understanding the Target Audience
The communications campaign was built upon EngenderHealth’s 2001 qualitative research on clients’ perceptions of vasectomy in Ghana. Key findings from the 2001 work indicated that: 1) users of vasectomy were very satisfied with the method; 2) nonusers had very negative attitudes toward it; 3) men who were aware of vasectomy often had incomplete or incorrect knowledge; and 4) the primary misconception was that vasectomy is “castration.”

Based on these research findings, the following communications objectives were set:

- To create awareness of and a positive image for vasectomy
- To provide correct information on vasectomy (and on NSV) and to educate both men and women on its benefits
- To increase awareness of the names and locations of sites where NSV services are available
- To encourage acceptance of vasectomy by using testimonials from satisfied clients

In addition, the tone of the campaign needed to be positive and upbeat to change the image of the method. The campaign targeted married men who were aged 35 or older, who had three or more children, and who did not want any more children.

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\(^2\) WST includes inreach (staff orientations, referrals, linkages between departments, and adequate signs) to ensure that clients do not miss opportunities to access information and services for male clients.

\(^3\) Workshops were conducted at La General Hospital and Ashaiman Health Center/Okanta Clinic in Accra and KATH and Kumasi South in Kumasi. Staff from Nyaho Clinic in Accra did not attend the training, but the nurse and surgeon received an on-site orientation from EngenderHealth staff.
2. Developing the Creative Concept
Lowe-Lintas-Ghana Ltd. was identified as the agency to develop the vasectomy creative and implement the mass media campaign. The “Permanent Smile” campaign was selected as the winning concept during pretest focus groups, both for its strength of recall and for its “likeability” among members of the target audience. The “Permanent Smile” concept focused on the benefits of vasectomy and promoted “satisfied users” through a testimonial approach. Throughout the campaign, vasectomy was positioned as an FP method that provides men with the freedom to care for their partner and children, while offering the freedom to enjoy life. The campaign was designed to position vasectomy as a viable FP option for men in stable relationships—a choice that can help them to thrive at home and in their careers. The campaign creative materials included two 45-second television commercials produced in English and two 60-second radio spots produced in English and in two local languages.

The first “Permanent Smile” television spot was produced by Lowe-Lintas and was filmed and produced in Ghana. It featured a local vasectomy acceptor from the Kumasi area telling his story of a successful career, family, and marriage and featuring a popular colloquial phrase meaning “You’re the Man.” All of the print materials for the campaign (e.g., posters, leaflets, etc.) featured this Kumasi vasectomy acceptor. The second television spot, produced by Greene Ink, a New York–based advertising agency, was designed to emphasize the international acceptance of vasectomy by men from all regions (African, Asian, Latin, and Caucasian). The campaign tagline “Vasectomy… Give yourself a permanent smile” was featured across all advertising materials. When the campaign was aired in 2008, only the Ghanaian spot was run, as the talent rights to the international ad had expired. The 2008 campaign was also edited to update the facilities included in the second phase of the vasectomy initiative.

3. Implementing the Campaign
The “Permanent Smile” campaign included a wide range of communications outlets, including television, radio, print materials, community outreach, and a launch event. In the first phase of media support, television and radio advertising aired for 19 weeks during the period March–June 2004. The television ad aired on leading national channels (GTV, TV3), and radio spots were broadcast on local stations (in Accra, on Peace FM and Joy FM; in Kumasi, on Fox FM and Luv FM). Ad units ran during prime-time hours (evening for television and morning and evening for radio).

Although the original plan was for the campaign to air exclusively from March to June in 2004, the two main television stations in Ghana overbooked advertising during the first three quarters of 2004. Thus, a significant number of scheduled television ads did not air as planned and were rebroadcast at a later date. As a result, 160 “Permanent Smile” television spots ran from March to June and 53 ran between September 20 and October 20, 2004. A small number of missed radio spots were also aired in October during the final week of this period of supplemental advertising.

The majority of the print materials (question-and-answer brochures, leaflets, posters, and small folded leaflets called Z-cards) were provided to site-level staff, who then distributed the materials at their facilities, within their communities, and during launch events. In addition, the advertising agency distributed some print materials in public places where men were easily reached (e.g., bars and garages). In 2004, the total cost of mass media placements (television and radio), community activities, and production of print materials was US$85,700 (excluding technical assistance).

In 2008, the mass media campaign was designed to maximize cost-efficiencies. The mass media spots were scheduled using a flighted approach (e.g., “bursts” of television and radio ads separated by a hiatus period). Starting the week of January 7, 2008, and continuing for the next six weeks, television and radio spots were broadcast across Accra, Kumasi, and Takoradi. After February 17, the campaign took a four-week hiatus and then returned on March 17 for another six weeks, ending April 27, 2008. This mass media schedule was at lower levels than the 2004 intervention—there were 25% fewer television spots and 30% fewer radio spots than in 2004. In addition, the number of printed items used was also reduced. The total
Three telephone operators were trained to provide assistance and answer people’s questions from morning to evening. Prerecorded answering systems were used during the times when the hotline operators were unavailable. In both years, hotline attendants recorded basic data about callers, the nature of the callers’ questions, and where they had heard about the hotline.

Results: Assessing the Impact

1. Increased Vasectomy Acceptance

During the first phase of the demand strategy in 2004, the number of vasectomies increased three-fold compared with the previous year. In 2004, 81 men accepted vasectomies at service sites, compared with 26 in 2003.

Following the end of communications activities in October 2004, the number of vasectomies dropped significantly during 2005 and 2006. Then, in 2007, concurrent with the additional clinical trainings that were conducted for new providers, the number of vasectomies began to increase again. Once the communications activities began, the number of vasectomies more than doubled, increasing from 13 in the latter half of 2007 to 33 in the first half of 2008 (see Figure 1).

Figure 1: Number of vasectomy procedures performed in participating facilities, 2003–2008
2. Increased Activity on the Hotline

During both phases of the campaign (in 2004 and in 2008), the hotline proved to be an important element for generating interest in vasectomy, with the most calls received during the periods of the mass media campaign. During 2004, 429 calls were answered across the 35 weeks in which the hotline operated; television and radio activities took place over 19 weeks of this time period. In 2008, 167 calls were received by the hotline across 22 weeks of operation (and 12 weeks of mass media activities). While fewer calls were documented during 2008, it is possible that some calls were missed because of technical difficulties experienced with the hotline software during this period.

Similar to the 2004 experience, the hotline callers in 2008 were mostly men (88%)—with more than half (53%) aged 30–39. Most callers were from Accra (59%), followed by Kumasi (11%) and Takoradi 4%. (One-quarter of the callers reported living someplace other than the three supported districts.) Approximately three-quarters of the 139 callers who answered a question about their FP use reported using no FP method (n=103). Almost half of the respondents who answered a question on their current family size (n=126) had two or fewer children; another 44% stated they had four or fewer.

3. Improved Knowledge about and Attitudes toward Vasectomy

As seen in Figure 2, prompted awareness of vasectomy increased immediately after the vasectomy campaign was rebroadcast in early 2008 and in May 2008. In Wave 1 (October 2007), only 28% (N=44) of respondents were aware of vasectomy. In Waves 2 and 3, which were conducted immediately after the vasectomy spots were aired on radio and television, awareness increased to 41% (N=66) and 44% (N=71), respectively. These results are very similar to the results of the 2004 panel study, which showed that awareness of vasectomy was only 31% prior to the launch of the campaign but increased to 59% following the campaign. With one-third less investment in mass media, the highest level of awareness achieved in 2008 was 44% (versus 59% in 2003).

Men’s ability to recall elements of the campaign increased significantly following the first media burst in early 2008, from 23% in Wave 1 (when there had been no vasectomy campaign for more than three years) to 48% in Wave 2 and 53% in Wave 3 (Figure 3). These awareness levels are comparable to what was achieved in the 2004 panel study (when 56% of men surveyed reported having seen or heard one or more of the vasectomy campaign components, after the launch of the mass media efforts in 2004), further supporting the conclusion that follow-on media campaigns can be...
implemented cost-effectively to support prior campaign efforts and achieve similar levels of impact.

During Wave 2 (conducted in February 2008), television was cited as the source of information about vasectomy by 58% of respondents (n=67)—comparable to the 55% (n=62) in Wave 3. However, the proportion of respondents reporting that they learned via radio about vasectomy services and contact information for vasectomy providers increased over time, from 35% (n=40) in Wave 2 to 64% (n=72) in the Wave 3.

The results of the 2008 survey suggest that the February and May 2008 media bursts produced improvements in men’s knowledge of and attitudes regarding vasectomy. The proportion of men stating that vasectomy is a permanent method rose from 58% to 69%, and the proportion saying that vasectomy is simple and fast climbed from 24% to 34% (Figure 4). Attitudes toward vasectomy among men also improved: The percentage saying that vasectomy is a trusted FP method increased from 33% to 46%. Likewise, negative attitudes and misinformation about vasectomy decreased:

The percentage of men who felt that a man would lose his sex drive after a vasectomy shrank from 24% to 19%, and the proportion believing that a man loses his strength declined from 17% to 14%.

**Lessons Learned**

- A well-integrated supply-demand approach is critical to sustaining the demand for vasectomy services over time. When the “Permanent Smile” campaign was introduced in 2004, the demand for vasectomy services quickly increased. However, over time, this impact was not sustained. During 2005, for example, the number of vasectomies dropped dramatically, and the total for that year was one of the lowest in the five and one-half years in which service statistics were monitored. Much of this decline appears related to the lack of available providers, since staffing within the participating facilities changed and doctors trained in NSV were no longer available. The results also suggest, however, that demand for vasectomy naturally declines over time when there is no additional communications support.

![Figure 4: Percentage of men agreeing with various statements about vasectomy](image-url)
Follow-on investments in communications activities can achieve improved knowledge, awareness, and attitudes with fewer resources. The results of the second phase of the “Permanent Smile” campaign suggest that improved knowledge about, awareness of, and attitudes toward vasectomy can be achieved with fewer resources when media activities are efficient and well-targeted. In 2008, approximately one-third less was invested in the demand strategy than in 2004 (US$54,500 v. US$85,700), and like the 2004 campaign, there were immediate increases in the demand for vasectomy services. However, these figures do not account for the price inflation that occurred between 2004 and 2008. Lowe-Lintas’s inflation tracking indicates that the 2004 media plan would have cost approximately US$165,500 in 2008, suggesting that the savings might have been even higher. The results of the 2008 panel study also show that improvements in vasectomy awareness and knowledge were comparable to 2004 levels, even after a three-year hiatus in advertising.

Increases in awareness can be perceived immediately, whereas changes in knowledge and attitudes start to occur after multiple exposures. The 2008 panel study suggests that awareness and recall increased relatively quickly when the Permanent Smile campaign was rebroadcast in 2008, with significant increases in awareness seen after the first six-week airing but only small increases occurring thereafter. Likewise, recall of the campaign increased quickly but then leveled off between Waves 2 and 3. In contrast, the greatest differences between Waves 2 and 3 were related to knowledge of and attitudes toward vasectomy: The perception that vasectomy is a trusted FP method hardly changed between Waves 1 and 2, but then rose substantially between Waves 2 and 3, as did men’s agreement that vasectomy is simple and fast. Negative attitudes toward vasectomy were also reduced between Waves 2 and 3. All of this implies that lengthier exposure to positive messages about vasectomy is needed to have an impact on attitudes and beliefs.

References

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