AIDSMARK

A DECADE OF INNOVATIVE MARKETING FOR HEALTH:

LESSONS LEARNED

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A Decade of Innovative Marketing for Health:

LESSONS LEARNED

USAID

AIDSMARK
Changing Behavior, Improving Lives

PSI

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ICRW

IPPF

MSH

PATH
A catalyst for global health

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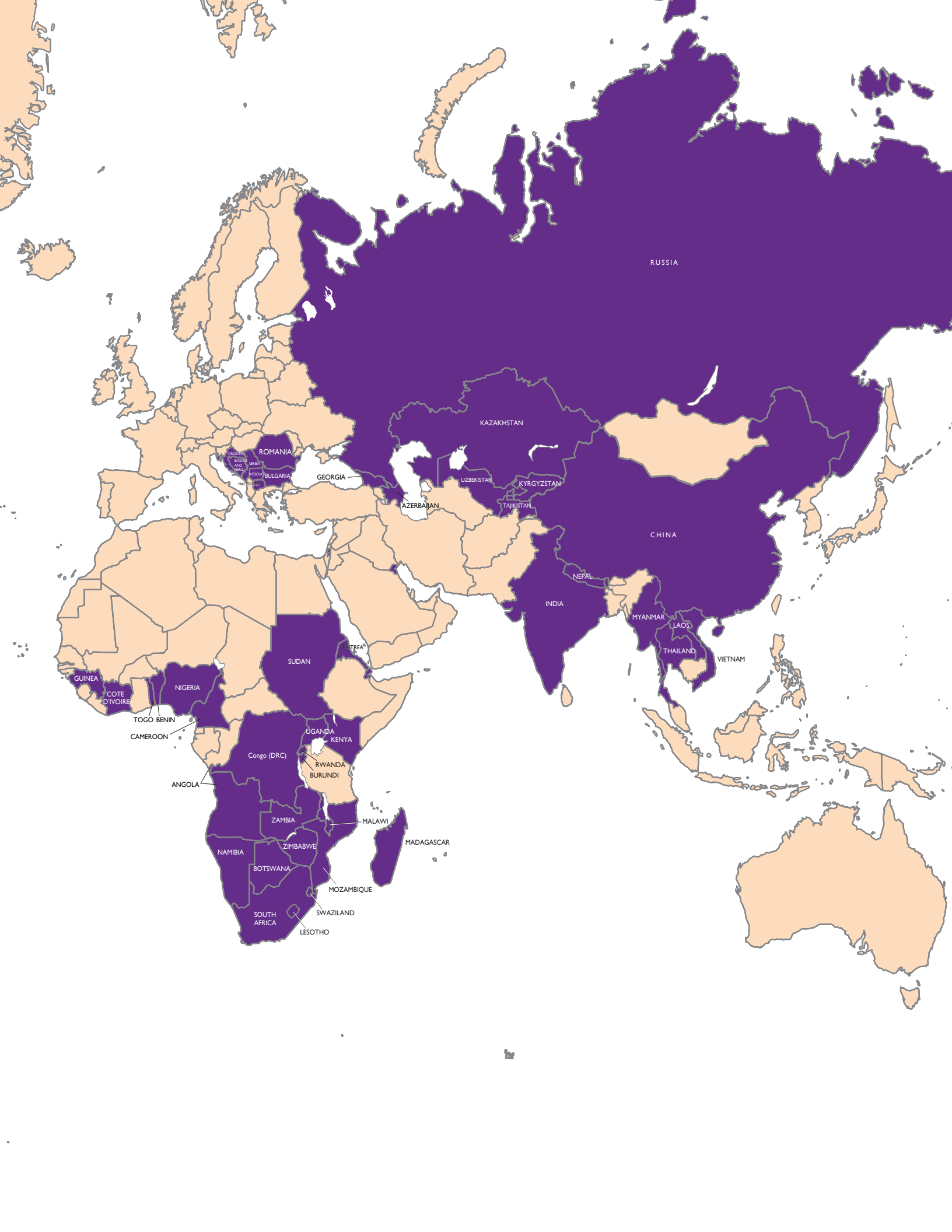
Countries with AIDSMark Supported Programs 1997 - 2007

Angola
Azerbaijan
Belize
Benin
Bolivia
Bosnia-Herzegovina
Botswana
Brazil
Bulgaria
Burundi
Cameroon
China
Congo (DRC)
Costa Rica
Cote d'Ivoire
Croatia
Dominican Republic
El Salvador
Eritrea
Georgia
Guatemala
Guinea
Guyana
Haiti
Honduras
India
Kazakhstan
Kenya
Kosovo
Kyrgyzstan
Laos
Lesotho
Macedonia
Madagascar
Malawi
Mexico
Mozambique
Myanmar
Namibia
Nepal
Nicaragua
Nigeria
Panama
Romania
Russia
Rwanda
Serbia
South Africa
Sudan
Swaziland
Tajikistan
Thailand
Togo
Uganda
Uzbekistan
Vietnam
Zambia
Zimbabwe


RUSSIA
KAZAKHSTAN
ROMANIA
CROATIA
BOSNIA AND HERZ.
SERBIA
KOSOVO
BULGARIA
MACEDONIA
GEORGIA
AZERBAIJAN
UZBEKISTAN
KYRGYZSTAN
TAJIKISTAN
CHINA
NEPAL
INDIA
MYANMAR
LAOS
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VIETNAM
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NIGERIA
TOGO
BENIN
CAMEROON
UGANDA
KENYA
Congo (DRC)
RWANDA
BURUNDI
ANGOLA
ZAMBIA
MALAWI
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BOTSWANA
MOZAMBIQUE
SWAZILAND
SOUTH AFRICA
LESOTHO

Contents

AIDSMark: A Decade of Innovative Marketing for Health

AIDSMark's End of Project Report describes the main achievements, challenges and lessons learned through 10 years of HIV prevention programming. AIDSMark was a global initiative funded by the U.S. Agency for International Development (USAID) in support of the U.S. government's efforts to reduce HIV transmission and mitigate the global impact of HIV/AIDS. In 1997, USAID awarded the AIDSMark cooperative agreement to Population Services International (PSI) and six partners. The purpose of AIDSMark was to expand social marketing of HIV prevention products and services in support of USAID's global HIV/AIDS control efforts.

AIDSMark funding enabled PSI and its partners to accomplish the following:

- **Start new HIV prevention programs in nine countries;**
- **Integrate additional HIV prevention services and products into existing HIV prevention social marketing programs;**
- **Scale up social marketing programs to reach greater proportions of at-risk communities and priority target groups; and**
- **Build local capacity – among affiliated social marketing organizations around the world – to design, manage and evaluate state-of-the-art social marketing interventions for HIV prevention.**

Social marketing programs in 56 countries were able to scale up activities, intensify efforts to reach high-risk groups and test new approaches as a result of AIDSMark. The project was unique in its focus on innovation, comprehensive approach and magnitude. AIDSMark was at the forefront of evolving trends in HIV prevention, including HIV counseling and testing services (CT), communication campaigns designed to reduce cross-generational sex (relationships between older men and younger women) and feasibility assessments for social marketing of male circumcision. In addition to testing new approaches, the project allowed PSI to extend successful models and assess health impact generated by social marketing programs. The number of PSI country programs using social marketing techniques to promote CT increased from zero to 23 between 1997 and 2007. During the same period, PSI gained the ability to measure population-based indicators of program reach, intensity and influence on behavior using cost-effective research methodologies.

While receiving AIDSMark funding, PSI sold more than 2.6 billion condoms, provided CT services to more than 830,000 individuals in developing countries, and reached many more with behavior change communication. As a result of these achievements, PSI and its partners prevented approximately 575,000 HIV infections worldwide between 1997 and 2007. More difficult to quantify but equally important are the project's contributions to improved organizational capacity. AIDSMark funded technical assistance, training, cross-visits

and other initiatives designed to strengthen the technical and management capacity of affiliated social marketing organizations in close to 60 countries. AIDSMark's capacity-building agenda covered a range of critical areas, including epidemiological assessments, market analyses, evidence-based communications, research, financial management, administrative systems and governance.

The purpose of this report is to increase global understanding of the complexities related to HIV prevention. By sharing best practices as well as challenges encountered, PSI and its partners hope to inform and encourage continued programming efforts to address HIV/AIDS. Lessons documented in this report cover a broad and diverse group of prevention approaches, including social marketing of the female condom, using different service delivery models to expand consumer access to CT and establishing unique and nontraditional male condom sales outlets. The papers also describe AIDSMark's contributions to cutting-edge communications efforts, including large-scale interpersonal outreach among high risk groups in India and mass media campaigns promoting abstinence in Kenya. AIDSMark also dedicates a paper to detailing the lessons from 10 years of research to inform and evaluate HIV prevention social marketing programs.

The epidemic and programmatic responses to address HIV/AIDS have evolved since AIDSMark began in 1997. New organizations and funding initiatives, such as the President's Emergency Plan for AIDS Relief and the Global Fund to Fight AIDS, Tuberculosis and Malaria, have dramatically altered the HIV care and prevention arena. Despite these advances, for every new person who begins antiretroviral therapy, another six are infected with HIV.[1] Furthermore, 80% of those living with HIV still do not know they are infected.[2] Whereas a few countries have demonstrated a decrease in HIV prevalence, most face stable or increasing prevalence rates. Continued efforts to prevent new infections are imperative to address these remaining challenges, even as access to HIV treatment improves. PSI and its partners call on the international community to build on AIDSMark's accomplishments and lessons to ensure a better future for the world's most vulnerable communities.

KEY LESSONS LEARNED

- Social marketing programs can and should make greater efforts to measure performance and address issues related to equity. **(See page 3)**
- Targeted social marketing campaigns that promote benefits of CT and address misconceptions can improve acceptance and use of CT services. **(See page 10)**
- Nontraditional outlets are essential to serve certain target groups and often require separate distribution systems. **(See page 18)**
- Investments in female condom promotion are warranted given its potential to protect people engaging in unsafe acts that would otherwise go unprotected. **(See page 24)**
- Commercial branding practices and techniques can be successfully adopted to develop innovative and effective behavior change programs. **(See page 32)**
- Frequent exposure to consistent messages affected behavior over time; however, threshold levels of coverage and quality of interpersonal communication required to achieve maximum behavioral results have yet to be determined. **(See page 41)**

1 Evolution of Social Marketing Research, Monitoring, and Evaluation

Developing Tools to Measure Performance

Between 1997 and 2007, AIDSMark spent approximately $8.5 million on research, monitoring, and evaluation of HIV prevention social marketing interventions in roughly 60 countries. The AIDSMark research program aimed to expand the base of evidence relevant to HIV prevention and build Population Services International's (PSI) capacity to use evidence to design and modify social marketing and communications interventions. To further these objectives, AIDSMark supported a research and capacity building agenda designed to help PSI:

- Identify factors associated with safer HIV behaviors, known as determinants;
- Promote successful social marketing program approaches and techniques, and
- Articulate lessons applicable to future research activities linked to social marketing programs.

This report describes the main research activities supported by AIDSMark, as well as their outcomes and lessons for future social marketing research.

When AIDSMark began, the body of evidence relevant to social marketing in general, and to HIV prevention in particular, was limited. In 1997, roughly 20 peer-reviewed assessments of social marketing interventions had been published, most of which examined family planning and child survival programs.[1] Since then, the number of peer-reviewed studies relevant to social marketing has quadrupled, and their scope has expanded to include a focus on HIV prevention. Between 1997 and 2007, AIDSMark contributed to the development and publication of close to 50 peer-reviewed studies, 60 PSI Working Papers, and 38 other studies.*

The lack of evidence relevant to social marketing was linked to capacity gaps in the ability of social marketing organizations to collect, interpret, and apply research. In 1997, few PSI country programs were able to do the following correctly and consistently:

- Use logical frameworks to design programs;
- Identify the behavioral determinants most likely to have an impact on the epidemic and plan program priorities accordingly; or
- Collect and analyze population-based indicators of intervention reach, intensity, and influence on behavior.

Today, PSI country programs increasingly base critical decisions regarding intervention design and modification on objective evidence. After 10 years of AIDSMark support, most PSI country programs have identified behavioral determinants for at least three key target groups and set program priorities accordingly. In 2006 alone, PSI programs in 31 countries used surveys to assess intervention success

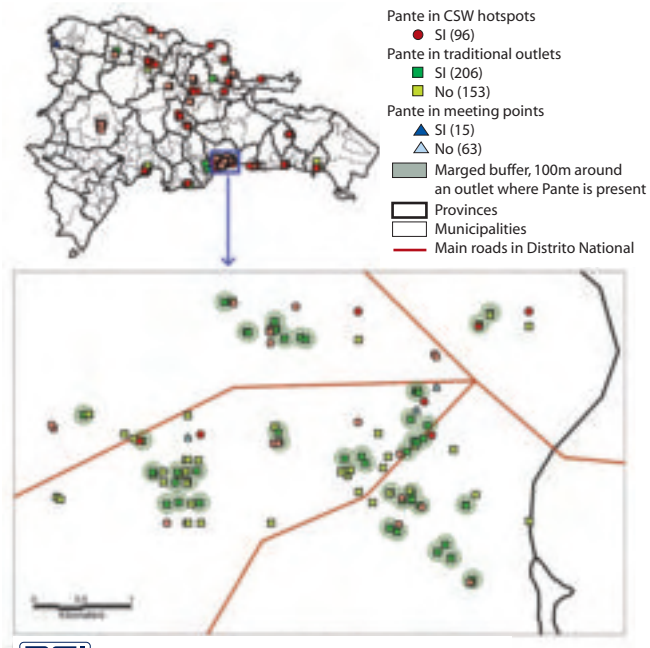
* See PSI's website (www.psi.org) for the complete list of peer-reviewed studies, Working Papers, and Social Marketing Research Studies supported by AIDSMark.

against logical framework indicators. As of April 2007, 60 percent of all PSI programs had the ability to compare two rounds of survey results and assess changes in key performance indicators over time.[2] Since 2000, PSI has routinely estimated the number of HIV cases averted and the population health impact of its HIV and other interventions on the basis of a mathematical model reporting Disability Adjusted Life Years (DALY) averted.

The development of practical research tools, training, and knowledge management efforts all contributed to the achievements described above. With AIDSMark support, PSI created and implemented new research tools and approaches.

The following methods were designed to collect actionable, relevant information for social marketing and communications programs:

- A targeted population-based survey, known as **Tracking Results Continuously,** or **TraC,** was developed to (1) construct and measure progress against logical framework indicators; (2) produce audience segmentation analyses and identify priority target groups and determinants; and (3) evaluate program impact by assesing whether exposure to social marketing interventions is correlated with positive changes in behavior. [3] Compared to previously used knowledge, attitude, and practice (KAP) surveys, TRaC is tailored to the behavioral determinants and exposure indicators relevant to social marketing interventions. TRaC studies can use sampling strategies for hard-to-reach groups, such as respondent-driven sampling, time-location sampling, and modified cluster sampling, or representative household surveys for monitoring and evaluation at the national level.
- A survey of product and service availability, known as **Measuring Access and Performance,** or **MAP,** was developed to monitor coverage and quality of product/service delivery efforts. MAP replaced PSI's distriribution survey as a cheaper, quicker, and more valid method to regulaly assess the extent to which minimum standards are met for product/service availability and accessibility within a given market.[4] Increasingly, PSI country programs use geographic information systems to measure spatial access to products and services.
- A framework for qualitative research, known as **FoQus,** was developed to improve the link between audience preferences, survey measures and marketing decisions.
  - **FoQus on Scales,** the first initiative under FoQus, provides researchers with guidance on improving multi-item scales used in TRaC surveys to measure determinants of behavior. Multi-item scales contain several statements to measure respondents' level of agreement with concepts measuringbehavioral determinants.
  - The second initiative, **FoQus on Concept Development,** provides researchers and managers with qualitative data similar to those the private sector uses. These data are used to brand products, services, and target behaviors and are integrated into marketing plans to develop effective campaigns and messages for influencing health-related behavior. [5]



These tools and approaches are included in PSI's Research Toolkit, which defines best practices and sets standards for how to conduct high-quality social marketing research. The toolkit was first developed in 2000, and the newest edition will be complete by the end of 2007 for electronic dissemination on the web. Seven chapters are currently available through the PSI website, and eleven more will be available by the end of 2007. *

* The following seven Research Toolkit chapters are now available: Annual Research Plan; Tools: PDAs for Data Collection; Studies: TRaC, Condom Sales and the Disability-Adjusted-Life-Year (DALY) Calculator; Dashboard Analysis for TRaC Studies - Series One through Four: Pre-Analysis Data Preparation; Monitoring Analysis; Segmentation Analysis; and Evaluation Analysis.

In addition to facilitating the development of tools for social marketing research, AIDSMark supported activities to build PSI's capacity to use state-of-the-art research methods and learn from the results. Beginning in 2002, PSI launched a large-scale training program, known as Research 2 Action, with the aim of enabling every country program to independently produce and use evidence to make major program decisions. Since then, PSI researchers and program managers around the world as well as external stakeholders in 11 countries have benefited from more than 4,000 days of research training. PSI's global research training program gave rise to the regionally based REsulTS Initiative, funded by the Government of the Netherlands, which aims to build the technical and organizational capacity of social marketing programs in East and Southern Africa.

In 1998, PSI employed a single regionally based researcher with a mandate to improve country-level capacity to collect and use evidence. Since then, PSI has added seven regional researcher positions with support from AIDSMark and other donors. Regionally based researchers are responsible for diffusing the PSI research methods; producing high-quality study designs, analyses, and reports; building local capacity; and writing papers based on higher-level data analyses.

To facilitate the dissemination of research findings and related program lessons, AIDSMark supported the development of a knowledge management system that includes a literature review service for intervention design, concept papers, pilot project reports, lessons learned documents, research training curricula, and related tools. Published papers as well as PSI Working Papers and other, shorter summaries of research findings are available through the PSI website. As a result of AIDSMark investments in knowledge management and capacity building, the research pages are among the most popular on PSI's website, with an average of 1,000 unique visitors per month. PSI has yet to expand its dissemination efforts externally.

Lessons Learned

Further innovations and capacity-building efforts are needed to identify and measure determinants of HIV risk behaviors in the developing world.

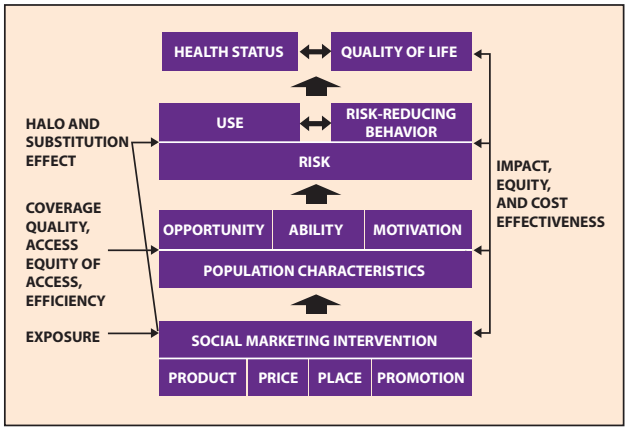
Determinants of HIV-related behaviors in developing country contexts are highly complex. As a result of AIDSMark, more social marketing programs are grounded in behavior change theory and use reliable research methods to quantify behavioral determinants today than in 1997. However, this practice is neither uniform nor flawless. There are immense opportunities to identify and measure determinants more precisely and efficiently through the systematic use of behavior change theory, qualitative insights from priority target groups, multi-item scales, and structural equation modeling.

Identifying Priority Determinants

Social marketers in the developed world use a number of popular behavior change theories to design and evaluate programs, such as the Health Belief Model, Diffusion of Innovations, the Theory of Reasoned Action, Social Learning Theory, and the Stages of Change Model. However, each of these theories assumes that audiences have the opportunity to practice the behavior that is being promoted (e.g., someone who is exposed to a campaign promoting HIV testing in the United States would have access to a testing facility). In many developing countries, these opportunities do not yet exist. As a result, creating the opportunity to practice a health behavior

(e.g., making it possible for target groups to find HIV counseling and testing services) is a prerequisite for any programming effort.

Figure 1: Performance Framework for Social Marketing



In response to the limitations of existing behavior change theories in the context of social marketing, PSI developed the Performance Framework for Social Marketing (see Figure 1) for use in developing country contexts.[6]

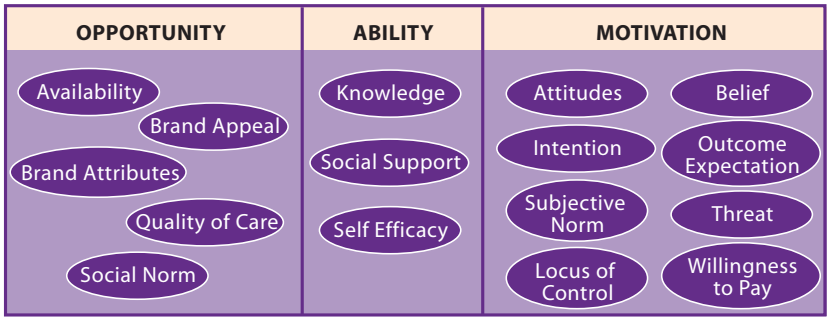
Embedded within this framework are 16 behavior change determinants. AIDSMark support enabled PSI to identify these different determinant categories, which theoretically influence behavior and which social marketing programs have the potential to alter (see Figure 2).[7] While PSI's behavior change framework has increased structured research contributions to program decisions, it remains a relatively high-cost and complicated tool when all 16 determinants must be measured and analyzed. Furthermore, generating scaled items to measure behavioral determinants has been done through a combination of literature reviews and guidance from managers and researchers familiar with the issues and context. Systematic use of qualitative research to generate multi-item scales and define determinants in meaningful terms (from the target group's perspective) has not been done and is needed to improve this process.

Measuring determinants

When AIDSMark began, PSI used standard, single, binomial response questions to measure determinants, similar to the way Demographic and Health Surveys (DHS) measure knowledge of a set of facts and stated reasons for nonuse of health products. Yet these measures have no known reliability or validity. Furthermore, they are not based on social-psychological measurement. As a result, further analysis often reveals that determinants identified this way are, in fact, less relevant than originally believed. For example, DHS measurement and qualitative data tied to the development of AIDSMark-supported regional communication campaigns in East and South Africa identified trust among 15- to 24-year-olds as an important factor associated with nonuse of condoms with nonmarital partners. However, subsequent analysis using multi-item scales revealed that trust was not a common predictor of condom use across the eight countries.[8]

AIDSMark supported PSI's shift to measuring determinants using multi-item scales and multivariate logistic regression. PSI is piloting the use of structural equation modeling to identify causal relationships among determinants and between determinants and behaviors. In addition, social marketing program managers are routinely involved in study design and data interpretation – something that occurred inconsistently prior to AIDSMark. All of these advances have improved the likelihood that research outputs will be used to make program decisions.

Figure 2: Sixteen Determinants of Behavior Change



Recommendations

- Scale up the use of qualitative research, conducted among key target groups, to explore and prioritize determinants.
- Train social marketing program managers in behavioral theory and ensure that all interventions are designed and managed based on an explicit theory.
- Shift away from regression analysis for which causal direction is unclear, and use structural equation modeling to analyze determinants.
- Invest in a large-scale research program to develop standard, multi-item scales appropriate for developing country contexts. Although multi-item scales constitute the measurement standard for behavioral determinants in the developed world, standard scales do not exist for most low-income settings, and no formal research program is currently working to develop them.

Evaluation needs substantial improvement.

PSI's recommended evaluation method is to conduct repeated cross-sectional surveys measuring changes in health behaviors as well as exposure to social marketing interventions. Significant correlations between positive changes in behavior and exposure are interpreted as evidence of program impact. The primary advantage of this "observational" approach is that evaluation is routine, using previous survey rounds as the control rather than a geographic area that would otherwise be off-limits for intervention. Disadvantages of this approach include cost and relatively weak measures of impact.

Evidence collected through cross-sectional surveys is far weaker than that from case control or randomized control trials. Because cross-sectional surveys cannot control for confounding effects, identifying causal relationships is difficult. Furthermore, cross-sectional surveys measure exposure to social marketing interventions primarily in terms of the reach and frequency of exposure to communications campaigns and activities. The role of price, distribution, and other program efforts to improve access to health products and services is not captured.

Population-based surveys cost between $5,000 and $62,500 per round.* Whereas some organizations designate a certain percentage of all program costs for research activities, PSI allocates funds for research activities on the basis of the potential utility of the research in informing program design and advancing the knowledge base in the field. Given the difficulty of estimating this value a priori, PSI follows the guideline that interventions spending more than $200,000 per year should conduct research at a rate that enables them to use results to make evidence-based program decisions.† For example, most stakeholders ask that projects conduct a TRaC survey at the baseline in order to set evidence-based priorities.

* Based on estimated data collection costs of $10 and $25 per respondent and sample sizes ranging from 500 to 2,500 respondents.

† Assuming a $600,000 three-year project conducts a TRaC at the baseline and endline, and an annual MAP survey at average costs, then the project would spend about $60,000 ($50,000 on the TRaC and $10,000 on the MAPs). This is equal to the 10 percent guideline used by many organizations. In nearly all PSI programs, MAP costs are shared among projects. Further, these two surveys monitor logical framework indicators, which is essential to evaluate impact.

For interventions below this expenditure level, PSI uses a lot quality assurance sampling (LQAS)-based TRaC study known as TRaC-M. LQAS requires smaller sample sizes, with as few as 19 respondents in some cases. Instead of producing estimates, this methodology produces hypotheses of the likelihood that behaviors or determinants are above a certain threshold. TRaC-M is a quick, easy, and low-cost way to measure exposure to program activities. As a result, it helps managers identify and scale up effective program activities or approaches and terminate ineffective activities. The disadvantage of this method is that its results are difficult to interpret in terms of common monitoring and evaluation indicators. For example, LQAS does not produce results that can be used to track trends or progress against logical framework targets set at purpose and output levels.

Recommendations

- Improve evaluation. Develop measures of program exposure that capture a more specific and complete picture of the extent to which target groups have seen, heard, or otherwise interacted with a program activity or component. Use case study research approaches and propensity score matching, a method for measuring intervention exposure that controls for selection bias.
- Build capacity to use quasi-experimental and experimental research designs and apply these techniques to questions related to pricing, product placement, and the development of new concepts, products, and services.
- Invest in new, lower-cost research methodologies (e.g., TRaC-M studies) and tools with potential to decrease unnecessary expenses associated with population based surveys (e.g., personal digital assistants).[9]
- Reassess and update guidelines determining when large-scale research activities, such as TRaC and MAP surveys, are warranted relative to annual program expenditure and other factors.

Social marketing programs can and should make greater efforts to measure performance and address issues related to equity.

A social marketing organization like PSI is just one of many players in a market in any given country. For example, the public sector often distributes condoms, and commercial sector products are available as well. In many places, PSI has adopted a strategy known as the Total Market Approach, which, through a coordinated effort, seeks to grow the overall market in order to create new users and raise levels of use among target groups. In the Total Market Approach, the market is segmented into homogenous groups with similar profiles, needs, and characteristics. The relative strengths of each sector (commercial, social marketing, public, nongovernmental organization, etc.) are harnessed to maximize efficiency by allowing each sector to target its resources to those most in need. For instance, the public sector may focus on the poorest faction, while the commercial sector would focus on the wealthiest. Such an approach enables greater equity in a market, since each consumer will pay the maximum he or she can afford for the product, but those who are truly unable to pay will be protected and still have access to the products they need.

Social marketing programs designed with a Total Market Approach should focus on monitoring health system performance issues, particularly use

of health products and services, equity in the use of these products and services, and segmentation based on willingness to pay. Whereas a Total Market Approach has influenced PSI's evaluation strategies, there is a gap between this understanding and current practice. Too few social marketing program managers understand measures of equity and how to make marketing decisions based on them. Instead of monitoring the performance of and social marketing's contribution to an overall market, many managers continue to rely on product sales as the primary measure of program effectiveness. PSI has not measured market share in a manner that would allow country programs to monitor possible negative and positive consequences of its social marketing programs.

Recommendations

- Adopt the concentration index* as social marketing's primary indicator of equity and monitor it consistently.
- Adopt a TRaC-based measure of market share and monitor it for positive or potentially negative consequences of social marketing interventions on the growth of the commercial sector.
- Adapt current methodologies for measuring willingness to pay and issue guidelines on this measure.
- Adopt a measure of brand equity, monitor it, and issue guidelines on how to use it for decision making in the context of a Total Market Approach.
- Issue guidelines on how TRaC and MAP surveys can be combined and used for improved segmentation and new product development and acceptability research.
- Produce guidelines for monitoring and evaluating social franchising in the marketing of health services (e.g., HIV counseling and testing) within the context of a Total Market Approach.

Conclusion

AIDSMark transformed the role of research in social marketing for HIV prevention at PSI. Before AIDSMark, research was frequently outsourced without oversight to market research agencies, some of which provided good guidance, but most of which did not. Sales were used as the primary measure of effectiveness, while other measures, including determinants of behavior change, equity, and monitoring of potentially harmful consequences of interventions, were poorly understood and rarely used. AIDSMark support permitted PSI to develop, introduce, and expand the use of relevant, more cost-effective and practical research approach. Today, managers are using new metrics to inform and evaluate social marketing and communications interventions.

The end of AIDSMark poses several challenges for social marketing research, including how to sustain efforts to diffuse state-of-the-art research methods and translate key findings into sector-wide innovation. Continued efforts to both expand the social marketing evidence base and enforce professional standards for research within social marketing organizations are needed. Publications in peer-reviewed journals, partnerships with academic institutions to strengthen method reliability, and dissemination of AIDSMark-supported tools (e.g., PSI's method for estimating DALYs averted through social marketing) are just a few of the areas where continued investments can help extend the momentum of the AIDSMark research agenda. Large-scale, long-term research activities are needed to address challenges outlined in this paper and to help social marketing programs target the right issues and target groups to stop HIV. In addition, PSI needs to increase efforts to share its research tools with the broader global health community.

* The concentration index is a measure of equity that is used to determine if an intervention is reaching the poor by tracking behavior of a target population by the quintiles of socioeconomic status (SES). It is most applicable in clustered epidemics within high HIV prevalence contexts; however, the more homogenous the population, the less likely that there will be SES disparities in behavior.

2 Making a *New Start*: Marketing and Franchising HIV Counseling and Testing

HIV Counseling and Testing: Lessons from Zimbabwe

HIV counseling and testing (CT) is an important component of public health efforts to reduce HIV incidence and increase access to care, treatment and support. Several studies indicate that CT can help reduce risky behaviors, especially among discordant couples and individuals who test HIV-positive.[1,2] There is evidence that individuals who know their HIV status are more likely to take measures to remain uninfected or to access antiretroviral therapy (ART) and other palliative services to prolong their life and avoid infecting others.[3] In spite of efforts to scale up provision of CT services, more than 80 percent of people living with HIV in resource-poor countries still do not know their HIV status.[4] Even where CT services are available, complex psychological, social and economic barriers prevent many individuals from learning their status.[5,6]

Governments and donors are working to address these barriers and improve access to and use of CT services. Although multiple service delivery approaches are evolving, CT typically consists of a pretest counseling session with a trained counselor, a sero-test for HIV and a post-test counseling session. During the post-test session, clients learn their HIV status. Those who test HIV-negative are advised to practice safe behaviors to remain uninfected, and those who test HIV-positive are also advised to practice safe behaviors to prevent reinfection or HIV transmission to sexual partners and children. Ideally, those who test HIV-positive also receive long-term psychosocial support and palliative services, including ART. Where such services are unavailable at the testing site, HIV-positive persons should be referred to other providers. Although costs vary by country and service delivery model, a 2004 analysis suggests that the average cost to provide CT services to each client is $27 (ranging from $5 to $28).[7] The cost-effectiveness of CT depends on the service delivery model and the extent to which programs successfully target HIV-positive individuals and couples.[8]

Overview of PSI's Global CT Program

Between 1999 and 2007, AIDSMark supported the expansion and improvement of Population Services International's (PSI) CT program by providing operational funding for 15 country programs and technical assistance for many more. As of July 2007, PSI provides and promotes CT services in 21 countries, working closely with the Ministry of Health in each country to help establish CT programs, build quality assurance guidelines and train and supervise personnel. Additionally, in Kenya and Vietnam, PSI works with the Ministry of Health and other organizations to create national CT brands and communication campaigns to generate demand. As a result, PSI programs are enabling close to 600,000 people in more than 20 developing countries to

The evolution of the New Start CT Logo from Zimbabwe to over 20 countries worldwide.

learn their HIV status every year at an average cost of less than $50 per client.* Worldwide, the number of clients counseled and tested by PSI-operated or -supported clinics has increased, on average, by 130 percent each year since 2000.[9]

With support from AIDSMark, PSI developed and strengthened the following models of CT service delivery:

- **Stand-alone centers** focus on providing CT services targeting specific groups of clients who are difficult for other CT service providers such as health centers and hospitals to reach (e.g., men, youth, sex workers). Although stand-alone centers typically have relatively high start-up costs, they tend to be highly cost-effective thanks to their ability to serve large numbers of clients (especially in urban settings). AIDSMark supported PSI-operated stand-alone CT centers in India, Zimbabwe, Namibia, Zambia and Rwanda.
- **Integrated sites** offer CT services alongside other preventive or curative services at existing clinics and other health facilities. To meet client confidentiality and other service delivery standards, CT services are usually offered in a physically separate area of the facility. Advantages of integrated sites include lower start-up and operational costs, reduced stigma associated with accessing services as compared to stand-alone sites, convenient access to a range of referral services and long-lasting contributions toward improving local service delivery capacity. Disadvantages include difficulty securing sufficient service providers and other resources for CT and varying adherence to CT service delivery standards. There is also a risk that separating CT services from other services in the same facility may propagate stigma and imply that HIV testing should be different or hidden, impeding routine or diagnostic testing. With AIDSMark support in Mozambique, Zimbabwe and Namibia, PSI helped host governments and other partners integrate CT services into existing public and nongovernmental health facilities.
- **Mobile units** provide CT services to underserved and most-at-risk populations who have difficulties accessing CT centers or clinics owing to geographical distance, transportation difficulties, inconvenient clinic hours or stigma. Mobile or outreach CT typically targets rural communities or highly mobile groups, such as migrant workers, truck drivers or uniformed service personnel. In addition, workplace HIV prevention initiatives are often linked to mobile CT services. Many AIDSMark-supported programs, including those in India, Lesotho, Rwanda, Zambia and Zimbabwe, complement integrated and stand-alone CT with mobile services.

The choice of service delivery models depends on the circumstances in the country and whether programs are implemented in concentrated or generalized epidemics. In concentrated epidemics, the focus is on high-risk populations who are most likely to test HIV-positive. Targeting these populations generally requires a combination of stand-alone centers, community-based facilities, mobile outreach and diagnostic testing within health facilities. CT service programs create demand through interpersonal communication and peer education to emphasize the benefits of knowing one's HIV status.

PSI uses social franchising techniques to develop individual sites – often a mix of the models described above – into popular, branded networks or franchises that offer high-quality, affordable CT services. Franchising enables PSI programs to build local capacity to offer quality CT among nongovernmental, faith-based and community-based organizations and the public sector. Creating a network of sites allows providers to share experiences, set standards and give quality assurance across the network. Supervision and ongoing training and support are key components to ensuring high-quality services

* Average unit cost figure includes local as well as international costs associated with providing a single client with high-quality CT. PSI/Washington.Annual Unit Cost Analysis. 2005.

across such a wide variety of service providers and sites. Over the past 10 years, PSI has worked to expand upon national protocols and guidelines to establish quality indicators that are consistently measured over time. These quality indicators often become national norms and procedures that spill over into nonbranded public sector sites as well. Clients are charged small fees to enhance the perception that they are receiving valuable, high-quality services. In 2006, CT fees ranged from U.S. $0.41 in Zimbabwe to U.S. $0.79 in India.

Franchisees are linked by a common brand name, service delivery standards, pricing guidelines and a licensing agreement with PSI. Franchising represents an effective strategy to achieve large-scale, comprehensive CT service delivery alongside branded promotion to increase client flow. AIDSMark supported PSI-managed social franchises for CT in several countries, including Namibia, Zambia and Zimbabwe. Brand recognition is high in these countries, creating so much demand that it sometimes exceeds the supply of services. A 2005 survey in Zimbabwe found that 88 percent of respondents reported some exposure to PSI's CT campaigns, and almost 45 percent of these reported being highly exposed. Increased exposure was also found to be associated with increased uptake of CT services and had a positive impact on the major determinants of CT use.[10]

PSI uses community mobilization events and social marketing campaigns to generate demand for CT. In partnership with community-based organizations, advertising agencies and others, PSI develops health communication campaigns to normalize CT, promote the benefits of learning one's HIV status, address misconceptions and encourage individuals to visit affiliated CT centers. In each country, a mix of communication channels, such as television, radio, print, outdoor and interpersonal, deliver key messages and build demand for CT among priority target groups. In 21 out of 23 CT country programs, PSI uses a combination of social marketing and service delivery techniques to both promote and provide CT, while in the other two, PSI promotes CT services provided by the Ministry of Health and other organizations. The following is a brief case study focusing on PSI's oldest and most thoroughly evaluated CT program, *New Start* in Zimbabwe.

New Start: Program Description and History

With funding and technical assistance from AIDSMark beginning in 1999, PSI created the New Start CT brand and began using commercial marketing techniques to improve demand for CT services in Zimbabwe. New Start was the world's first social franchise network offering CT services. In partnership with the Ministry of Health and Child Welfare, PSI/Zimbabwe identified existing government, nongovernmental and private organizations and service providers with the potential to meet minimum standards for CT service provision. PSI/Zimbabwe then provided these selected sites with training, service delivery tools, ongoing technical support and supervision to strengthen their capacity to deliver high-quality, affordable CT services. Quality standards were articulated in agreements between franchisees and PSI/Zimbabwe, including standards for internal and external quality control for HIV testing as well as ensuring delivery of accurate test results. Adherence to quality standards is monitored through regular on-site and external supervision, mystery client surveys, exit interviews with clients and site assessment tools. Following a 2005 assessment

that found varying adherence to quality standards throughout the network, PSI/Zimbabwe developed counseling guidelines and checklists and initiated quarterly assessments using standardized site and counselor assessment tools.

In addition to displaying the standardized brand name and rising sun logo, all franchisees offer clients educational and promotional materials developed by PSI/Zimbabwe. The franchise tagline "Make a New Start Today" emphasizes hope and peace of mind as key benefits of learning one's HIV status. Over time, PSI/Zimbabwe developed a series of social marketing campaigns to encourage primary target groups (sexually active youth, couples planning to get married or have children and men who are separated from their families for extended periods of time) to visit New Start centers, learn their HIV status and practice safe sexual behaviors.

Initially, PSI/Zimbabwe used mass media campaigns (television, radio and print) to raise awareness about the general benefits of CT and to promote the location, professionalism and quality of New Start centers. The second phase of New Start social marketing, the "Let's Talk" campaign, emphasized the confidentiality and affordability of CT offered at New Start centers with the tag line "When you need to talk to someone about HIV/AIDS… [New Start] trained counselors are there to help you: Only Zim$50!" The third phase, the "Get Real" campaign, encouraged young people on the verge of a major life commitment, such as marriage, to assess personal risks realistically and to take control of their future by learning their HIV status. In 2006, PSI/Zimbabwe launched the fourth phase, the "Get Real Early" campaign, to emphasize the potential of CT services to facilitate access to early and effective treatment for those who test positive. One key message from this campaign is delivered by a husband who explains, "If I had not tested early, I might have infected my wife. Now we know how to maintain our status and live together."

In addition to mass media campaigns, PSI/Zimbabwe organized special promotional periods and related events linked to popular holidays such as Valentine's Day, Mother's Day and World AIDS Day. Since 2003, PSI/Zimbabwe has used promotional days to motivate specific target groups, such as youth, couples or women, to seek CT services and learn their HIV status. For example, the Valentine's Day promotion was designed to encourage couples to visit New Start centers for free, high-quality CT services. Currently, only 12 percent of New Start clients seek counseling and testing as couples. Thus, couples have become a priority target group, as research has shown that individuals who receive CT with their partners are more likely to change their risky behaviors than those who receive CT alone.[11]

As New Start social marketing campaigns evolved in response to research on why more Zimbabweans were not learning their HIV status, so did PSI/Zimbabwe's service delivery model. In October 2000, PSI/Zimbabwe opened its first directly managed, stand-alone New Start clinic. Located in downtown Harare, this site was staffed with 30 well-trained counselors and aimed to provide quality services and attract large numbers of clients. Today, PSI-managed New Start Centers of Excellence function as both training centers and high-performing sites. In 2001, New Start adopted rapid HIV testing technology, which produced results within 15 minutes. After the introduction of rapid testing, the proportion of New Start clients who received their test results increased from 77 percent to 99 percent. Since 2003, PSI/Zimbabwe has

managed several New Life post-test support centers linked to New Start sites to improve access to ART, psychosocial counseling and nutritional advice for individuals who test HIV-positive. Mobile outreach efforts to improve access for rural communities and high-risk groups have expanded since 2000. As of July 2007, 16 out of 20 sites have outreach teams that bring CT services to clinics, schools, community facilities and various workplaces, including mines, commercial farms, prisons, transportation companies and the armed forces.

As of July 2007, the New Start franchise includes 20 CT clinics throughout the country. Of these, 15 are operated by partner organizations: seven by non-profit organizations, five by the government, two by private companies and one by the University of Zimbabwe. In addition, U.S. Agency for International Development (USAID) funding has allowed two New Start centers to offer routine CT services to all clients in conjunction with a national pilot provider-initiated counseling and testing service delivery model. By 2010, PSI/Zimbabwe plans to replace three of the five PSI/Zimbabwe-managed stand-alone sites with partner-operated sites.

Results

Every month, more than 23,000 clients receive high-quality, affordable CT services through the New Start network. Since the program's inception in 1999, more than one in 10 Zimbabweans have learned their HIV status from a New Start center. In November 2007, New Start will test its millionth client. Between 2005 and 2006, CT client flow increased by more than 30 percent at partner-operated sites and 13 percent at PSI-operated sites. In 2006, more than 45 percent of all clients served through the New Start franchise received CT services from mobile outreach teams.

Rising client flow combined with careful allocation of resources (including the integration of CT services into existing health facilities) has improved the program's cost-effectiveness over time. Between 1999 and 2006, the cost per client served by New Start fell by 94 percent, from $325 to $18. By 2004, the cost per client served was already below the global average of $27, and today it averages $18.[12] During promotional periods, when services are offered free of charge, New Start maintains its cost-effectiveness; advertising these promotional days using a combination of mass media and community-level channels costs approximately $1 per client tested. In July 2000, the Government of Zimbabwe officially recognized New Start's national-level contributions to HIV prevention by developing a New Start postage stamp. In addition to its national impact, New Start has contributed to international expansion of CT services. More than 20 countries have adopted aspects of the New Start model into their own social marketing and franchising programs for HIV prevention.

Analysis of sales and survey data suggests that promotional events as well as mass media social marketing campaigns have effectively motivated Zimbabweans to learn their HIV status. The February 2006 Valentine's Day promotional event resulted in an 18 percent increase in the number of couples seen by the franchise that month. Furthermore, 2005 survey results found

a positive correlation between exposure to PSI/Zimbabwe's mass media campaigns and increased uptake of CT services.[13] Between 1999 and 2003, the percentage of Zimbabweans who knew where to find CT services increased from 40 percent to 82 percent. During the same period, the percentage of Zimbabweans citing fear of social stigma as a barrier to accessing CT services decreased.[14] Reported knowledge of HIV status increased from 7 percent before the campaigns (November 2003) to more than 10 percent after the campaigns were aired for over 12 months.[15]

Lessons Learned

Multiple service delivery models are needed to maximize access to CT services and to meet the needs of diverse segments of the population.

New Start's success is due largely to its use of multiple service delivery models to reach priority target groups. Recognizing that no single service delivery model can meet the needs of every target group, PSI/Zimbabwe used tailored approaches to make it easier for Zimbabweans to learn their HIV status. This program demonstrates the value of using a mix of service delivery approaches – including stand-alone centers and integrated sites – in partnership with governments, non-profit organizations and private organizations and providers. The Zimbabwe experience also shows that targeted mobile services are an effective way to reach groups who do not have convenient access to CT centers or clinics. Through mobile outreach efforts, PSI/Zimbabwe was able to increase the proportion of rural, low-income and mobile high-risk groups (e.g., minors, truckers and sex workers) who learned their HIV status.

The most recent modification to the New Start service delivery model was the introduction of provider-initiated testing and counseling. Since March 2007, PSI/Zimbabwe has worked closely with the Ministry of Health and Child Welfare to integrate routine or "opt-out" HIV testing at several health care facilities throughout the country. Preliminary results from the provider-initiated testing and counseling pilot site suggest that this is an effective model to increase the proportion of people who know their HIV status and who are linked to care and treatment while maintaining client rights to informed consent and counseling. [16]

Future CT programs should identify an appropriate mix of service delivery models on the basis of each country's clinic context, epidemiology and the preferences of priority target groups. Although what is feasible and effective is likely to vary among countries, every CT program can benefit from using multiple service delivery approaches to maximize access to CT services. Furthermore, programs should consider the viability of provider-initiated HIV testing and counseling as a strategy to increase the number of people tested, especially asymptomatic, HIV-positive individuals. However, client-initiated CT sites are still essential to increasing access for those who are least likely to seek CT within health care facilities. Client-initiated, community-based CT remains the best model for prevention counseling. Programs should also assess opportunities to better integrate CT with complementary services, such as tuberculosis screening, family planning, male circumcision and sexually transmitted infection (STI) diagnosis and treatment.

Regular training, supervision and standardized service delivery tools can improve the effectiveness of CT as a prevention strategy.

Ensuring consistent adherence to service delivery standards can be challenging, especially when CT programs involve sites managed by multiple partners. Standard operating procedures should be carefully articulated and reinforced through regular, repeated training and supervision as well as practical service delivery tools. Frequent training is needed to sustain service provider knowledge, skills, commitment and morale. Practical tools such as counseling guidelines, checklists and operating procedure manuals can improve adherence to basic service delivery standards. Adherence to service delivery standards should be monitored using a combination of posttraining provider supervision (including regular direct observation and feedback) as well as mystery client studies or other monitoring and evaluation techniques. Training on-site supervisors as well as external supervisors from PSI and the Ministry of Health is essential to maintaining motivated staff and personalized, high-quality

counseling, testing and operations. Local governments and Ministries of Health in several New Start countries, including Zimbabwe, adapted service delivery tools as national protocols, improving the supervision, training and quality assurance of national CT service delivery, including external and internal quality assurance for rapid HIV testing.

Future programs should proactively incorporate these and other strategies to improve and monitor quality of CT services. Quality is a critical component of CT programming, as it is a prerequisite for motivating individual behavior change and improving community-level confidence in CT.

Referrals to post-test care and support are essential to quality CT Services.

New Start CT was launched in 1999, before treatment or care services became available. The international community continues to question the ethics of providing HIV testing without providing subsequent treatment, including Antiretroviral Therapy (ART). Stand-alone CT sites in Zimbabwe and elsewhere do not offer clinical care services, making it difficult to provide referrals and track follow-up. Through tracking the uptake of HIV-positive referrals, PSI/Zimbabwe has found that approximately 40 to 50 percent of clients access services within one month of receiving a referral,[17] which indicates a strong need to strengthen the linkage between CT and care and support services. Ensuring that clients receive referrals to post-test care and support can be accomplished through training counselors to provide referrals, providing written results and referrals, encouraging partner disclosure and developing relationships with treatment service providers; however, we need to do more to understand how best to provide care and support for newly diagnosed CT clients. HIV-negative clients can also be referred to other prevention services, such as post-test clubs, STI treatment and ongoing prevention counseling.

Targeted social marketing campaigns that promote benefits of CT and address misconceptions can improve acceptance and use of CT services.

Although many developing countries initially exhibit an unmet demand for CT services, demand-creation efforts are required to achieve greater impact. Service provision alone is not sufficient to motivate large proportions of at-risk populations to use CT services. In Zimbabwe and other countries, PSI social marketing campaigns have helped increase CT client flow by emphasizing the benefits of knowing one's HIV status and addressing specific concerns of each priority target group. The New Start experience reinforces several important lessons regarding effective social marketing of CT services. To increase uptake of CT services, social marketing campaigns should do the following:

- **Emphasize positive aspects of learning one's HIV status,** such as the ability to prepare for a major life event (e.g., marriage, pregnancy), access post-test treatment and support services, take control of one's life and plan for the future.

- **Address specific barriers to accessing CT,** such as concerns related to stigma associated with HIV and questions regarding the confidentiality of services. Analysis of survey data from four countries found that general knowledge about HIV/AIDS was not correlated with increased use of CT services, whereas perceived stigma and other more complex individual and social barriers had a negative impact on the use of CT services. [18]

- **Focus on drawing in couples and other priority target groups.** PSI/Zimbabwe's use of couple-focused social marketing campaigns and promotional events is an excellent example of effective, target group-specific social marketing. The Valentine's Day promotional event generated a 50 percent increase in the number of couples tested at New Start sites Future CT programs should ensure that clinics can meet the likely increase in client flow during promotional periods by extending clinic hours, temporarily adding staff and ensuring referral points for post-test care and support services.

- **Regularly create new campaigns** to sustain target group interest and increase demand, even after CT services are well known. After eight years of CT social marketing and service delivery in Zimbabwe, new and different efforts to emphasize the positive aspects of CT and address barriers to accessing CT are needed to motivate more Zimbabweans to learn their HIV status. Social marketing of CT should follow general principles and best practices for effective behavior change communication by using an appropriate mix of mass media and interpersonal communication channels, depending on target group preferences, and by addressing target-group-specific barriers identified through research.

Additional research is needed to assess the long-term behavioral impact of CT on those who test HIV-negative as well as HIV-positive.

Although the New Start program is one of the most carefully evaluated and evidence-based CT programs in the developing world, it should have done more to explore whether New Start clients are more likely than those who do not receive counseling to sustain positive behavior changes in the long run. In addition, the evaluation of this program was unable to answer questions regarding how to improve the impact of CT on those who test HIV-negative. Additional research, including longitudinal studies, is needed to evaluate the extent to which CT clients are more likely to practice fidelity, reduce partners and use condoms consistently after learning their HIV status. Carefully evaluated interventions aiming to provide high-quality risk reduction counseling to HIV-negative clients engaging in high-risk behavior may help future CT programs design effective approaches for this group, as well as for discordant or concordant HIV-positive couples.

3 As Accessible as Coke: Case Studies of PSI's Condom Distribution Programs

Condom Social Marketing: Innovative Distribution Strategies

Population Services International (PSI) and partners first implemented male condom social marketing programs to improve consumer access to and increase demand for condoms in developing countries in 1972 primarily for family planning, and in 1987 began addressing HIV prevention. Condoms are an essential component of comprehensive, effective HIV prevention programs.[1] Leveraging proven private sector distribution strategies for fast-moving consumer products as well as innovative partnerships with nonprofit and government entities, social marketing programs enable consumers to find condoms where and when they need them.

AIDSMark has supported condom social marketing programs in more than 50 countries over 10 years. These programs used a combination of innovative distribution strategies and other marketing techniques such as pricing, branded promotion and behavior change communication (BCC) to increase male condom use and other preventive behaviors.

Two AIDSMark-supported social marketing programs – one in Nigeria and the other in the Dominican Republic – used locally appropriate and effective condom distribution strategies. Each program used techniques that responded to different market opportunities and target group needs. Both programs conducted research in country to analyze gaps in consumer access to condoms and identify potential solutions. This paper describes how the two programs developed distribution networks of convenient condom sales outlets to respond to target group preferences and capitalize on existing commercial sector opportunities.

NIGERIA: Commercial Sector Efficiency and Nontraditional Sales Outlets

An estimated 4.4% of Nigerians aged 15 to 49 are HIV-positive.[2] However, reported HIV prevalence is much higher in select geographic areas and among high risk groups such as commercial sex workers (CSWs). Adult HIV prevalence exceeds the national average in 14 states and the Federal Capital Territory.[3] As many as 55% of CSWs and 11% of long-distance truck drivers in the country are infected with HIV.[4] Although current prevalence data among youth are lacking, older data suggest a prevalence ranging from 4.2 to 9.7%, placing sexually active youth among Nigeria's most at-risk groups.[5] Despite substantial HIV prevention efforts, close to 4 million Nigerians are living with HIV, and 300,000 additional people become infected every year.[6] This represents the second-highest burden of HIV infection in sub-Saharan Africa after South Africa.[7]

In 2000, the Society for Family Health (SFH), PSI's local affiliate in Nigeria, received $9.8 million through AIDSMark to use social marketing techniques to prevent HIV. Over the next five years, SFH implemented a national-scale program to motivate poor and other vulnerable groups to abstain from sex, reduce partners and use condoms consistently and correctly. Priority target groups included those most likely to contract HIV: CSWs, their clients and low-income youth. To make it easier for these groups to access high-quality, affordable condoms, SFH relaunched the *Gold Circle* male condom and developed new distribution strategies. SFH used BCC – including peer education, parent outreach and mass media campaigns – to complement condom marketing efforts and encourage those at risk to abstain, reduce partners or use condoms consistently.

Distribution Strategy

SFH's condom distribution strategy utilizes the coverage and efficiency of the commercial pharmaceutical sector as well as nontraditional retail sales outlets that are uniquely accessible to priority target groups. Condom storage, transportation and pharmaceutical sales functions are outsourced to take advantage of existing commercial sector capacity and to contain program costs. PSI contracts a management company, Manufacturers Delivery Services (MDS), to manage a central warehouse in Lagos where Gold Circle condoms are stored, distribute condoms to 13 regional depots operated by MDS, oversee inventory control and sell the condoms to more than 50 commercial wholesalers. Wholesalers sell Gold Circle condoms – on a fully cash-based system – to more than 200,000 private retail outlets throughout the country, which include pharmacies, clinics and patent medical vendors as well as street hawkers and other nontraditional outlets.

In a developed market context such as Nigeria's, sales through traditional outlets such as pharmacies are the most efficient distribution method, and they represent more than 90% of SFH's annual condom sales. However, traditional sales outlets are not sufficient to meet the needs of priority target groups. Pharmacies, for example, are not likely to be open during evening hours. Nor are they always located near brothels and bars where CSWs and their clients congregate. To ensure that condoms were accessible in high-transmission areas, or geographic areas frequented by CSWs and their clients, SFH supplemented pharmaceutical sales with targeted distribution through nontraditional retail outlets and partnerships.

While trying to convince bars and sex establishments to stock Gold Circle, SFH's internal sales force noticed the large number of small-scale vendors in the same hot zone areas (areas with high rates of commercial sex work), including hawkers and small shops selling cigarettes, candy and kola nuts. Because of their convenient location and late operating hours, the hawkers and small neighborhood shops were uniquely suited to meet the needs of CSWs and their clients. SFH's internal sales force convinced a number of these small-scale businesses to sell Gold Circle condoms as a way to increase profits and help the community. Subsequently, SFH integrated these outlets into the commercial distribution network. Once established as Gold Circle outlets, hawkers, street vendors and other nontraditional outlets purchased condoms from commercial wholesalers.

SFH also distributes Gold Circle through a network of non-governmental organization (NGO) and government partners serving high risk groups at prices 10% higher than wholesalers to discourage resale to commercial channels. In this way, SFH achieves targeted sales without jeopardizing commercial sector profit margins. NGOs provide an initial seed supply of Gold Circle condoms to smaller projects, which in turn sell condoms directly to underserved, at-risk groups and reorder from commercial wholesalers. SFH also provides free condom samples to select government and NGO partners such as the Armed Forces Program on AIDS Control, the National Youth Service Corps and government agencies involved in HIV prevention to improve condom access for the poorest and most vulnerable groups.

By working with established commercial, NGO and government partners, SFH cut product delivery time and costs. Its internal sales team was able to focus on core activities such as creating demand and establishing targeted sales outlets that would not have otherwise been served by commercial

distributors – such as the street vendors and small shops in hot zone areas. The SFH sales team monitors overall condom availability and affordability to ensure that adequate supplies and appropriate prices are consistently maintained throughout various sales channels. In addition, the sales team sustains commercial partner motivation to sell Gold Circle by distributing promotional materials and offering sales incentives.

Results

Although only 10% of Gold Circle condoms are sold through hawkers and other nontraditional sales outlets, this distribution channel has been essential in serving high risk groups. Between 2002 and 2004, the percentage of CSWs reporting that they could find condoms within 30 minutes of the brothel increased from 68% to 98%. At-risk males also reported improved access to condoms. The percentage of males who believe condoms "are easy to obtain" rose from 80% in 2002 to 86.6% in 2004. A separate study found that the percentage of CSWs obtaining condoms from hawkers and other nontraditional outlets increased from 19% in 1998 to 31% in 2002.[9]

Between 2000 and 2005, sales of Gold Circle condoms doubled from 80 million to 160 million. This represents the second highest number of condoms sold annually among 68 social marketing programs around the world.[10] Rising Gold Circle sales have corresponded with total market expansion as well as increasing condom use among high risk groups. The number of officially registered condom brands in Nigeria rose from 10 in 2001 to 60 in 2006.[11] Reported consistent condom use among CSWs increased from 79% in 2002 to 89% in 2004. Condom use in last sex between males and a nonmarital partner increased from 60% to 71.5% during the same period.[12] Males with a high exposure to SFH communications were more likely to report using condoms and to believe that condoms were easy to find compared to males with little or no exposure to SFH communications.[13]

DOMINICAN REPUBLIC: Building NGO Capacity in Social Marketing

Approximately 1% of all adults in the Dominican Republic are infected with HIV.[14] HIV prevalence is significantly higher among CSWs and residents of the "bateyes" – former sugar cane plantation communities inhabited by large numbers of migrant workers. Estimates of HIV prevalence among CSWs range from 3.5% to 13%, depending on geographic region.[15] In this context, the U.S. Agency for International Development invited PSI to implement a targeted condom social marketing program in the Dominican Republic with AIDSMark funding between 2003 and 2007. With AIDSMark support, PSI marketed *Pantè* condoms to achieve two main goals: (1) improve condom accessibility for CSWs and their clients and (2) reduce local sales of smuggled social marketing condoms from Haiti.[16]

At the beginning of the AIDSMark funding period, PSI/Dominican Republic (PSI/DR) conducted an extensive assessment of the local market and determined that the best way to achieve targeted sales to high risk groups was through partnerships with Dominican NGOs. Groups such as CEPROSH, MUDE and ADOPLAFAM were distributing free condoms to CSWs, but only on a limited basis owing to sporadic and unreliable condom supplies. Commercial condom brands were available predominantly in urban areas through pharmacies. In addition, commercial brands were sold at prices that were not affordable for many at-risk groups. A previous social marketing project, launched in the late 1990s, had failed to generate significant sales or to mitigate sales of smuggled condoms from Haiti.

Distribution Strategy

Recognizing that several Dominican NGOs were already serving CSWs and their clients but lacked the ability to market condoms effectively to these groups, PSI/DR designed a comprehensive capacity-building program. PSI/DR used numerous training activities

and post-training support efforts to strengthen NGO capacity to use social marketing techniques, scale up program activities and adhere to sound management, accounting and reporting standards.*

Toward these goals, PSI/DR trained hundreds of NGO administrators and sales agents in the following areas:

- Stock and warehouse management
- Revolving fund management
- Customer relations and sales techniques (i.e., how to make a sales pitch, close a sale and follow up)
- Demand creation techniques (i.e., how to increase consumer motivation and intent to use condoms)
- Marketing plan development
- Sales record keeping, management information system database management and survey research methods

Post-training support was provided in the form of periodic site visits, audits and specialized technical assistance based on each NGO's specific needs.

Working closely with NGOs, PSI/DR sold Pantè condoms exclusively through outlets that were easily accessible to CSWs and their clients. Examples of targeted sales outlets established by the program include pay-by-the-hour motels and "colmados" (kiosks/corner stores) in hot zone neighborhoods. PSI/DR deliberately avoided distributing Pantè condoms to pharmacies out of respect for the existing commercial market. Instead, PSI/DR focused on establishing alternative sales points where CSWs and clients could find condoms late at night when most pharmacies are closed. The goal of the PSI/DR program was to increase condom use among high risk groups without negatively affecting commercial condom sales. NGO partners monitored monthly sales by outlet type and location to help PSI/DR ensure that Pantè condoms were sold through targeted outlets serving high risk groups. A no-credit policy for condom sales minimized financial risks.

The country was divided into geographic areas and each NGO partner was allotted distribution territories and outlet channels based on its inherent strengths. CEPROSH, an NGO based in Puerto Plata, covered CSWs and clients in the north by selling Pantè through motels and sex work establishments in northern regions. By contrast, MUDE served low-income rural women by selling Pantè through health promoters and retail outlets in rural parts of the country. PSI/DR helped each NGO recruit and train a qualified supervisor to oversee condom marketing activities. Trained sales agents signed distribution agreements outlining their commitment to sell to priority target groups in designated territories, follow pricing guidelines and submit accurate monthly reports.

Instead of establishing its own internal sales force, PSI/DR focused on strengthening sales teams employed by NGO partners. PSI/DR employed a small marketing and management team to oversee program implementation and provide continual support to partners based on their respective needs. PSI/DR representatives served on sales committees alongside NGO supervisors to review pricing decisions, sales strategies and disputes.

Results

Between 2003 and 2006, sales of Pantè condoms increased from 3.5 million to 15.7 million annually. PSI's market share rose to 70%, even as free, public sector condom distribution increased.[17] Although contraband condoms from Haiti's social marketing program did not disappear, their presence in the Dominican market declined significantly.† During the same period, commercial condom sales remained stable.[18]

* PSI/DR partnered with the following Dominican NGOs: ADOPLAFAM, CEPROSH, COIN, MODEMU, MUDE and PROFAMILIA.

† Before the AIDSMark program began, as many as 7-8 million smuggled Pant condoms were sold in the Domincan Republic each year. Personal communication with Elizabeth Beachy, former Executive Director of PSI/DR. September 2007.

Because all Pantè condoms were sold through NGO partners serving CSWs and their clients, it is safe to assume that the majority of Pantè condoms were sold to at-risk groups. As of 2006, 88% of all CSWs interviewed reported using Pantè condoms in last sex with a new client. In the same year, 81% reporting using a condom in last sex with a regular client, and 63% used a condom in last sex with a nonpaying partner.[19] Presumably, improvements in convenient access to condoms contributed to these results.

As of 2006, 72% of CSWs in the Dominican Republic were able to find condoms within 100 meters of where they work.[20] Since 2003, PSI/DR and its NGO partners have established more than 3,000 new condom sales outlets that were convenient to at-risk groups – both in terms of physical location and operating hours. Today, more than 1,700 colmados, 500 motels and 735 sex establishments stock and sell Pantè condoms.[21] According to store audits, the percentage of colmados stocking Pantè condoms increased between 2004 and 2006.[22]

In addition to increasing access to and use of condoms, PSI/DR's condom social marketing program made long-lasting contributions to the organizational development and financial sustainability of NGO partners. More than three years after AIDSMark support ended, all six initial NGO partners remain actively involved in condom social marketing, and more than two-thirds of all NGO sales agents trained by PSI/DR continue to sell and promote Pantè condoms as of October 2007. NGOs earn revenue from selling Pantè condoms, which they can use to support operational costs. According to a recent external evaluation, partner NGOs cited technical assistance in social marketing provided by PSI/DR as one of the most valuable aspects of the program. One NGO director expressed, "[This] is the first time that I have worked with another agency on equal terms and as true partners."[23]

Lessons Learned

Distribution strategies must be tailored to each context based on the needs and preferences of priority target groups as well as locally specific opportunities to work through commercial, governmental and nonprofit channels.

As these case studies demonstrate, no single distribution approach works in every context. Distribution models that work in different countries are tailored to unique market opportunities, target group needs and program objectives. Whereas the program in Nigeria was able to leverage the vitality of well-developed commercial sector distribution channels, NGO channels were more effective in the Dominican Republic. Both country programs utilized more than one distribution approach to reach priority target groups.

Future condom social marketing programs should take care to understand gaps in consumer access as well as locally feasible solutions to these gaps before designing condom distribution systems. Formative research is critical and should precede distribution decisions. Evidence-based distribution strategies will carefully assess existing commercial networks, margins, credit policies and pricing as well as the consumer behaviors of key target groups before deciding how to improve access to condoms.

Outsourcing warehousing, distribution and invoicing functions to competent third-party organizations can be efficient and cost-effective.

When local partners – commercial or otherwise – are capable of overseeing key aspects of the distribution process, social marketing programs can delegate these functions and focus on establishing and supporting targeted sales outlets, building local capacity in social marketing and creating consumer demand. Outsourcing to capable commercial or nonprofit partners with established sales and distribution systems can reduce administrative and operational costs associated with social marketing programs. Instead of creating duplicate systems for product storage, transportation and pharmaceutical sales, social marketing programs can use scarce resources to address complex barriers to behavior change.

In the Dominican Republic, partnerships with NGOs enabled PSI/DR's small team to focus on creating consumer demand, managing the overall distribution system and building local capacity in social marketing. In Nigeria, commercial partnerships enabled the social marketing program to focus on establishing and supporting convenient condom sales outlets that would not typically be served by pharmaceutical wholesalers (e.g., street hawkers in neighborhoods frequented by CSWs and their clients). Future condom social marketing programs should assess local opportunities for partnerships before designing distribution systems that might prove expensive and duplicative. Where outsourcing opportunities exist, social marketing programs should carefully manage subcontracts to ensure that program targets are met and priorities – such as serving the poor – are addressed.

Monitoring and incentive systems must be developed to align commercial partners' interest in revenue generation with equity and other public health program goals.

While commercial wholesalers and retailers are essential to the success of most condom social marketing programs, their financial motivations may conflict with program goals to serve the poor and/or difficult-to-reach high risk groups. Sustaining commercial partner interest in selling subsidized products such as condoms requires careful negotiation, incentives and continuous monitoring. In countries with well-developed commercial sectors, less-subsidized/higher-priced products may make it easier for social marketing programs to attract and maintain commercial partners. Regular negotiations and nurturing efforts are often needed to convince commercial partners to sell health products with relatively low revenue-earning potential (due to their low profit margins and sales volumes relative to other pharmaceutical and fast-moving consumer goods).

Nontraditional outlets are essential to serve certain target groups and often require separate distribution systems.

Both country programs described in this report used nontraditional sales outlets to improve consumer access to condoms. Whereas traditional outlets such as pharmacies often account for the bulk of total condom sales, they may not be sufficient to serve priority target groups. Other sales outlets are often more conveniently accessible to these groups because of their geographic location, operating hours, familiarity or some other aspect of consumer accessibility. Successful condom social marketing programs identify and service outlet types and locations preferred by target groups. In most cases, separate systems are needed to establish nontraditional outlets. In some cases, established nontraditional outlets (such as street hawkers selling Gold Circle condoms in Nigeria) can eventually be served by commercial wholesalers. In other cases, separate distribution systems – operated by social marketing organizations or partner organizations – are required to support established networks of nontraditional outlets.

4 Female Condom Social Marketing: Innovative Programming in Myanmar and Zimbabwe

Lessons from Myanmar and Zimbabwe

Developed by the Female Health Company in 1994, the female condom* is a barrier method that provides dual protection against unintended pregnancy and sexually transmitted infections (STIs) including HIV. The female condom is inserted by a woman prior to sexual intercourse, and it is currently the only female-initiated HIV prevention method. Studies examining female condom use in the context of male condom use have found that the expansion of choices increased the overall level of protection. In fact, many couples alternate between male and female condom use, which appears to increase the overall number of protected sex acts. [1] In collaboration with the Female Health Company, international donors and local partners, Population Services International (PSI) is using a combination of commercial marketing and peer outreach or other community outreach strategies to improve access to and correct use of the female condom. In 2006, PSI sold more than 2.6 million female condoms worldwide. AIDSMark support enabled PSI to initiate, expand and strengthen female condom social marketing programs in a number of countries.

This report describes two case studies from Myanmar and Zimbabwe, outlining program experiences, results and lessons learned. The first section focuses on the female condom program in Myanmar, which trained teams of peer educators to promote, demonstrate and sell the product at drop-in centers. Initially, project activities targeted female sex workers (FSWs), but they soon expanded to include men who have sex with men (MSM), the latter who found that removing the inner ring made the female condom an effective alternative to male condoms. PSI/Myanmar's intensive use of peer educators, targeted distribution, discreet packaging and affordable pricing have improved access to female condoms and increased use among groups at greatest risk of HIV and STI transmission in Myanmar. The second section describes the evolution of the female condom program in Zimbabwe from a traditional mass media campaign to an innovative initiative focused on interpersonal communication (IPC) between women and their hairdressers. The hair salon initiative trained hairdressers to discuss the benefits of using the female condom and demonstrate correct use to their clients. The program successfully increased access to, understanding of and use of the female condom among women. The last section discusses the shared lessons learned from these two programs to show how the female condom can be an effective HIV prevention tool in the context of distinctly different epidemics. The critical lesson is that both programs were successful because of efficient targeting, strategic use of commercial marketing techniques and an emphasis on IPC to ensure that consumers were comfortable with the product.

* The original female condom (FC1) was made from polyurethane. FC1 is being phased out and replaced by a new version (FC2). This version of the female condom, made available in 2007, is made from nitrile polymer, a latex derivative that allows for less expensive production of the female condom. Nitrile polymer is an ideal material for the female condom as it does not contain the allergic properties of latex and can be used with both oil- and water-based lubricants.

Myanmar

Although reliable sero-prevalence data are scarce, Myanmar is believed to have one of the highest HIV prevalence rates in Southeast Asia. In July 2003, PSI/Myanmar began social marketing of the female condom to provide FSWs with an alternative protection method. Until 2001, possession of male condoms was grounds for arrest under Myanmar law as condoms were interpreted as evidence of sex work. Anecdotal evidence suggests that although this law was repealed some police continue to enforce it,[2] and many sex workers are still reluctant to carry male condoms. In addition, some clients remain unwilling to use male condoms and sex workers express a demand for alternative methods of protection.

In Myanmar, MSM who work as male sex workers sometimes work alongside FSWs on the street and relations between the two communities are often close. Through this close contact, the MSM community became aware of the female condom, which was being promoted to their female counterparts. [3] They began to request that they be supplied with female condoms because they desired an HIV prevention method that was less stigmatized, easier to use if a partner is inebriated and as effective as male condoms.[4] In addition, some transgender MSM were attracted to a method that was targeted to women. As demand grew, PSI/Myanmar decided to promote the female condom to male sex workers and other MSM through peer education and outreach activities.*

PSI/Myanmar chose to use the word *feel* to brand the female condom. By using a brand name associated with local shampoo, soap and candy products, PSI/Myanmar minimized potential embarrassment for sex workers and MSM in purchasing, carrying and using feel female condoms.[5] The program created dedicated teams of sex worker and MSM peer educators to promote and sell *feel* in the two main cities, Yangon and Mandalay. Initially, PSI/Myanmar limited distribution by using only well-trained peer educators to teach sex workers and MSM to correctly use feel. Peer educators were asked to try the product first so that they could speak from personal experience. During small-group sessions conducted in beauty parlors, bars, and brothels or in PSI/Myanmar-operated drop-in centers, peer educators demonstrated how to correctly use the female condom, discussed common concerns about the product and encouraged participants to practice insertion before using. Limited distribution combined with intensive, peer-led trainings created informed demand for the product and minimized negative consumer experiences. [6]

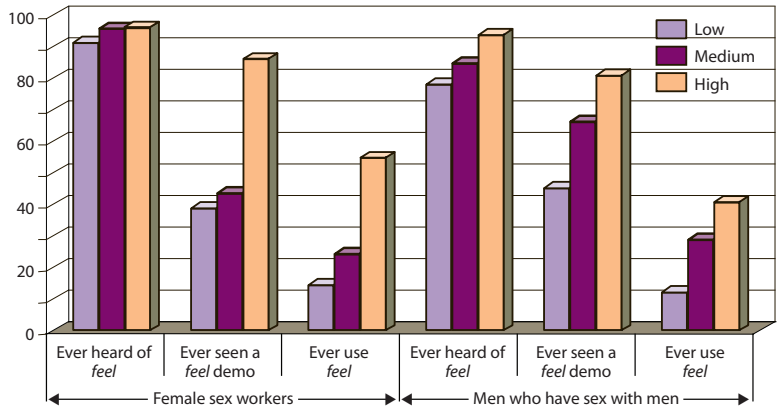
Since the inception of the program, PSI/Myanmar has made many improvements to female condom promotion to better appeal to its target audience. In 2005, the consumer price was lowered from U.S. $0.10 to $0.05 to ensure affordability was not a barrier to use.[7] In the following year sales through peer educators represented 30 percent of the program's total female condom sales, showing PSI's dedication to hiring committed and effective peer educators. Product distribution was expanded and the remainder of 2006 sales (70%) occurred primarily through nongovernmental organizations serving groups engaging in high-risk behaviors and small stores convenient for these groups. In 2006, in response to MSM requests for more masculine branding, PSI/Myanmar used follow-on funding to develop feel for men, a brand targeted to MSM with similar pricing and distribution strategies as those used for the original feel condom. PSI/

*Though the female condom has not been specifically approved for anal sex, studies have documented MSM using the female condom as early as 1998. There are no published studies documenting the efficacy of the female condom in preventing HIV transmission. S. Gibson, W. McFarland, D. Wohlfeiler, K. Scheer, and M. H. Katz, "Experiences of 100 Men Who Have Sex With Men Using the Reality Condom for Anal Sex," AIDS Education and Prevention 11 (1998): 65.

Myanmar's ability to adapt its program has improved access to female condoms and increased use among groups at greatest risk of HIV and STI transmission in Myanmar. The percentage of sex workers who reported ever using the female condom increased from 15.6 percent to 35.6 percent between 2004 and 2006. The percentage of sex workers who reported knowing how to correctly use the female condom increased from 37.1 percent to 55.6 percent between 2005 and 2006. During the same time period, sex workers also reported improvements in accessibility and affordability of female condoms.[8]

By 2006, almost 70 percent of surveyed sex workers and MSM had participated in a small-group demonstration session on how to use the female condom correctly.[9] Sex workers and MSM with high levels of exposure to PSI/Myanmar programs were more likely than those with less exposure to report having ever tried feel.[10] MSM who had attended PSI/Myanmar-led female condom demonstrations were more likely to report confidence in their ability to ask a partner to use a female or male condom than were MSM with low exposure to PSI programming.[11]

Awareness, Demonstration and Use of *feel* by Risk Group and Exposure Level
January 2006



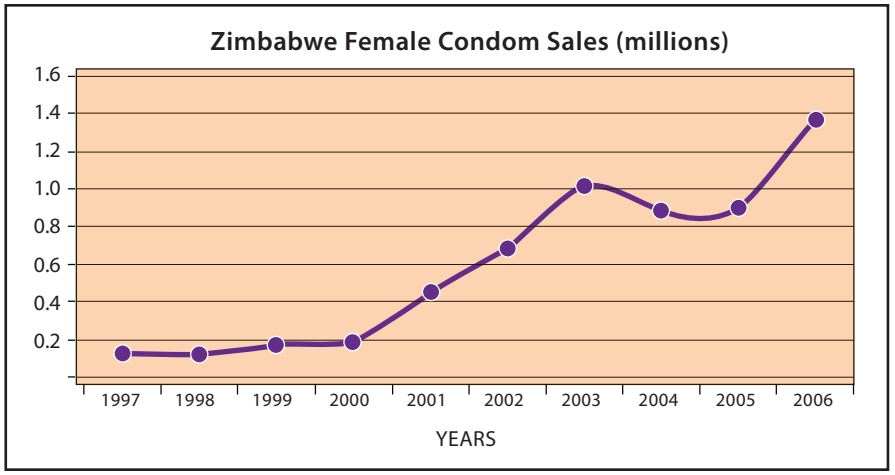
Zimbabwe

Although as many as 21 percent of Zimbabwean women ages 15–49 are HIV-positive (compared with 14.5 percent of males), cultural barriers often preclude women from purchasing or initiating the use of male condoms.[12] In November 1996, more than 20,000 Zimbabwean women signed a petition submitted to Parliament requesting access to the female condom. The following year, PSI/Zimbabwe

launched the first branded female condom in Africa: the *care* contraceptive sheath. In collaboration with Johnson & Johnson, PSI/Zimbabwe distributed care female condoms through pharmacies, grocery stores and other retail outlets. At the same time, PSI/Zimbabwe implemented a mass media campaign using radio spots, posters and advertisements in newspapers and magazines to raise consumer awareness about care and emphasize its ability to prevent unplanned pregnancies as well as HIV. In light of the advanced stage of Zimbabwe's epidemic, PSI/Zimbabwe's target group for the female condom included sexually active women and their partners in urban areas. Initially, promotional materials were designed to appeal to couples.

Roughly four years after the product was launched, research in 2001 revealed that although 67 percent of Zimbabweans had heard of care, only 11 percent knew where to find the product and approximately half described care as affordable.[13] Limited improvements in awareness of and access to the female condom since the product's introduction resulted in low product sales. Between 1997 and 2000, PSI/Zimbabwe sold fewer than 200,000 care female condoms annually. The initial positioning of the product as a "contraceptive sheath" for couples was confusing to consumers. In response to these challenges, in 2001 PSI/Zimbabwe launched a program to target women most likely to use the product by working with hair salons serving single women in low-income, urban areas. Hair salons were identified as a popular and safe environment where women were free to discuss sensitive issues including contraception and HIV prevention. An assessment found that approximately 97 percent of Zimbabwean women visit a hair salon at least once a month and 49 percent visit a salon at least once a week.[14] Often, women visit the same hairdresser repeatedly and

build a strong customer-client rapport.



With support from AIDSMark and the UK's Department for International Development, PSI/Zimbabwe trained female stylists from more than 500 salons in low-income neighborhoods to promote care as an effective dual-protection method, demonstrate correct use of the product, discuss common misconceptions and answer client questions. During product demonstrations, stylists encouraged clients to touch and become more familiar with the product. The salons sold care female condoms at lower, more subsidized prices in an attempt to improve convenient and affordable access. PSI/Zimbabwe's dedicated care sales and promotional team visited trained hairdressers twice a month to discuss challenges and to deliver additional supplies of product and promotional materials. Hairdressers received small gifts, such as toiletry bags, aprons, handbags or T-shirts, as rewards for achieving sales targets. To complement the hair salon initiative, PSI/Zimbabwe organized promotional events such as Miss Hope, a beauty pageant sponsored by care. PSI/Zimbabwe also integrated female condom marketing into its other HIV prevention programs, utilizing public and private sector distribution of care at HIV posttest support programs, HIV counseling and testing centers, general health clinics and college and workplace programs.

PSI/Zimbabwe's hair salon initiative increased access to, understanding of and use of the female condom. Between 2002 and 2004, the percentage of Zimbabwean women who reported ever using the female condom increased from 15 percent to 28 percent. Women who had observed a care product demonstration at a hair salon were 2.5 times more likely to have tried the female condom than were women who had not seen a care demonstration. [15] Between 1997 and 2006, annual sales of care increased from 120,720 to 1.36 million. In 2006, the majority of these female condoms (53%) were sold through hair salons. [16]

There is potential to expand the coverage of the hair salon initiative and improve the quality and frequency of care demonstrations. In 2004, fewer than half of all women (47%) reported ever talking with a hairdresser about care. Among those who had discussed care with their hairdresser, 89 percent reported that the hairdresser could answer all of their questions about the product. Only 27 percent of all women surveyed had seen a hairdresser demonstrating how to use care correctly. Roughly half of all women who tried care stopped using the product. Of these, 60 percent stopped using care because their partner did not like the product.[17] Similarly, focus group discussions revealed that several women felt men would be more likely to accept care if its use was suggested by someone other than their partner. [18]

Lessons Learned

Investments in female condom promotion are warranted given its potential to protect people engaging in unsafe acts that would otherwise go unprotected.

Proper application and marketing of the female condom relative to the country context is increasingly important as the impact and cost-effectiveness of the female condom are continuously debated. To maximize the likelihood that the female condom is used to protect high-risk sex acts that would otherwise go unprotected, programs should target at-risk groups in need of an alternative to the male condom and who are most likely to use the product. The composition of these groups will vary from country to country. For example, PSI/Myanmar has demonstrated that the female condom is a viable HIV prevention product for MSM as it provides receptive partners with an option that is perceived to be stronger, as effective and in some cases easier to use compared with the male condom. In addition to targeting MSM and FSWs, programs should strive to identify other vulnerable groups in need of an alternative prevention method, especially in generalized epidemics.

Even in generalized epidemics as in Zimbabwe, the female condom is unlikely to become as widely used as the male condom and should be promoted as an alternative when other prevention strategies, including the male condom, abstinence, mutual fidelity and non-penetrative sex, cannot be practiced. In 2006, PSI sold 912 million male condoms but only 2.6 million female condoms worldwide. However, PSI/Zimbabwe has successfully marketed the female condom to women in the general population. PSI/Zimbabwe credits this success to its evidence-based marketing approach. The female condom was first positioned as a contraceptive product, allowing it to escape the stigma of an HIV prevention product. Comprehensive nationwide distribution and high-quality personalized IPC also played a key role in transforming the female condom into a product that is accepted by the general population. Unlike other female condom programming attempts, PSI/Zimbabwe targets a wide range of at-risk women with tailored IPC focused on correct product use and negotiation skills. The program conducts formal training and follow-up support with hairdressers and grassroots promoters to ensure quality IPC is delivered and that any misconceptions or usage concerns are resolved. Geographic information system mapping was used to identify densely populated high-risk areas, and these data allowed PSI/Zimbabwe to broaden its reach. The hair salon initiative expanded to cover informal backyard salons where lower-income women have similar relationships with their hairdressers. [19]

In most country contexts, especially in concentrated epidemics, the value of the female condom lies in its ability to achieve incremental increases in protection, such as among sex workers with clients who are unwilling or unable to use male condoms, males who complain that male condoms result in decreased sexual pleasure or break easily, and females who are uncomfortable carrying male condoms or negotiating male condom use. For instance, the female condom can provide many benefits when alcohol use is common among both FSWs and their clients as is the case in Myanmar. Sex workers can insert it prior to drinking, which eliminates the possibility of forgetting it once inebriated. Sex workers also report that it is difficult to use male condoms with inebriated clients, and using the female condom gives them greater control over their prevention options. [20]

A combination of interpersonal outreach and commercial marketing strategies should be used to reach priority target groups and reduce stigma.

Face-to-face promotion and training are critical to help target groups overcome initial barriers and become more familiar with a new prevention product. Programs in Myanmar and Zimbabwe used tailored interpersonal outreach and targeted sales and distribution strategies to make it easy for priority target groups to learn about, practice using and purchase the female condom.

In addition, both country programs used mass media promotion and commercial distribution to improve consumer awareness of and accessibility to the product. Mass marketing strategies can help normalize the female condom, minimize stigma and generate partner support for the product. In Myanmar, PSI used targeted commercial marketing techniques (e.g., distribution through retail outlets frequented by MSM and sex workers), which made it easier for the target groups to find and use female condoms. In Zimbabwe, the care female condom was widely available in salons, support groups, tertiary colleges and retail outlets (drug stores, liquor stores, supermarkets) and in all health clinics. PSI/Zimbabwe initially developed mass media campaigns to promote care as a "contraceptive sheath" with the ability to prevent unplanned pregnancies as well as HIV – and to avoid stigma associated with the male condom.

Personal experience with the female condom enhances program impact by increasing the credibility of outreach workers and building confidence among consumers, which leads to higher continuation rates.

Programs in both countries found that people who had participated in face-to-face discussions and demonstrations related to the female condom were more likely to use the product. Peer educators in Myanmar and hairstylists in Zimbabwe were trained to encourage potential customers to try the product more than once and to practice inserting the female condom prior to using it with a partner. Outreach workers were also encouraged to try the product themselves so that they would be able to speak from personal experience, help customers overcome common barriers to use and maintain credibility with the target groups. Training a large number of outreach workers and customers to use the product correctly generated informed demand for the female condom and minimized negative consumer experiences.

Depending on the target group's needs and cultural norms within a country, it may be beneficial to use relatively private and safe locations to demonstrate and discuss correct use of the female condom. For this purpose, PSI/Myanmar used its own drop-in centers where sex workers and MSM came to socialize and receive high-quality, nonjudgmental health services. PSI/Zimbabwe used hair salons in a similar manner. In both countries, safe locations allowed outreach workers to have intimate and sensitive discussions with target groups. In Myanmar, male sex workers who had been exposed to a high level of PSI programming, including condom demonstrations and other activities at the drop-in centers, were more likely to report confidence in their ability to ask a client to use a female condom.[21] Program evaluations demonstrated that Zimbabwean women who had observed a care product demonstration at a hair salon were 2.5 times more likely to have tried the female condom than were women who had not seen a care demonstration.[22] Most women surveyed felt comfortable discussing sexual issues with their hairdressers, and those who had done so were more likely to report repeated use of care female condoms.[23]

Partner support for the female condom can increase the likelihood of sustained use.

Use of the female condom can be initiated by female or receptive partners, but its use is not necessarily controlled by the initiating partner. The female condom provides women and receptive male partners with increased ability

to negotiate prevention by offering them an alternative to the male condom. However, program experiences from Zimbabwe suggest that partners play an important and influential role in determining whether the product will be used. In Zimbabwe, 60 percent of all women who had stopped using care identified "partner dislike of the product" as the reason. [24] Women in focus groups also referred to the cultural dominance of men influencing the decision to use care, and suggested that men may be more apt to use care if the idea were initiated by someone other than the female partner. [25]

In response, in addition to teaching condom negotiation skills to women, PSI/Zimbabwe began training male barbers to discuss female condoms and increase acceptability among their male clients. Since this component was added in September 2006, more than 60 barbers have been trained. The program also created a mass media campaign designed to increase couples' communication about female condom use. Because men have reported increased stimulation from the female condom's inner ring, IPC sessions also encourage women to discuss the product with their partners as a sexual novelty designed to increase pleasure. [26]

Future programs should continue to explore partner perceptions about the female condom and factors contributing to their dislike or rejection of the product. Using the results of this research, programs will be able to develop complementary health communication activities (using a combination of mass media and interpersonal outreach, depending on local contexts and target group preferences) designed to address partner concerns and emphasize product benefits that will resonate with this important and influential target group.

Answering complex questions regarding female condom programming strategies, costs and impact will help increase stakeholder support for the product.

Future programs should address unanswered questions such as:

(1) Whether the female condom supplements or cancels out protection achieved through other less costly methods;

(2) What is the incremental or marginal cost per high-risk sex act protected as a result of female condom programming;

(3) Which aspects of female condom programming achieve the highest results and should be replicated and scaled up; and

(4) How many people consistently use the female condom and buy it repeatedly. Research studies and better documentation of program lessons relevant to these questions can help generate stakeholder support, increase funding for the female condom, expand prevention options for groups at greatest risk of contracting HIV and lead to a better understanding of what segment of potential users the female condom appeals to and why.

The cost of the female condom has traditionally been a barrier to its incorporation into HIV prevention projects for both donors and implementing organizations. Nonetheless, the female condom can be a cost-effective alternative protection method when male condoms are difficult to use, such as when one partner is intoxicated. Even with the introduction of the less expensive second-generation nitrile polymer female condom (FC2), concerns about cost still exist. However, as global distribution of FC2 increases, manufacturing costs will decrease. Programs should analyze the benefits of the female condom before writing the product off as too expensive. Research is needed to determine whether there is a substitution effect – that is, whether men and women are using a female

condom when a cheaper alternative (a male condom) is available. Until sufficient data are available to show the extent of the substitution effect, programs should continue to promote female condoms as an alternative to male condoms and as a cost-effective method of preventing HIV infection when other methods cannot be used. In addition, successful programs must ensure that the female condom is affordable for target populations. PSI/Zimbabwe markets the female condom at highly subsidized prices, and women report that the product is affordable, which removes a barrier to use. In Myanmar, the program lowered the price to a level that sex workers could pay, and sales increased after the price change, indicating that it was affordable for target populations.

Given that reported levels of consistent condom use among high-risk groups are still lower than the levels required to stop the propagation of HIV, continued investments into alternative protection methods are needed to increase the total number of protected sexual acts. In addition to long-term investments in the development of new, female-controlled methods such as microbicides, public health programs should continue to expand access to the only female- or receptive male-partner-initiated method currently available: the female condom. Widespread dissemination of lessons learned from and research related to female condom programming can help increase funding and program commitments to expand access to this important prevention product.

5 Changing Behavior Through Social Marketing for HIV Prevention

Behavior Change Communication for HIV Prevention

Effective health communications are an essential component of successful social marketing programs. For years, Population Services International's (PSI) social marketing programs have used mass media, street theater, peer educators, mobile video unit (MVU) shows and other techniques to motivate individuals at risk to adopt safer behaviors. AIDSMark enabled PSI to develop mass media campaigns of international production standards as well as innovative community-level advocacy and other interpersonal approaches and to use multiple communication channels in a coordinated way. With AIDSMark support, PSI developed behavior change communication (BCC) interventions to go beyond condom promotion and promote abstinence and mutual fidelity, as well as discourage relationships between older men and younger women (also known as "cross-generational sex"). This report describes the experiences and lessons learned from three of AIDSMark's most inventive BCC programs: a branded abstinence campaign, a program to battle cross-generational sex and a regional HIV prevention campaign.

"Nimechill," Kenya's first large-scale youth abstinence campaign, used a positive, upbeat strategy to emphasize the social benefits of abstaining. Branding techniques tied campaign materials together, increased the campaign's visibility and popularity and helped disseminate the main message: "ni poa kuchill," or "it's cool to chill/abstain." In Uganda, AIDSMark created the world's first social marketing intervention to address cross-generational sex. Using a combination of interpersonal outreach, community mobilization and mass media, PSI/Uganda highlighted health risks associated with cross-generational relationships and encouraged social denunciation of the practice. Finally, AIDSMark enabled PSI to test the viability of regional mass media campaigns to address common barriers to HIV prevention and motivate youth to postpone sex.

Branded Abstinence Campaign: Nimechill in Kenya

According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), HIV prevalence in Kenya has fallen from a peak of 10% in the late 1990s to 7% in 2003. AIDS-related deaths as well as increased abstinence and other safer sexual practices are believed to have contributed to this trend.[1] Between 1993 and 2003, the median age at first sex among women increased from 16.8 to 17.6 years old.[2] Unfortunately, youth continue to be at risk of unintended pregnancies as well as HIV and other sexually transmitted infections (STIs) since they are also waiting longer to get married, and use condoms sporadically once they become sexually active. Female youth are more than three times as likely to be infected with HIV as their male counterparts. Among 20- to 24-year-old Kenyans, 9% of females and 2.4% of males are HIV-positive.[3]

To motivate youth to delay sexual debut, PSI/Kenya created Nimechill, the country's first large-scale youth abstinence campaign. Using television, radio, billboards, posters, other printed messages and T-shirts, PSI/Kenya promoted positive images of and messages from youth who chose to abstain. The word "nimechill" is a combination of Swahili and English slang and translates literally as "I have chilled" or figuratively as "I am abstaining." All campaign materials were linked together by the common Nimechill brand and logo, a cartoon caricature of a fist and two fingers making a "V" or "peace" sign. The Nimechill campaign was implemented between September 2004 and April 2005 with $550,000 provided by the President's Emergency Plan for AIDS Relief (PEPFAR) via AIDSMark. In addition, PSI/Kenya

secured in-kind contributions from commercial partners, including discounted media time from local television and radio companies.

The goal of Nimechill was to motivate urban and peri-urban 10- to 15-year-olds to postpone sexual debut.* Although the campaign touched on health risks associated with early sexual activity, it focused on emphasizing social benefits of abstaining. Nimechill used positive, upbeat language to call youth to action ("it's cool to chill") as opposed to negative, cautionary statements (e.g., "don't have sex" or "sex kills"). Instead of telling youth how to behave, the campaign used confident, attractive and intelligent youth to portray abstinence as socially advantageous. Four television spots, five radio spots, 17 billboards and five print executions (used in numerous newspapers, magazines and posters) featured slightly older youth (14- to 16-year-olds) acting as positive deviants and role models. The campaign promoted stories from youth who were comfortable defying social pressure to have sex.

For example, one Nimechill television spot portrays a young teen winning the crowd's approval when he stands up to a bully who teases him because he does not have a girlfriend. A poster shows several youth leaning out of a mini-bus, with the text over the photo stating "Sex? No way, tumechill" ("we're chilling"). Text at the bottom of the photo reads "We won't be taken for a ride. Ni poa kuchill" ("It's cool to chill"). T-shirts printed with the Nimechill logo and "young, beautiful and chilling" or "handsome, intelligent and chilling" were given away to youth at Nimechill-sponsored events such as a concert performed by SEMA – a Kenyan band whose members are known for acting as abstinence role models. By disseminating affirmative images through multiple communication channels, Nimechill promoted abstinence as the new, cool and healthy social norm. At the same time, the campaign aimed to increase confidence among youth in their ability to resist pressure to have sex.

Results

Two surveys conducted before and after the campaign revealed an increase in abstinence among youth during the time that the Nimechill campaign occurred. This trend occurred independently from the campaign. Youth who were exposed to Nimechill were not more likely to abstain than youth who were not exposed. High levels of exposure to Nimechill did have a positive effect on two known correlates of abstinence behavior: confidence and intentions to abstain.[4] In addition to these statistically significant results, there were several anecdotal signs of the campaign's impact on popular culture. Politicians were photographed with youth raising the V sign, entrepreneurs manufactured and sold bumper stickers featuring the "chill" logo and newspapers and radio shows ran pieces on "chilling" without support from PSI/Kenya.[5]

After seven months of implementation, approximately 85% of urban 10- to 14-year-olds recalled the Nimechill brand, logo and messages. Among those who recognized the campaign, close to half had discussed it with friends or family. More than 78% of youth recalled seeing campaign spots on television, 50% heard them on the radio and 47% saw print materials. Youth who were exposed to Nimechill through three or more media channels were more likely to report increased confidence and intentions to abstain – two proven predictors or "correlates" of abstinent behavior. As a result, Nimechill's effectiveness in changing self-efficacy and intentions is presumed to have contributed to increases in abstinence over time.[6]

* The campaign was designed to reach this group due to the likelihood that urban 10-15 year olds a) were not yet sexually active; b) married at a later age compared to rural youth; c) had good access to mass media and c) faced significant health risks if/when they did become sexually active given higher HIV prevalence rates in urban areas.

The absence of a direct effect on increased abstinence raises the question of whether seven months is a sufficient implementation period to demonstrate an impact on behavior change, especially when the majority of the target group was already practicing the desired behavior. Future campaigns should aim to reach youth repeatedly, through multiple communication channels over a longer period. Future campaigns should focus on addressing proven determinants of abstinence behavior for distinct target groups. Research conducted in 2005 suggests that for urban Kenyan youth, these determinants include social norms, self-efficacy and risk perception. The success and limitations of Nimechill also suggest that abstinence campaigns should be extended to target older youth as well, at ages when sexual initiation typically occurs (e.g., 15 to 18-year-olds in Kenya).[7]

Pilot Program to Reduce Cross-Generational Sex in Uganda

In Uganda, female youth between the ages of 15 and 19 years are more than 8.5 times more likely to be infected with HIV than males in the same age group.[8] Cross-generational sex, defined as nonmarital sexual relationships between young women and men who are 10 or more years older, puts young women in Uganda and other African countries at higher risk for violence, unplanned pregnancies, HIV and other STIs.[9] With support from AIDSMark, PSI/Uganda conducted qualitative research in 2004 to explore factors contributing to the practice of cross-generational sex. Focus group discussions with young females and older men revealed motivations behind these relationships: material or financial benefits for young women and sexual gratification for men. Relationships are often transactional and involve the exchange of small gifts such as cosmetics, food or mobile phone use.[10]

Building on these research findings, AIDSMark developed one of the first programs to reduce cross-generational sex in Africa. This innovative pilot used multiple communication approaches to highlight the risks of cross-generational relationships and emphasize the benefits of abstinence (for young women) and fidelity (for older men).

Interventions at individual, family and community levels were used to:

(1) build the confidence and skills of young women to abstain and avoid relationships with older men;

(2) advocate for social denunciation of cross-generational relationships; and

(3) increase communication between parents and their teenaged children about sexual health risks.

The original intent to target 14- to 20-year-olds was revised as a result of controversy and public concern regarding HIV prevention activities targeting youth below age 18. Instead, the program focused on reaching university students – following research which found that one in five female university students was involved in a relationship with an older man.[11]

With support from AIDSMark, PSI/Uganda used a combination of interpersonal outreach, mass media and community advocacy to reduce sex between younger women and older men. The pilot was implemented during a 12-month period and cost approximately $200,000. The following program components were implemented in Kampala district:

Outreach to female university students. PSI/Uganda created a network of 60 "Go Getter" peer educators at three universities. The "Go Getters" recruited first-year female students to participate in small-group discussions and special events designed to build confidence, self-esteem and skills to abstain and focus on career goals. Successful female career women gave "role model" presentations and discussed how they achieved their life goals. The program also secured summer internships for 47 female students with locally based businesses to contribute to individual career development objectives.

Parent skills training. In partnership with the Church of Uganda, PSI/Uganda worked with six different religious denominations to train more than 600 parents. As a result of these trainings, parents were better equipped and more comfortable discussing reproductive health issues with their adolescent children.

Radio and print campaign. PSI/Uganda developed a series of radio spots and posters to communicate the following key messages over a four-month period:

- Young women: "Your life is worth more than material things. Sex with older men is dangerous."
- Older men: "Just as you are manipulating someone's daughter for your own needs, someone else may do the same to your daughter."
- Community leaders: "Take a stand and put a stop to this dangerous practice."

Advocacy. PSI/Uganda enlisted prominent political and religious leaders to speak out against cross-generational sex. Ugandan First Lady Janet Museveni, the queen of Buganda (the Nnabagereka), Minister for Ethics and Integrity Tim Lawanga and several religious leaders participated in the program. In addition to making public statements, some high-level advocates were featured in PSI/Uganda's radio and print campaign. "Go-Getters" also contributed to program advocacy efforts by appearing on popular television and radio programs and writing articles for university newspapers.

Results

The evaluation of the Ugandan cross-generational sex program found that although the program did not achieve its ultimate goal of reducing the practice of cross-generational sex, it did have a positive influence on the young women it reached. Reported levels of cross-generational sex did not decline during the nine-month period between the baseline and follow-up surveys conducted among female university students. However, whereas the proportion of female students reporting relationships with older men stayed **stable** among women exposed to the program, it **increased** by 19% among females who were not exposed to the program. Furthermore, young women with a high level of exposure to the program were more likely to (1) reject cross-generational sex as a socially accepted norm; (2) believe in their confidence and ability to refuse sex with older men; and (3) recognize health risks associated with cross-generational relationships.[12]

Although the duration, reach, intensity and/or relevance of program activities may not have been sufficient to reverse complex behavioral patterns, the Uganda pilot achieved other important results. By enlisting the support of Uganda's first lady and other community leaders, the pilot facilitated public discussion of cross-generational sex – a practice that was previously socially accepted but rarely acknowledged. Through the parent-skills training activities, PSI/Uganda established working relationships with several faith-based organizations, which continued long after the pilot ended. Independent of PSI/Uganda, a leading local radio station, Sanyu FM, dedicated a popular talk show to discussing one of the pilot's radio spots targeting older men. All of these achievements helped pave the way for continued and expanded program efforts to reduce cross-generational sex and other risky sexual behaviors. PSI/Uganda's "cross-gen" pilot program initiated public discussion of sensitive issues and behaviors related to the spread of HIV/AIDS.

What We Know About Cross-Generational Sex

In June 2000, AIDSMark supported research in Kenya to understand motivations contributing to cross-generational sexual relationships and to examine how perceived risk of contracting STIs and HIV affected sexual behavior and condom use. Focus group discussions with women ages 15 to 19 years and in-depth interviews with men ages 30 years and older were carried out in Nairobi, Mombasa, Kisumu and Meru. Results indicated that men who pursue relationships with younger women come from a variety of social and professional backgrounds. Whereas young women seek older partners who are willing to spend money, men look for partners who are well-mannered, need money and have certain physical attributes. Women are motivated by financial incentives, while men seek younger partners for sexual gratification. Young women are also influenced by pressure from peers to fit in or from family members to secure financial assistance. Both sides view cross-generational relationships as safe or low-risk. Women believe that older men are likely to be faithful, whereas men perceive young women as sexually inexperienced and innocent. [13]

In 2004, AIDSMark funded a qualitative study among women engaged in cross-generational sex in Maputo, Mozambique. Using the participatory ethnographic evaluation and research (PEER) method, 20 women between the ages of 16 and 25 were trained to conduct one-on-one interviews with their peers. Results from this study indicate that women with older partners are likely to have complex sexual networks, including multiple partners and transactional as well as nontransactional relationships. Instead of viewing themselves as coerced victims, women with older partners view transactional sex as a beneficial strategy to attain material goods and a lifestyle of modernity and success. Women expressed pride in their ability to establish and maintain cross-generational sexual relationships. An understanding of HIV did not translate into perceived personal vulnerability. The immediate risk of losing an economic resource outweighed the longer-term risk of contracting HIV/AIDS. [14]

For additional information regarding AIDSMark research findings related to cross-generational sex, see N. Luke and K. M. Kurz, "Cross-generational and Transactional Sexual Relations in Sub-Saharan Africa: Prevalence of Behavior and Implications for Negotiating Safer Sexual Practices," (Washington, DC: International Center for Research on Women (ICRW), 2002).

Regional Campaigns to Address Common Barriers to HIV Prevention

Research conducted in sub-Saharan Africa revealed common barriers to behavior change among youth. In response, AIDSMark developed two regional BCC campaigns for use in sub-Saharan Africa. This paper focuses on the "Delayed Debut" campaign, a regional mass media campaign also known as "Real Man, Real Woman." This was the second regional campaign developed by AIDSMark. The first, known as the "Trusted Partner" campaign, was designed to motivate condom use among sexually active youth by emphasizing the reality that even trusted partners can transmit HIV.*

Inspired by evidence from Uganda and Zimbabwe regarding the potential to prevent HIV infection by motivating youth to postpone the debut of sexual activity, AIDSMark supported formative research to explore factors contributing to early sexual debut.[15] Qualitative studies from eight countries showed that African youth were less likely to abstain from sexual activity because of peer pressure for young men to prove their masculinity, financial motivations linked to transactional sex, violence against young women and limited parent-child communication about HIV/AIDS.[16] Based on these findings, AIDSMark developed the Delayed Debut regional mass media campaign for HIV prevention.

To motivate 13- to 18-year-olds to delay or abstain from sexual activity, the Delayed Debut campaign emphasized the benefits of abstinence and urged youth to resist peer pressure by focusing on their future. By showing that young men and women who abstain are smart, able, responsible and happy, the campaign promoted new, healthier gender-based norms.[17] Four television spots, eight radio spots and four print advertisements were developed to portray nonsexual relationships as romantic, condemn sexual violence and address transactional sex. While the campaign did not address communication between parents and children, AIDSMark developed a complementary interpersonal communication curriculum to help parents talk with their teens about reproductive health issues.

Television and print materials were developed in Kenya using sites common to youth across Africa, such as schools, bars and apartments. All scenes were shot twice, once using wardrobe and background specific to West Africa and once for East and Southern Africa. Voices for radio and television spots were recorded in each country individually to ensure local acceptability and understandability. The campaign was implemented in 12 different countries for a fraction of what it would have cost to develop international-quality mass media materials locally.[18] In a country like Nigeria, a mass media campaign of this quality can cost as much as $500,000. Society for Family Health (SFH), PSI's affiliate in Nigeria, paid one-tenth of this amount ($50,000) to air the campaign in local languages.

Country programs integrated Delayed Debut materials into established HIV prevention social marketing interventions in different ways. For example, PSI/Malawi's "Youth Alert!" HIV prevention program used Delayed Debut television spots during outreach sessions with students and distributed Delayed Debut print materials to local leaders during community mobilization events. Delayed Debut radio spots were broadcast through a Youth Alert! radio show and discussed by Youth Alert! Listeners clubs in rural areas. PSI/Malawi partnered with young Malawian musicians to produce six music videos inspired by the campaign theme of "a real man/woman waits." The resulting compellation video won a 2007 Population Institute Global Media Award.

Results

Two of the twelve countries that implemented the Delayed Debut campaign evaluated the campaign's impact. Benin and Zimbabwe conducted baseline and follow-up surveys among youth. The survey questionnaire, sample size and evaluation period differed between the two countries. Because of

* Originally developed for 11 countries (Lesotho, Kenya, Malawi, Mozambique, Namibia, Nigeria, Tanzania, Uganda, Swaziland, Zambia and Zimbabwe), the Trusted Partner Campaign was ultimately used by 20 PSI country programs. For more information about this campaign go to http://www.aidsmark.org/intervention/bcc.html

these differences, results from the two countries are not directly comparable but can contribute to overall interpretations regarding the impact of regional mass media campaigns at the country level. Whereas the campaign appears to have been slightly more successful in Zimbabwe, it did not contribute to increases in safer behavior or determinants of behavior change in either country.

In Benin, the campaign achieved significant coverage of youth and increased knowledge of abstinence as an HIV prevention strategy. However, the campaign did not achieve its ultimate goal of motivating youth to abstain. Approximately 47% of 13- to 19-year-olds surveyed recalled the main message of the campaign. Whereas youth with a high exposure to the campaign were more likely to report that abstinence is the most effective way to prevent HIV, this knowledge did not translate into an increase in reported abstinence or other preventive behaviors.* Exposure to the campaign was not correlated with positive changes in any significant determinants of abstinence – factors identified through research to be positively correlated with abstinence behavior among urban youth in Benin (e.g., perceived ability to resist peer pressure to have sex.).[19]

Similarly, in Zimbabwe, although the campaign reached a high proportion of the target group, this exposure did not translate into behavior change. Almost 90% of 13- to 24-year-old Zimbabweans surveyed recalled the campaign either spontaneously or when prompted. Youth who were exposed to the Delayed Debut campaign were not more likely to abstain compared to youth who were not exposed to the campaign. Although the campaign did not lead to positive changes in determinants of abstinence, it may have prevented negative changes in some areas – specifically the social acceptability of romantic relationships without sex. [20]

Lessons Learned

Commercial branding practices and techniques can be successfully adopted to develop innovative and effective behavior change programs.

With support from AIDSMark, PSI used social marketing techniques to do more than sell condoms. Using branding techniques, straightforward messages and mass media channels popular among youth, PSI developed innovative campaigns to encourage youth to wait to have sex. While the impact of these campaigns on behavior change was limited during relatively short implementation periods, they achieved impressive coverage rates and had a positive impact on some determinants of behavior change. The popularity of the Nimechill campaign used in Kenya, for example, demonstrates the potential to use branded mass media to generate social movements to reject unhealthy behaviors (such as early initiation of sexual activity) and establish new, healthy norms.

Results from the BCC interventions described in this report suggest that **focused** mass media campaigns using **positive** messages are likely to be most effective, especially when targeting youth. Whereas Delayed Debut addressed multiple, complex behaviors including nonconsensual sex, Nimechill focused on a single,

* PSI programs in the following countries implemented the Delayed Debut Campaign: Angola, Benin, Burkina Faso, Burundi, Congo, Guinea, Kenya, Malawi, Nigeria, Togo, Zambia, and Zimbabwe.

straightforward and upbeat message ("Ni poa kuchill"). Future abstinence campaigns should promote social **benefits** of abstaining and, to the extent possible, also address determinants identified using locally conducted quantitative research. Phased approaches – where related issues are dealt with one layer at a time (e.g., social acceptance of cross-generational sex followed by consequences and risks of sex between younger girls and older men) should be explored in cases where campaigns aim to address multiple factors or complex issues.

Addressing complex behavior change requires extensive programming over time at individual, community and national levels.

The evaluation results from the BCC interventions described in this report suggest that future efforts to address complex issues, such as early sexual debut, cross-generational sex and sexual violence, may benefit from implementation periods of more than 12 months, more intensive coverage and better saturation of key target groups. Exposure to multiple communication channels was correlated with reduced barriers to or improved determinants of behavior change in several countries. This finding reinforces a previously identified best practice for health communication interventions to reach target groups repeatedly with mutually reinforcing messages and images. Mass media campaigns should be combined with interventions at individual, community and national levels, because mass media alone are not sufficient to address complex behavioral patterns such as sex between older men and younger women.

The Uganda program's combination of mass media, interpersonal outreach to female university students *and* advocacy with community leaders and parents is a promising model that warrants scaling up. This small-scale pilot demonstrated the importance of involving host-governments early on in the implementation process to secure high-level support for BCC interventions, especially when addressing social normative issues. Delays in the Ministry of Health's approval of PSI/Uganda's mass media spots dealing with cross-generational sex reduced the amount of time these spots were aired and therefore limited program coverage.[21] By involving key decision makers in the development and implementation of program strategies, programs can also advocate for the incorporation of campaign objectives and messages into national plans to address HIV.

PSI/Kenya developed outreach and advocacy components to complement campaign messages and address related sensitive issues such as sexual violence. After receiving additional U.S. Agency for International Development (USAID) funding in 2006, PSI/Kenya developed *Chill Clubs* (youth-facilitated discussions targeting 12,500 primary school students in five districts) and advocacy with teachers and parents. Whereas PSI developed a Delayed Debut interpersonal communication module to be used in conjunction with the regional campaign, it was only implemented in one of the 12 countries that used the mass media campaign.

Future programs should implement mass media campaigns *in conjunction with* interpersonal outreach as well as community- and national-level advocacy to achieve greater coverage of primary as well as secondary target groups over extended periods. More research is needed to identify minimum or ideal exposure levels for optimum program impact by BCC component, including mass media coverage and interpersonal outreach efforts. Exploring the minimum levels of exposure required to achieve program goals will lead to better results and more cost-effective use of resources in future.

Regional BCC campaigns can be a cost-effective way to reach large numbers of people, but their impact on behavior change is uncertain.

Centralized development of mass media campaigns to address behavioral issues that transcend geographic boundaries allows country programs to access high-quality BCC materials at a fraction of actual costs. Delayed Debut as well as the Trusted Partner regional campaigns were innovative efforts to leverage economies of scale and address common barriers to HIV prevention in sub-Saharan Africa. The campaigns tackled important and previously largely untouched issues using state-of-the-art creative and production techniques. Unfortunately,

whereas the Delayed Debut campaign reached large proportions of urban youth, exposure to the campaign was not associated with increases in abstinence or positive changes in related behavioral determinants.

This raises questions about whether regional approaches are an effective strategy to achieve country-level results. Perhaps the campaign's design was flawed, given that it was based on qualitative research findings that conflicted with quantitative studies conducted later. In other words, the campaign may not have targeted the most salient predictors of abstinent behavior.

The campaign covered too many complex issues: early sexual debut, sexual violence and transactional sex. In addition, the campaign's shortcomings may have been related to the way it was integrated into ongoing social marketing interventions in each country. Countries participating in AIDSMark's regional campaigns made individual decisions as to how best to use campaign materials according to the local context and specific target group behaviors. Implementing countries developed their own media placement plans, which determined appropriate media channels and frequency as population media habits differ in each setting. Future regional campaigns may benefit from greater involvement of country programs in production decisions as well as international oversight of critical implementation issues (such as the extent to which mass media campaigns were linked to interpersonal outreach and community mobilization efforts).

6 Effective Interpersonal Communication: Lessons from India's *Operation Lighthouse*

An Intensive, Theme-based Approach to IPC

Many AIDSMark programs used interpersonal communication (IPC), as well as mass media, to address HIV prevention. IPC is an important health communication channel with demonstrated potential to achieve behavioral results among a variety of target groups that has become a standard intervention strategy. [1] Using one-on-one or small-group settings, IPC interventions tailor communication interactions to build skills, confidence and motivation to adopt new, safer behaviors based on individuals' needs. IPC is often used to reach relatively small and distinct target groups (e.g., injecting drug users or truck drivers), to discuss sensitive topics – which may be less appropriate for television or radio coverage – and to address complex barriers to behavior change (e.g., individual internalization of health risks, social pressure to practice unsafe behaviors). Several studies suggest that the impact of IPC is directly linked to (1) coverage of the target group; (2) quality and consistency of interpersonal messages; and (3) the extent to which IPC approaches are combined with other program elements, including service provision and mass media communication. [2]

This report focuses on the program experiences and research findings from the *Operation Lighthouse* project in India as they relate to IPC, the program's core behavior change strategy. In 2001, with AIDSMark support, PSI/India launched a targeted prevention program to reduce the incidence of sexually transmitted infections (STIs) and HIV among those at greatest risk. Operation Lighthouse was a five-year, $20 million initiative designed to help stabilize HIV prevalence in India by motivating truckers, fishermen, migrant laborers and sex workers to reduce their number of sexual partners, use condoms and learn their HIV status. To achieve these goals, PSI/India implemented an integrated program incorporating IPC, mass media campaigns, targeted condom social marketing and HIV counseling and testing (CT). The program was carefully monitored and evaluated throughout the project period, and exposure to Operation Lighthouse activities was found to have a positive impact on determinants of condom use and HIV testing among the target population. This success was due to a focus on training, frequent exposure to consistent messages and constant monitoring and evaluation. Future programs should seek to learn from and adapt the Operation Lighthouse model where possible, although this model poses challenges outside of an Indian context.

Operation Lighthouse: Program Description

India has the second largest population of HIV-positive individuals in the world. Although national HIV prevalence is estimated to be one percent, prevalence among select high-risk groups, such as sex workers or injecting drug users, is as high as 50 percent.[3] During the program design phase, PSI/India recognized ports as critical, yet underserved, areas with significant populations of males separated from their families. As a result, Operation Lighthouse identified 12 major port communities throughout the country as priority intervention sites to reach men at high risk and female sex workers: Chennai, Goa, Haldia, Kandla, Kochi, Kolkata, Mangalore, Mumbai, Paradip, Tuticorin, Vashi and Vizag. [4]

The main objectives of Operation Lighthouse were as follows:

- Increase knowledge of and demand for STI/HIV prevention products and services among truckers and other high-risk groups in select port communities;
- Improve access to high-quality prevention products and services among truckers and other high-risk groups in select port communities; and
- Improve the environment for a sustainable Indian STI/HIV prevention program.[5]

Intensive, Theme-based Approach to IPC

PSI/India developed an integrated approach to behavior change communication (BCC) that used multiple and overlapping targeted media approaches to deliver focused messages around a single theme. Operation Lighthouse used a variety of interpersonal techniques to reach priority target groups repeatedly with mutually reinforcing, face-to-face messages and participatory activities including one-on-one discussions, small-group discussions, condom demonstrations and community-level "edutainment" activities such as street theater, puppet shows and magic shows. An effective and timely monitoring and evaluation strategy provided valuable evidence used to fine-tune interventions.

Research findings were gathered through an Output Tracking Survey (OTS), a six-month interval monitoring system, allowing the program to gauge movement in output level indicators and level of message recall each month. *

Using the OTS, Operation Lighthouse was able to elicit up-to-date information about target groups and use these data to identify BCC themes that guided and linked interpersonal outreach work and supporting materials. Staff also used a detailed management information system (MIS) to ensure adequate integration of monitoring data and feedback. This system, managed by the core technical support office, helped port staff identify successes and gaps in reaching work plan targets by recording and reviewing daily outreach activities and research findings. Technical support staff reviewed

monitoring reports and OTS data monthly to provide each port with feedback on the uptake of messages and suggestions for program improvement, such as which themes were successful or which target groups needed more outreach focus.

The program changed themes every three to six months to sustain target group interest and prevent IPC staff burn-out. Behavioral themes covered by the program included the following:

- Risk of acquiring HIV/AIDS through unprotected sex with any nonspousal partner;
- Partner reduction as an effective method to prevent STIs and HIV;
- Self-efficacy (skills and confidence) to purchase and correctly use condoms;
- Severity and signs of untreated STIs; and
- Benefits of learning one's HIV status.

PSI/India employed close to 400 interpersonal communicators (IPCs), including street drama performers, to reach 60 percent of priority target

*The OTS utilized three different questionnaires according to the following six-month schedule: In the first two months, the OTS measures message recall; in the third month, the OTS measures attitudes; in the fourth and fifth months, the OTS again measures message recall; and in the sixth month, the OTS measures attitudes and behaviors.

groups six times per year with interactive activities designed to address the abovementioned themes. Operation Lighthouse IPCs were full-time, paid professionals, and many had advanced degrees in social work and/or previous work experience in the non-governmental organization (NGO) sector. Although some of the IPCs working with men who have sex with men and female sex workers were former peers, the program did not use peers on a widespread basis. IPCs were hired on the basis of their communication skills and other relevant qualifications. As paid professionals, Operation Lighthouse IPCs were as committed to program goals as they were qualified to conduct participatory, engaging and entertaining face-to-face sessions. The program employed approximately one IPC coordinator to manage every five IPCs. To maximize coverage of the target groups, coordinators functioned as IPCs as well as supervisors.

The IPCs were organized into three teams, each with a distinct focus. The Integrated Behavior Change Communication team promoted the current HIV prevention theme related to condom use and partner reduction using a range of one-on-one and small-group interactive sessions as well as edutainment activities to increase individual risk perception and address other barriers. The Services Promotion team promoted the benefits of correct STI treatment and learning one's HIV status and encouraged target groups to visit nearby clinics offering these services. HIV and STI services were branded Saadhan, which helped promote the high-quality services among target men. The condom Visibility, Accessibility and Touch-ability team promoted correct condom use through interactive condom demonstrations, edutainment activities and small-group discussions, all of which were designed to destigmatize condoms, emphasize product efficacy and address common misperceptions.

Operation Lighthouse IPCs were trained four times a year to ensure familiarity with themes, build technical knowledge of HIV prevention issues and strengthen overall communication skills, such as body language and voice modulation. Training sessions also provided an opportunity for IPCs from different ports to exchange ideas and support each other. PSI/India hired local training agencies to help translate program themes into IPC messages, activities and supporting materials, including flip charts, educational games, street theatre scripts, brochures and outdoor media such as wall paintings and posters. The cost of each training session was approximately US$8,000, representing an annual training cost of US$32,000.[6]

Results

Operation Lighthouse IPCs reached more than 350,000 high-risk men and women every month. Furthermore, the program achieved its goal of reaching high-risk individuals repeatedly with mutually reinforcing interpersonal messages and participatory activities. Operation Lighthouse IPCs reached each individual trucker or other at-risk male between six and nine times each year. The 2006 evaluation suggested extensive reach of the program, with 85 percent of all truckers surveyed reporting exposure to Operation Lighthouse messages. Results from this survey also indicate that the program's successful targeting of high-risk individuals translated into increased use of condoms, increased use of HIV testing services and reduced barriers to both condom use and HIV testing.*

* All figures cited are statistically significant. Exposure levels were defined as follows: no exposure = not seeing any of the three main IPC activities (interpersonal communications, street theater or condom demonstrations); low-medium exposure = seeing one or two of the three; and high = seeing all three activities during the two years prior to the survey. PSI/India. HIV/AIDS TRaC Study among Truck Drivers, Laborers and Fishermen in Twelve Port Cities (Mumbai, India: November 2006).

Truckers who were exposed to Operation Lighthouse IPC activities were more likely to report an increase in condom use with a nonspousal partner compared to truckers who had not been exposed to program IPC. In addition, truckers with high exposure to the program were more likely to know their HIV status (13 percent) than truckers who had not been exposed to the program (three percent). Unfortunately, the program did not have a similar positive impact on partner reduction. Men with a high exposure to the program were more likely to report sex with nonspousal partners than men who were not exposed. In sum, Operation Lighthouse had a positive impact on motivating condom use and HIV testing behaviors but was unable to motivate truckers and other high-risk men to reduce the number of sexual partners. One possible reason for the increased likelihood of multiple partners among men who reported exposure to Operation Lighthouse lies in the fact that exposure was measured based on message recall. Men practicing high-risk behavior may be more interested in the Operation Lighthouse messages because of the messages' relevance to their lifestyle; therefore, they may have been more likely to recall these messages when surveyed.[7]

Reduced Barriers to Condom Use and HIV Testing and Drawing Blood for HIV Test

For truckers and other high-risk men, exposure to Operation Lighthouse IPC activities was correlated with improved access to condoms and HIV testing services, perceived importance of knowing one's HIV status and confidence in one's ability to use condoms correctly. Specific changes in determinants of condom use and HIV testing among truckers (over time as well as relative to exposure to IPC activities) are documented in the following table.

Changes in Determinants of Condom Use and HIV Testing among Truckers[8]

Determinant	2002 (N=3,370)	2006 (N=5,888)	No Exposure† (n=892)	Low-Med Exposure† (n=2,003)	High Exposure† (n=3,000)
Reports that condoms are always available at the time of sex	15%	19%***	17%	20%	21%***
Reports that he is aware of a place to go for HIV testing services	18%	69%***	38%	65%	83%***
Believes that it is important to get tested for HIV	63%	87%***	77%	88%	90%***
Reports the intention to get tested for HIV	27%	65%***	49%	65%	72%***
Reports feeling comfortable putting a condom on correctly in the dark	37%	45%***	32%	44%	53%***

†Exposure measured for two years prior to survey (2004–2006)
*** Change is significant at the .001 level

Lessons Learned

Frequent exposure to consistent messages affected behavior over time; however, threshold levels of coverage and quality of IPC required to achieve maximum behavioral results have yet to be determined.

While Operation Lighthouse represents one of the most carefully monitored and evidence-based IPC interventions to date, offering rapid feedback on changes in program indicators, OTS research was not designed to pinpoint the threshold level or type of IPC inputs required to achieve behavior change. Secondary analysis of three rounds of survey data revealed a correlation between high exposure to Operation Lighthouse IPC activities and positive changes in behavior. [9] This finding confirms existing data supporting the potential of interpersonal approaches to achieve behavioral results. However, the same analysis was unable to identify specific levels of exposure required to achieve similar results. Aside from knowing that "more is better," significant questions remain regarding the ideal reach, frequency of contact and type of IPC interactions necessary to achieve behavioral results in the most cost-efficient manner.

Without a minimum coverage and quality threshold identified for IPC, HIV prevention programs will struggle to determine adequate duration and frequency of BCC interventions. Evidence suggests that future programs should adopt intensive IPC approaches and aim to reach large numbers of the target population repeatedly with high-quality, participatory, face-to-face activities. In addition, programs should experiment with and carefully evaluate different models of IPC coverage and quality to help identify minimum threshold levels and types of inputs needed to achieve results cost-effectively. Current programs in India are attempting to identify these thresholds, but each country will need to discover its own ideal exposure levels specific to its epidemiologic and cultural context.

The Operation Lighthouse version of a theme-based approach to IPC has benefits as well as risks.

Operation Lighthouse used multiple interpersonal communication channels (e.g., small-group discussions, street theater, condom demonstrations and supporting materials such as brochures and posters) to emphasize a single behavior change theme repeatedly over a three- to six-month period. This model has many advantages. Identifying themes using evidence obtained through careful monitoring and evaluation – as practiced by Operation Lighthouse – enhances the probability of success. Furthermore, using a theme to link similar, mutually reinforcing messages delivered through different channels can increase the likelihood that the target group absorbs key messages.

Costs associated with the theme-based approach include significant time and technical resources required to (1) use research to identify behavioral themes; (2) develop training modules and supporting materials to enable the program to change themes every three to six months;

and (3) train, supervise and provide additional support for IPCs to ensure that they can use new materials appropriately. As discussed earlier in this report, determining an ideal coverage strategy to avoid oversaturation requires technical expertise and other resources that many IPC programs may lack.

One risk of a theme-based approach is that IPCs are too focused on key themes – to the extent that they miss opportunities to respond to individual issues or needs presented during one-on-one or small-group sessions.[10] Operation Lighthouse IPCs might have been able to play a more constructive role in tackling complex behavioral issues, such as motivating high-risk groups to reduce the number of sexual partners, if they had been encouraged to listen more and pass insights from the target group back to managers and trainers.[11] IPC programs should use themes to guide, but not restrict, IPC sessions. By emphasizing and building IPCs' listening skills, future programs can encourage IPCs to respond to issues most relevant to the target audiences by dealing with each individual or small group on a case-by-case basis.

Frequent training of IPC workers can enhance program quality and results.

Operation Lighthouse managers found that quarterly refresher trainings for all IPCs strengthened the quality of their interactions by giving IPCs a range of creative strategies to draw upon when delivering key messages. While the frequency of IPC training used by Operation Lighthouse presents financial and management challenges, it contributed to the program's success. In addition to building IPCs' knowledge of HIV prevention issues and communication skills, regular trainings kept IPCs motivated and committed to the program. The trainings sustained IPC morale and enthusiasm, even when they worked long hours in difficult conditions. An external assessment team described "the frequency and thoroughness of the Operation Lighthouse IPC training to be unique" relative to other programs.[12] Future programs should plan recurring training sessions and regular supervision activities throughout the implementation period to support IPCs. High-quality IPC requires a continuous commitment to training and supervision, which should help identify weak areas for future trainings to address.

Supporting materials need to be carefully developed and regularly updated on the basis of input from target groups.

Operation Lighthouse developed a range of IPC work aids (e.g., flip charts) and consumer take-aways (e.g., brochures) to enhance the quality of each IPC contact and reinforce key messages. Every three to six months, the program produced new materials in 10 different languages to correspond to each behavior change theme. While the level of effort required to achieve this was substantial, the program found that the constant supply of new, high-quality supporting materials helped sustain target group interest and IPC motivation. To ensure that supporting materials are understandable and appropriate for target audiences, future programs should carefully pretest all materials with members of the target audience and use local-language translators. In addition, future programs should use highly illustrated print materials and avoid overusing text when working with low-literacy audiences.

Flip charts and other work aids for IPCs should be introduced during training sessions so that IPCs can practice before using them. Including sample discussion questions on the back of flip charts and other materials may increase the likelihood that materials will be used correctly. Finally, as discussed earlier, IPCs should be encouraged to use supporting materials as a guide to help them respond to each individual's or small group's unique needs.

Despite the success of Operation Lighthouse in India, replicating the program in other contexts poses challenges.

Certain characteristics of Operation Lighthouse implementation pose challenges for scale-up or replication in other countries. One of the primary factors contributing to the success of the program was the high level of education that all 400 IPCs had completed. In addition, each IPC was a paid full-time employee who received extensive training four times per year. Typically, HIV prevention programs do not have sufficient budgets to retain large paid full-time staffs. Furthermore, access to that many college-educated workers who are interested in full-time outreach work is rare in many developing country settings.

However, other Operation Lighthouse program elements can be considered best practices, and can be applied to interpersonal communication programs globally. Such practices include reaching individual target group members multiple times; basing program activities on regular monitoring and evaluation to track specific behavioral indicator movement; maximizing the use of structured, participatory exercises; regularly changing HIV message themes to avoid message fatigue and to meet the HIV prevention needs of target groups; continuously providing IPC refresher trainings; and effectively linking health communication activities with branded STI and CT service promotion.

Conclusion

Over a ten year period, AIDSMark enabled PSI and its partners, DKT international, PATH, International Center for Research on Women, Family Health International, International Planned Parenthood Federation, and Management Sciences for Health to scale up, intensify and develop new, innovative social marketing interventions for HIV/AIDS prevention. Approximately 60 country programs benefited from AIDSMark support for expanded HIV prevention programming and related capacity building initiatives. Few global HIV prevention programs have achieved results of AIDSMark's magnitude and quality. These achievements are largely due to the project's contributions to improved local capacity to conduct robust research studies, analyze epidemiological and market data, design evidence-based marketing and communication strategies and follow business-like management practices.

Both the epidemic and programmatic strategies to minimize its impact have evolved since AIDSMark began in 1997. While a handful of countries have demonstrated success in stabilizing prevalence rates, an estimated 60 million more infections will occur worldwide by 2015.[1] Access to antiretroviral therapy, although still limited, is a reality in many countries. Proven prevention strategies, such as condom social marketing, have been scaled up and balanced with efforts to motivate abstinence and fidelity. New approaches to prevention, such as HIV counseling and testing, have been established. Furthermore, the evidence base has expanded: since 1997, the number of peer-reviewed studies relevant to social marketing has quadrupled and expanded beyond family planning and child survival to include a distinct focus on HIV prevention.

As the papers included in this report demonstrate, AIDSMark program experiences and research findings contributed to these advances. During a ten year period, AIDSMark generated provocative ideas and new approaches as well as support for previously established best-practices. Lessons from AIDSMark highlight the importance of investing in targeting, partnerships, evaluation and continual innovation. More specifically, the project demonstrated the following strengths and limitations of social marketing for HIV prevention:

- Improving access to male condoms requires a combination of distribution strategies based on local market opportunities and target group needs. In addition to leveraging established commercial distribution channels, social marketing programs should develop networks of non-traditional sales outlets that are convenient and preferable to high risk groups, such as bars and street vendors.
- Investments in social marketing of the female condom are warranted in light of potential to make contributions to the proportion of sex acts that are protected, and successful interventions in countries as diverse as Zimbabwe and Myanmar.
- Increasing the use of CT services requires multiple service delivery models (i.e. stand alone centers dedicated to CT delivery, integrated sites developed with partner organizations, and mobile services), continuous demand creation communication, regular service provider trainings and greater access to post-test support services.

- Whereas mass media alone is not sufficient to achieve behavior change, evidence-based, branded cam paigns can be a cost-efficient channel to disseminate key messages, influence social norms and promote abstinence and fidelity as well as consistent condom use.
- Regional mass media campaigns may be a cost-effective strategy to reach large numbers of people with international quality productions, although their impact at the country level is uncertain.
- The quality and impact of interpersonal outreach can be enhanced by a theme-based approach whereby key messages, participatory exercises and supporting materials are updated several times a year to address behavioral determinants identified through research.
- Outsourcing to competent third-party organizations can be cost-effective, especially in the areas of warehousing, product distribution, advertising and service delivery training. Social marketing organizations should proactively establish working relationships with commercial, non-profit and governmental partners to enhance program efficiency.
- Additional research is needed to identify (1) threshold levels of BCC coverage and intensity, by channel, needed to achieve optimal behavioral results; (2) the marginal cost per high risk sex act protected by female condom use; (3) long-term behavioral impact of CT on those who test HIV negative; (4) determinants of HIV risk behaviors in developing country contexts; and (5) better measures of social marketing program exposure, equity and impact.

Leveraging these lessons to stop HIV/AIDS before another ten-year period passes will require increased public commitment, funding and scaled-up prevention interventions. In spite of the advances of AIDSMark and other global, national and local HIV/AIDS control efforts – the epidemic continues to have severe consequences on the health and socio-economic welfare of communities around the world. Continued focus on prevention is essential, especially as access to AIDS treatment expands. For every patient who initiated antiretroviral therapy in 2006, six other individuals became infected with HIV.[2] A new generation of large-scale, long-term HIV prevention programming is needed to sustain best practices, scale up emerging models and translate the lessons from AIDSMark into sector-wide innovation.

References

AIDSMark: A Decade of Innovative Marketing for Health

1. Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), "WHO and UNAIDS Issue New Guidance on HIV Testing and Counseling in Health Facilities," www.who.int/mediacentre/news/releases/2007/pr24/en/index.html
2. Global HIV Prevention Working Group, "Bringing HIV Prevention to Scale: An Urgent Global Priority", (Bill and Melinda Gates Foundation, Seattle, Washington, June 2007).

1 The Evolution of Social Marketing Research

1. S. Chapman, "Evaluating social marketing interventions," in M. Thorogood and Y. Coombes, eds., *Evaluating Health Promotion*, 2nd ed. (Oxford: Oxford University Press, 2004); S. Chapman and H. Astatke, *The Social Marketing Evidence Base* (Washington, DC: Population Services International), 2003.
2. Population Services International, "PSI Research Scorecard", (2007) <www.psi.org/research/scorecard/PSI_Research_Scorecard_Current.pdf>.
3. Y. Coombes and S. Chapman, Project TRaC: *Tracking Results Continuously Concept Paper* (Washington, DC: Population Services International, 2003).
4. S. Chapman, V. Capo-Chichi, K. Longfield, and B. Piot, "Project MAP: Measuring Access and Performance, Lessons Learned and Recommendations" (concept paper, Population Services International Research Division, Washington, DC, 2004).
5. S. Chapman, H. Astatke, K. Longfield, R. Smith, K. Hawkins, B. Rolfe, and N. Price, "Project FoQus: A Framework for Qualitative Research in Social Marketing" (concept paper, Population Services International Research Division, Washington, DC, 2006).
6. S. Chapman, "Evaluating social marketing interventions."
7. D. Patel and S. Chapman, *PSI Behavior Change Framework: Proposed Revision* (Washington, DC: Population Services International, 2004).
8. K. Longfield, M. Klein, and J. Berman, *Multi-country Study on Trusted Partners among Youth: Eritrea, Tanzania, Zambia, and Zimbabwe* (working paper, Population Services International, Washington, DC, 2002).
9. J. Raharinjatovo, D. R. A. Patel, J. White, G. Morgan, and N. Hobby, *Using PDAs for Data Collection: Lessons Learned and Recommendations* (working paper, Population Services International Research Division, Washington, DC, 2006).

We would also like to acknowledge the following articles as contributing to this publication.

A. R. Andreasen, Backward Marketing Research. In A. R. Andreasen, Marketing Research That Won't Break the Bank: A Practical Guide to Getting the Information You Need (San Francisco: Jossey-Bass, 2002).

A. R. Andreasen, Marketing social marketing in the social change marketplace. Journal of Public Policy and Marketing 21(1)(2002):3–13.

M. Barberis and P. D. Harvey, Costs of family planning programmes in fourteen developing countries by method of service delivery. Journal of Biosocial Science 29 (1977):219–233.

T. R. Black and P. D. Harvey, A report on a contraceptive social marketing experiment in rural Kenya. Studies in Family Planning 21 (1989):267–277.

S. Chapman and H. Astatke, The Social Marketing Evidence Base (Washington, DC: Population Services International, 2003).

J. Davies, S. N. Mitra, and W. P. Schellstede, Oral contraception in Bangladesh: Social marketing and the importance of husbands. Studies in Family Planning 18(3) (1987):157–168.

J. Davies and T. D. J. Louis, Measuring the effectiveness of contraceptive marketing programs: Preethi in Sri Lanka. Studies in Family Planning 8(4) (1977):82–90.

P. D. Harvey, The Impact of Condom Prices on Sales in Social Marketing Programs. Studies in Family Planning 25(1) (1994):52–58.

2 Making a New Start: Marketing and Franchising HIV Counseling and Testing

1. P. Glick, *Scaling up HIV Voluntary Counseling and Testing in Africa: What Can Evaluation Studies Tell Us About Potential Prevention Impacts?* Strategies and Analysis for Growth and Access (SAGA) Working Paper (Thousand Oaks, CA: Sage Publications, March 2005).
2. Lance S. Weinhardt, Michael P. Carey, Blair T. Johnson, and Nicole L. Bickham, "Effects of HIV Counseling and Testing on Sexual Risk Behavior: A Meta-Analytic Review of Published Research, 1985–1997," *American Journal of Public Health* 89(9) (September 1999):1397–1405.
3. The Voluntary HIV-1 Counseling and Testing Efficacy Study Group. "Efficacy of Voluntary HIV-1 Counselling and Testing in Individuals and Couples in Kenya, Tanzania and Trinidad: A Randomized Trial." *The Lancet* 356 (July 8, 2000): 103–112.
4. Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), "WHO and UNAIDS Issue New Guidance on HIV Testing and Counseling in Health Facilities," <www.who.int/mediacentre/news/releases/2007/pr24/en/index.html>
5. P. L. Hutchinson and X. Mahlalela, "Utilization of Voluntary Counseling and Testing Services in the Eastern Cape, South Africa," *AIDS Care* 18(5) (July 2006): 446–455.
6. Knut Fylkesnes and Seter Siziyar, "A Randomized Trial on Acceptability of Voluntary HIV Counselling and Testing," *Tropical Medicine and International Health* 9(5) (May 2004): 566–572.
7. J. Stover, L. Bollinger, and K. Cooper-Arnold, *Goals Model for Estimating the Effects of Resource Allocation Decisions on the Achievement of the Goals of the HIV/AIDS Strategic Plan* (Washington, DC: The Futures Group, 2003). The specific use of the $27 estimate was based on the analysis completed by Michael Sweat (see note 8), which concluded that the cost of voluntary counseling and testing (VCT) in Kenya was $26.65 per client.
8. M. Sweat, S. Gregorich, G. Sangiwa, C. Furlonge, D. Balmer, C. Kamenga, O. Grinstread, and T. Coats, "Cost-effectiveness of Voluntary HIV-1 Counseling and Testing in Reducing Sexual Transmission of HIV-1 in Kenya and Tanzania," *The Lancet* 356 (July 8, 2000): 113–121.
9. Population Services International, Annual Unit Cost Analysis, 2005. Average unit cost figure includes local as well as international costs associated with providing a single client with high-quality CT for HIV.
10. PSI Sales and Health Services Reports, 2005, 2006, and 2007.
11. PSI/Zimbabwe, "HIV TRaC Study Evaluating the Use of Voluntary Counseling and Testing Services among Urban Youth," 2005. Exposure levels were defined as follows: some exposure = seeing at least one campaign; high exposure = seeing three or more campaigns.
12. C. Farquar, J. N. Kiarie, B. A. Richardson, F. N. John, R. W. Nduati, D. A. Mbori-Ngacha, and G. C. John-Stuart, "Antenatal Couple Counseling Increases Uptake of Interventions to Prevent HIV-1 Transmission," *Journal of Acquired Immune Deficiency Syndrome* 37(5) (December 15, 2004): 1620–1626.
13. K. Hatzold, D. Joseph, and L. Czerwinski, *Cost-effectiveness Analysis of HIV Counseling and Testing (CT) Service Delivery Methods in Zimbabwe,* PSI Research Division Working Paper (preprint, Population Services International, Washington, DC, 2007).
14. PSI/Zimbabwe, *Zimbabwe (2005): HIV TRaC Study Evaluating the Use of Voluntary Counseling and Testing Services among Urban Youth, Second Round,* Social Marketing Research Series (Population Services International, Washington, DC, June 2005). Results cited are significant at the level $p < .01$.
15. D. Joseph, S. Rosenstock, K. Richter, and S. England, *Evaluation of the Effectiveness of a Multi-Country Social Marketing Program for Increasing Demand for VCT,* PSI Research Division Working Paper (preprint, Population Services International, Washington, DC).
16. PSI/Zimbabwe, *Zimbabwe (2005).* Results cited are significant at the level $p < .01$.
17. Target Research, *Feasibility Assessment of Routine Offer of HIV Testing at Murambinda Pilot Site* (June 2007).
18. PSI/Zimbabwe, "Monthly Health Services Report" (July 2007).
19. Joseph et al., *Evaluation of the Effectiveness of a Multi-Country Social Marketing Program.*

3 As Accessible as Coke: Case Studies of PSI's Condom Distribution Programs

1. Joint United Nations Programme on HIV/AIDS (UNAIDS), *Position Statement on Condoms and HIV Prevention* (Geneva, Switzerland: UNAIDS, July 2004).
2. Federal Ministry of Health/National AIDS/STI Control Program (NASCAP) [Nigeria], *National HIV Sero-prevalence Sentinel Survey* (Abuja, Nigeria: Federal Ministry of Health, 2005).
3. Ibid.
4. World Bank, "Nigeria Fact Sheet" (July 2006).

5. T. Benson, "Youth Intervention on STDs/HIV/AIDS in Tertiary Institutions in Nigeria: A Case Study of Prevent AIDS Society (PAS)," presented at the International AIDS Conference in Barcelona, Spain, July 7–12, 2002; 14: abstract no. F12083.
6. National Agency for the Control of AIDS (NACA), *Nigeria: HIV/AIDS Country Report 2005 Preview* (December 2005).
7. NASCAP, *National HIV Sero-prevalence Sentinel Survey*
8. Ibid.
9. SFH, *National Behavioral Surveys 1 and 2: Brothel Based Sex Work in Nigeria* (Abuja, Nigeria: SFH/Nigeria, September 2001 and January 2004).
10. DKT International, 2006 Contraceptive Social Marketing Statistics (Washington, DC: DKT International, August 2007).
11. National Agency for Food and Drug Administration and Control (NAFDAC).
12. Population Services International, "2005 PerFORMance Review," 2006, <www.psi.org/research>. All figures cited are statistically significant.
13. Ibid.
14. UNAIDS, "Dominican Republic Data", (2006).
15. Dirección General de Enfermedades de Transmision Sexual y Otras ITS (DIGECITSS), *Encuesta de Seroprevalencia de la Infección VIH Basadas en Puestos Centinelas* (Santo Domingo, 2005).
16. Julia Hasbun and Tracey Tuyen, *Final Evaluation Report: Condom Social Marketing Project for Pantè Condoms in the Dominican Republic* (evaluation report, Santo Domingo, Dominican Republic, August 2007).
17. Ibid.
18. Horwath Consulting, *Store Audits* (2004–2006).
19. Population Services International and Horwath Consulting,TRaC *Survey among Sex Workers in the Dominican Republic* (Santo Domingo, 2006).
20. PSI/Dominican Republic, "MAP survey" (unpublished data, Population Services International, 2006).
21. Hasbun and Tuyen, *Final Evaluation Report*
22. Horwath Consulting, *Store Audits.*
23. Hasbun and Tuyen, *Final Evaluation Report.*

4 Female Condom Social Marketing: Innovative Programming in Myanmar and Zimbabwe

1. G. Vijayakumar, Z. Mabude, J. Smit, M. Beksinska, and M. Lurie, "A Review of Female Condom Effectiveness: Patterns of Use and Impact on Protected Sex and STI Incidence," *International Journal of STD and AIDS* 17(10) (October 2006):652–659.
2. Personal communication with Guy Stallworthy, formerly of PSI/Myanmar, October 15, 2007.
3. Personal communication with Habibur Rahman, PSI/Myanmar, August 9, 2007.
4. Personal communication with Sam Connor, PSI/Myanmar, June 19, 2007.
5. S. Gibson, W. McFarland, D. Wohlfeiler, K. Scheer, and M. H. Katz, "Experiences of 100 Men Who Have Sex With Men Using the Reality Condom for Anal Sex," *AIDS Education and Prevention* 11 (1998):65. Though the female condom has not been specifically approved for anal sex, studies have documented MSM using the female condom as early as 1998. There are no published studies documenting the efficacy of the female condom in preventing HIV transmission.
6. PSI/Myanmar, Feel *Female Condom Marketing Plan* (2003–2004).
7. INNOVAIDS, PSI, and the Female Health Foundation, *Lessons Learned: Female Condom Programming Experiences in Asia and the Pacific,* (Washington DC, Population Services International, 2005).
8. Ibid.
9. PSI/Myanmar, *Summary Info on feel Female Condom: Results from Targeted Surveys Among Commercial Sex Workers in Myanmar, 2004–2006.* (Washington, DC: Population Services International, 2007). All figures cited are statistically significant. Because PSI/Myanmar did not collect survey data among MSM until 2006, trend analysis is not yet possible for this group.
10. Ibid.
11. Ibid.

12. PSI/Myanmar, *HIV/AIDS Baseline Tracking Survey: MSM & MSW from Yangon and Mandalay,* (Washington, DC: Population Services International, March 2006).
13. Central Statistical Office [Zimbabwe] and ORC Macro, *2005–2006 Zimbabwe Demographic and Health Survey* (Calverton, MD: Central Statistical Office and ORC Macro, 2007).
14. PSI/Zimbabwe, "Knowledge, Attitudes and Practices Survey", (first report, Population Services International, 2001).
15. PSI/Zimbabwe, "Hair Salon Initiative: Impact Assessment", (Population Services International, 2004).
16. Ibid.
17. PSI/Zimbabwe sales data.
18. PSI/Zimbabwe, *Hair Salon Initiative.*
19. PSI/Zimbabwe, "Final Report: Evaluation of the Hair Salon Promotion", (Population Services International, 2002).
20. Personal communication with Kumbirai Chatora, PSI/Zimbabwe, September 9, 2007.
21. PSI and InnovAIDS, *Lessons Learned: Female Condom Programming Experiences in Asia and the Pacific* (Washington, DC: Population Services International, 2006).
22. PSI/Myanmar, "HIV/AIDS Baseline Tracking Survey".
23. PSI/Zimbabwe, "Hair Salon Initiative Impact Assessment".
24. Ibid.
25. Ibid.
26. PSI/Zimbabwe, *Final Report: Evaluation of the Hair Salon Promotion.*
27. Personal communication with Kumbirai Chatora, PSI/Zimbabwe, September 4, 2007.

5 Changing Behavior through Social Marketing for HIV Prevention

1. Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), *AIDS Epidemic Update* (Geneva, Switzerland: UNAIDS and WHO, 2006).
2. Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya], and ORC Macro, *Kenya Demographic and Health Survey 2003* (Calverton, MD: CBS, MOH, and ORC Macro, 2004).
3. Ibid.
4. Population Services International, *Kenya 2005: HIV/AIDS TRaC Study Evaluating Abstinence among Urban Youth* (Washington, DC: Population Services International, 2006). All statistics mentioned are statistically significant.
5. Ibid.
6. Ibid.
7. Ibid.
8. MOH [Uganda] and ORC Macro, *Uganda HIV/AIDS Sero-Behavioral Survey 2004–2005* (Calverton, MD: Ministry of Health and ORC Macro, 2006).
9. N. Luke and K. M. Kurz, *Cross-generational and Transactional Sexual Relations in Sub-Saharan Africa: Prevalence of Behavior and Implications for Negotiating Safer Sexual Practices* (Washington, DC: ICRW, 2002).
10. T. Rukandema and A. Namusoke, *Uganda Cross Generational Sex Pilot Program Report* (Kampala, Uganda: PSI/Uganda, 2005).
11. Ibid.
12. Population Services International, *Evaluating the Impact of the Cross-Generational Sex Program among Female University Students in Kampala, Uganda* (Kampala, Uganda: PSI/Uganda, 2005).
13. U.S. Agency for International Development (USAID), "What Happened in Uganda?" synthesis of presentations to USAID, February 2002; and E. Pettifor et al., "Early Age of First Sex: A Risk Factor for HIV Infection Among Women in Zimbabwe," AIDS 18(10) (2004): 1435–1442.
14. J. Berman, J. Greene, and K. Richter, *Barriers to Delayed Sexual Debut among Youth in Eight African Countries* (Washington, DC, Population Services International, 2007).
15. Population Services International, *Development and Dissemination of Regional Behavior Change Communication Campaign to Address Delaying Sexual Debut in Africa* Washington, DC, Population Services International, September 2004.
16. T. Adjimon, *Evaluation de la Campagne* Plus Tard, Plus Sur: *Rapport Final* (Benin: Population Services International, 2006).

17. Population Services International, "Draft Evaluation Tables: Delayed Debut Analysis: Benin" (unpublished data, Population Services International, 2007).
18. Ibid.
19. Rukandema and Namusoke, *Uganda Cross Generational Sex Pilot Program Report*.
20. K. Longfield, A. Glick, M. Waithaka, and J. Berman, *Cross-Generational Relationships in Kenya: Couple's Motivations, Risk Perception, STIs/HIV and Condom Use,* AIDSMark Report Series (Washington, DC: Population Services International, 2003).
21. H. Kirstan, F. Mussá, and S. Abuxahama, *"Milking the Cow": Young women's constructions of identity, gender, power and risk in transactional and cross-generational sexual relationships: Maputo, Mozambique,* PSI First Report (Maputo, Mozambique: Population Services International, March 2005).

6 Effective Interpersonal Communication: India's Operation Lighthouse Program

1. J. Kelly, "Letter to the Editor: Community-level Interventions Are Needed to Prevent New HIV Infections," *American Journal of Public Health* 89(3) (March 1999):299–301.
2. D. Wilson, *External Assessment of PSI Youth Sexual Health Programme: Cameroon, Madagascar and Rwanda* (Washington, DC: Population Services International, April 2002).
3. PSI/India, *Breaking Barriers: An Integrated Approach to Targeted Interpersonal Communications Case Study* (Population Services International, December 2004).
4. E. Putnam, S. Epstein, N. Lowenthal, and R. Roy, "Assessment of Operation Lighthouse", (report submitted to USAID/India, March 2005).
5. Ibid.
6. PSI/India, *Breaking Barriers.* Note that these estimates include the costs of trainers, travel (for trainers and IPCs) and the development of supporting materials.
7. PSI/India, HIV/AIDS TRaC *Study among Truck Drivers, Laborers and Fishermen in Twelve Port Cities,* Social Marketing Research Series (Population Services International, Mumbai, India, November 2006). All figures cited are statistically significant. Exposure levels were defined as follows: no exposure = not seeing any of the three main IPC activities (interpersonal communications, street theater or condom demonstrations); low-medium exposure = seeing one or two of the three; and high = seeing all three activities during the two years prior to the survey.
8. Ibid.
9. Ibid.
10. Ibid.
11. PSI/India, *Breaking Barriers*
12. Personal communication with Sanjay Chaganthi, *Operation Lighthouse* program director, July 2007.
13. Putnam, Epstein, Lowenthal, and Roy, *Assessment of Operation Lighthouse.*

Conclusion

1. Global HIV Prevention Working Group, "Bringing HIV Prevention to Scale: An Urgent Global Priority", (Bill and Melinda Gates Foundation, Seattle, Washington, June 2007).
2. Ibid.

The mission of PSI is to measurably improve the health of poor and vulnerable people in the developing world, principally through social marketing of family planning and health products and services, and health communications.

Social marketing engages private sector resources and uses private sector techniques to encourage healthy behavior and make markets work for the poor.

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