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The Role of Social Marketing Organizations in Strengthening the Commercial Sector: Case Studies for Male Condoms in Myanmar and Viet Nam

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Abstract

Background: Condom social marketing has been critical to sexual health programs in the developing world. The discipline has matured and social marketers are now applying a total market approach (TMA) to fill market gaps, satisfy unmet need, and increase commercial sector engagement. This paper presents case studies from Myanmar (PSI/M) and Viet Nam (PSI/V), examines the effectiveness and efficiency of their condom markets for reaching key populations at risk for HIV, and presents actions taken to strengthen the commercial sector.

Methods: Access figures came from retail audits, routine data, and UNAIDS. Condom use data were from behavioral surveys. Data for SES profiles were from behavioral surveys and a national survey.

Results: The Myanmar market was relatively effective, but not efficient. Condom access and use improved, but wealthier populations benefited from subsidized condoms. To strengthen the commercial sector, PSI/M helped the public sector decrease the number of free condoms sold on the market, endorsed two commercial brands, and improved pricing. Commercial market share improved and PSI/M adopted a cost-recovery strategy. In Viet Nam, efforts focused on hotels/guesthouses and improved targeting for subsidized condoms. PSI/V also integrated a commercial brand into targeted hotel/guesthouse distribution and promoted it to populations with ability to pay. More hotels/guesthouses stocked condoms and decreased their reliance on subsidized commodities.

Conclusions: Social marketers can increase health impact by strengthening commercial sector contributions to public health priorities. Examples from Myanmar and Viet Nam demonstrate how such actions can transform a market and engage private sector players to improve health outcomes.

Keywords: Social marketing, Condoms, HIV, Program sustainability, Commercial sector, Myanmar, Vietnam

Introduction

For more than 50 years, public health practitioners have been working to improve sexual health outcomes globally. Some of the most established programs have been in family planning and have offered couples modern contraception to help them avoid unplanned pregnancy. While there have been improvements over time, more than 222 million women continue to have an unmet need for family planning, with the greatest need concentrated in the 69 poorest countries.[1] Since the 1980s, practitioners have also focused on HIV/AIDS and have targeted prevention programs at key populations at risk for infection. While there has been a decline in new infections and AIDS deaths, there are still 35.2 million people living with HIV. Condoms are an integral component of both types of programming: when used correctly and consistently, condoms are effective for preventing pregnancy and the sexual transmission of HIV.[2,3]

Social marketing is a common strategy that practitioners use. It uses marketing concepts, such as product design, appropriate pricing, sales and distribution, and communications, to influence behaviors that benefit individuals and communities for the greater good.[4] Condom social marketing interventions are one of the most important components of sexual health programs in the developing world. Currently, more than two billion socially marketed condoms are distributed each year and condom social marketing is present in 66 countries across the globe.[5]

This paper presents two case studies that describe how a social marketing organization used an improved and total market approach (TMA) to strengthen the commercial sector for condoms. We describe the organization's role in the Myanmar and Viet Nam markets over time, identify how effective and efficient those markets were, and describe the actions each country office took to support the commercial sector and improve the effectiveness and efficiency of their condom markets.

Background

Social Marketing

The origins of condom social marketing can be traced back to the 1960's when the government of India expanded the availability of family planning methods, with a focus on condoms.[6,7] After the discovery of HIV/AIDS in the 1980's, most condom social marketing efforts focused on HIV prevention.[8,9] In recent years, the social marketing community, donors, and other stakeholders have questioned the financial sustainability of such programs and are asking whether programs are as effective and efficient as they can be. Traditional social marketing approaches, like the "manufacturer's model" and the "NGO model," are under increased scrutiny for their ability to reach those most in need and, at the same time, promote sustainability.

The manufacturer's model is defined as a partnership between a social marketing

organization and one or more commercial manufacturers. In exchange for demand creation efforts, manufacturers agree to lower prices and devote more of their efforts to producing products with a social benefit.[10] Because the manufacturer's model supports the commercial sector, "crowding out" has not been a concern. When done well, it has created a more equitable and sustainable market by shifting wealthier individuals to commercial products while reserving public sector commodities for the poor.[11] The Social Marketing for Change (SOMARC) project in the 1980's and 1990's successfully implemented the manufacturer's model in several countries and graduated contraceptive products, including condoms, from donor assistance to commercially viable products.[12-14] Similarly, the Blue Circle campaign under the Private Sector Family Planning project (PSFP) in Indonesia increased the provision of modern contraception through the commercial sector during the same time period.[15]

The NGO model focuses on achieving health impact and serving the poor, not on securing financial return. The NGO model is a subsidized model and has historically been the preferred social marketing approach to reach the truly poor. Multi-lateral subsidies have supported the majority of such programs, especially in developing contexts. And, while there has been a heavy reliance on subsidy, the benefit of the approach has been greater control over the full marketing mix, primarily because social marketers often created and managed the brands, rather than allowing commercial manufacturers to do so.[10] The majority of programs aimed to increase overall population access to condoms, either through fully or partially subsidized commodities, and to increase use. Several studies have found that the NGO model successfully achieved those objectives,[16-20] but there has been concern that subsidized condom programs do not foster the appropriate marketing mix because the commercial sector is crowded out, and, as donor funds shrink, programs are not sustainable.[21,22]

Total Market Approach

Debates about sustainability, effectiveness, and efficiency have influenced the development of a total market approach (TMA), also known as the "whole market approach," which some argue is central to the future of social marketing.[23,24] Core to the concept of TMA is improved market segmentation. Richard Pollard defined TMA as a system in which all sectors, public, social marketing, and commercial, are integrated within one "market" that is segmented by willingness to pay.[24] Applying a TMA also means understanding the dynamics of supply and demand so that all sectors can work together to deliver health choices for all population segments. While it is important to meet the needs of each market segment, social marketers should do so in an effective and efficient manner. The goal is to ensure that those in need are reached with the appropriate products; this usually means that those in the poorest communities receive free products, those with slightly greater resources benefit from partially subsidized products, and those with a greater ability to pay are encouraged to purchase products from the commercial sector. Greater efficiency in the market is more likely to increase sustainability by better targeting public and social sector subsidies and decreasing "crowding out" of the commercial sector.[25,26]

The literature suggests that for a TMA to be successful, the following processes should be in place: 1) engagement between the public, social marketing, and commercial sectors; 2) planning for total market coverage, which includes input from all three sectors; and 3) the capacity to regulate the market, such as quality controls, regulations, and enforcement mechanisms. In addition, TMA strategies should focus on improvements to any combination of the following measures of effectiveness and efficiency over time; 1) access to condoms or

condom use (generally), 2) the degree to which the poor or those at increased risk use condoms, and 3) subsidy, the extent of donor or government funding supporting condom supply. Finally, there should be a change in sector distribution by wealth. For equity to exist, the commercial sector should be serving at least a portion of the top quintiles and the social marketing brands and the public sector should be serving the lower quintiles.[25,27,28]

The concepts of TMA are appealing to social marketers, donors, and other stakeholders, especially as donor budgets shrink and funds to support the NGO model decline. A number of initiatives have been implemented in recent years. Among those documented, most have been focused on family planning.[25,29-37]

There have also been TMA applications for strengthening condom markets with a focus on HIV. For example, social marketers explored cost recovery strategies for condom distribution in Cambodia, and the role of subsidies and free condoms in eleven sub-Saharan African countries.[26,27] There have also been initiatives to understand the impact of free commodities on socially marketed condoms in the Ivory Coast and methods for achieving a sustainable regional condom market in the Caribbean.[25,38,39]

While many TMA initiatives have focused on improvements in the public and social marketing sectors, examples of how the two sectors can collaborate with the commercial sector to improve market effectiveness and efficiency have not been well documented in the peer-reviewed literature. Strengthening the commercial sector is important because it lays the groundwork for future market growth and offers higher quality products to those in need. It also opens up the market for competition within the commercial sector, which can lower prices and decrease out-of-pocket expenditures on commodities for consumers. This is especially important in developing countries where the largest proportion of household health expenditures occur in the private sector. Social marketers working more effectively with both the public and commercial sectors will ultimately bring the market closer to meeting the needs of each population segment and result in sustainable solutions for the provision of products and services.[40]

While these TMA concepts are important, there are other factors that can influence social marketers' actions, like the strength of the economy, local infrastructure, and the stage of development for each country's condom market.[21,25] Social marketers must also consider their own resources and competencies; for example, whether they have the skills, manpower, money, and leverage to improve the markets in which they operate. At the very least, social marketers should do no harm to the market; practices such as using subsidized products or donor funds to undercut commercial prices, stealing market share away from the commercial sector, claiming the same positioning as the commercial sector, or competing with for-profit brands are very likely to harm the commercial market. Instead, social marketers should seek to grow the product category (condoms), and when needed, work with the public sector to ensure that it also does not hamper the growth of the commercial sector.

Population Services International

Population Services International (PSI) is a global health organization that has socially marketed condoms for more than 40 years. Its mission is to make it easier for people in the developing world to lead healthier lives and plan the families they desire by marketing affordable products and services. PSI has programs in 69 countries, 53 with a focus on HIV. Among these, 45 countries have condom social marketing programs.

PSI has mostly implemented the NGO model to satisfy latent demand for condoms that neither

the public or commercial sector could meet. This was done by selling subsidized products through commercial sector distribution channels, such as pharmacies or kiosks, and by promoting those products through communication channels, like mass media, community meetings, or interpersonal communications. In the beginning, the organization promoted its own socially marketed product brands more than the overall condom category. In many cases, PSI captured the majority of market share and became the condom category, with consumers using local PSI product names as generic terms for condoms.

PSI's shift to TMA happened gradually and for a number of reasons. In markets where socially marketed products had dominated the condom category for an extended period of time, it became clear that there was not an appropriate marketing mix and that PSI was probably crowding out the commercial sector. It was also clear that PSI could do more to help strengthen the public sector. In other countries, and particularly in an era of shrinking budgets, donors encouraged the transition from the NGO model to a TMA model as a way to either reduce or better target subsidy and increase program sustainability.

Methods

Study Design

We present two case studies to understand how working with the commercial sector can improve the effectiveness and efficiency of male condom markets. The case study descriptions below provide background for the Myanmar and Viet Nam condom markets and present our measurement approach. In the results section, we examine the effectiveness and efficiency of each market before, during, and after the TMA interventions.

Both case studies were retrospective and relied on analysis of secondary data. Informed consent was obtained for all data collected from human subjects. PSI's Research Ethics Board reviewed the 2010 studies in Myanmar. In Viet Nam, the Institutional Review Board in Biomedical Research reviewed the 2010 and 2012 studies. In both Myanmar and Viet Nam, the target populations were female sex workers (FSW) and male clients (MC) of female sex workers.

Case Study Descriptions

Case Study 1: Myanmar. Myanmar is a low-income country that has more recently entered into a period of rapid economic expansion.[41] Recent political reforms have attracted global business and brands, such as Coca-Cola, which have reentered the market and have started to strengthen the commercial sector. While some commercial condom brands have entered the market in recent years, their presence has been negligible. HIV transmission in Myanmar occurs primarily through high-risk sexual contacts between FSW, MC, and men who have sex with men (MSM), and the sexual partners of these key populations. Sentinel surveillance data from 2011 revealed the HIV prevalence for each population: FSW (9.4%),[42] MC (2.3% - 3.5%),[43] and MSM (7.8%).[42] For the purposes of this paper, we focused primarily on FSW and MC.

Since 1996, PSI has implemented a national condom social marketing program in Myanmar, through the subsidized sale and distribution of "Aphaw" ("Trusted partner")-branded condoms. There are four types of Aphaw; regular, scented, studded, and ultra thin. All are sold in pharmacies, retail shops, kiosks, and outlets near

brothels. Target populations for Aphaw are in line with the epidemic: FSW, MC, and MSM. When PSI/M launched Aphaw, there were few condom brands on the market, no advertising campaigns to promote condoms, and there was no targeting of key populations at risk. By 2003, reported levels of consistent condom use among FSW and MC were still less than optimal: 64% of FSW reported using condoms with all of their clients during the last week and 49% of MC reported using condoms during their last five commercial sexual encounters.[42,43] Access to condoms was also an issue. Retailers were reluctant to sell condoms because of the stigma associated with the product, commercial sex, and HIV/AIDS. The social marketing sector could correct this market deficiency by offering a highly subsidized condom through commercial outlets and national mass media campaigns, a classic example of the NGO model.

In recent years, subsidized condoms have dominated the Myanmar condom market. Fully subsidized (free) condoms were a third of the market in 2009.[44] The National AIDS Programme and a group of non-governmental organization (NGO) partners distributed free, unbranded condoms directly to consumers in drop-in-centers, through peer educators, gatekeepers at brothels, and in massage parlors and karaoke venues. Partially subsidized Aphaw condoms were 53.6% of the condom market in 2009.[44] There was also evidence that "free" condoms had leaked into the market and were being sold to consumers at a retail price; in 2009, leaked condoms represented 8.3% of the total market volume/share. Furthermore, the commercial sector held only 4.8% of the market share in 2009. Thus, the historical data suggested that fully and partially subsidized condoms were crowding out the commercial market and that donor subsidy was not being used efficiently.

Recognizing this as a problem, PSI/M used the data on effectiveness and efficiency to inform a TMA strategy, which started in 2010 and was designed to strengthen the commercial market and minimize the resale of subsidized condoms. PSI/M approached UNFPA, the National AIDS Programme, and other key stakeholders with ideas for improving condom targeting in the public sector and recommended methods to avoid crowding out the commercial sector. PSI/M also started soliciting commercial partners with the aim of growing that sector of the market. The goal was to create a more sustainable and equitable market for male condoms in Myanmar.

Case Study 2: Viet Nam. Viet Nam is a lower middle-income country with a strong commercial sector.[45] As of 2013, there were an estimated 300 condom brands available through pharmacies. The HIV epidemic is concentrated among key populations at risk. In 2011, UNAIDS estimated the following prevalence: FSW (3%), MSM (16.7%), and people who inject drugs (PWID, 13.4%).[46] Commercial sex occurs in hotels and guest houses (H/G), which represent a sub-component of Viet Nam's total condom market and a critical channel for successful HIV/AIDS prevention efforts.

Since 2005, PSI/V has implemented a highly targeted condom social marketing program through the subsidized sale of Number One condoms. The program focus has been on improving access to quality, affordable condoms at H/Gs and other outlets that key populations frequent. A number of other subsidized condom brands also entered the market as a part of different reproductive health and HIV/AIDS prevention programs. As of 2013, there were three fully-subsidized brands (VIP, Protector Plus, and Happy) and several partially subsidized social marketing brands, including Hello, Yes, and OK, distributed in Viet Nam through different channels, such as pharmacies and outreach workers who distributed directly to key populations.

In 2008, PSI/V started implementing a five-year Social Marketing for HIV Prevention Project funded by the United States Agency for International Development (USAID). It aimed to contribute to national HIV/AIDS prevention goals through targeted social marketing to motivate key populations to consistently use the following products and services: male and female condoms, water-based lubricants that are co-packaged with condoms, low dead space syringes for people who inject drugs, and voluntary counselling and testing services.

In 2007, prior to the initiation of the new program, condom coverage in H/G was low: only 34% of H/Gs stocked condoms.[47] This was concerning, especially because studies among key populations highlighted the importance of convenient access at locations where commercial sex occurs for increasing condom use.[48] In response to this market gap, PSI/V discontinued condom sales through pharmacies and focused sales of Number One on H/Gs and other non-traditional outlets accessible to key populations. PSI/V used a small (< 20 member), field-based sales and trade marketing team dedicated to the H/G channel to increase coverage.

Data Collection and Measures

This section describes how we calculated key metrics to measure the effectiveness and efficiency of the Myanmar and Viet Nam male condom markets. Effectiveness measures were: 1) access, the proportion of outlets carrying condoms or the proportion of key populations working within the catchment areas where condoms were available, and 2) condom use. Efficiency metrics were: 3) equity, the distribution of key populations across wealth quintiles and the extent to which poorer consumers were using subsidized condoms, and 4) subsidy, the amount of donor or government funding that supported condom supply.[25,36,28]

Case Study 1: Myanmar. We used several data sources to analyze the Myanmar condom market. Access data were from quarterly condom retail audits conducted by PSI/Myanmar (PSI/M) in 5 major cities. Retail audits that sampled pharmacies and street vendors were conducted throughout 2009, 2010, and 2011. Data on free product distribution came from UNAIDS. We used data from UNAIDS Asia Epidemic Model (AEM) to estimate the size of each key population and calculate the proportion of FSW that had access to condoms.[49]

Baseline data on condom use were from National AIDS Programme behavioral surveys conducted in 2003 among FSW and MC. Follow-up data on condom use and the SES profile for each target population were from cross sectional surveys conducted by PSI/M in 2008-2010. Time location sampling was used to select FSW and MC study participants in both rounds. Sample sizes for the 2008 surveys were: FSW (N = 975) and MC (N = 2,025). Sample sizes for 2010 were: FSW (N = 978) and MC (N = 2,740). Condom use for FSW was defined as correct and consistent use with commercial, casual, and regular partners. For MC, we defined condom use as correct and consistent use with commercial partners.

Case Study 2: Viet Nam. Access data for Viet Nam represented condom coverage in H/G. Figures for 2008 came from PSI/V's own management information system (MIS), which contained data for N = 2,147 H/Gs. Condom coverage figures and the number and type of condom brands available in H/Gs came from outlet surveys that PSI/V conducted in 2010 (N = 1,105) and 2012 (N = 1,389). For both study years, outlets were randomly selected from a sampling frame of H/Gs that was created by mapping their locations in districts with a high density of H/Gs in the seven President's Emergency Plan for AIDS Relief (PEPFAR)

priority provinces where PSI implemented its program.

Data on condom use came from cross-sectional surveys that PSI/V conducted in seven provinces in 2011 and 2013. Respondent-Driven Sampling was used for both study rounds with FSW. For MC, a stratified, two-stage cluster design was used to select venues men frequented in the evenings and a fixed number of men were selected in each site. Sample sizes for the 2011 surveys were: FSW (N = 1,666) and MC (N = 1,602) and in 2013, FSW (N = 1,420) and MC (N = 1,983). For FSW, consistent condom use was defined as correct and consistent use with commercial, casual, and regular partners. For MC, we defined condom use as correct and consistent use with commercial partners.

Analysis

Case Study 1: Myanmar. We ran basic descriptive statistics on condom access and condom use in Excel and SPSS 15. To measure relationships between different sectors of condoms (free, socially marketed, and commercial) and use we ran chi-squared tests through cross tabulations in SPSS 15.

For measures of equity, we used two data sources: the 2008 and 2010 PSI behavioral surveys cited above and the 2010 National Tuberculosis Prevalence (NTP) Survey. We used the NTP Survey to establish wealth quintiles for the general Myanmar population. We created an index of socioeconomic status (SES) using a set of household asset variables and principal components analysis (PCA). The wealth index used a list of seven asset variables that were included in both the NTP Survey and behavioral surveys. We first combined the datasets, and then conducted PCA on the entire sample. We constructed a continuous wealth index and then further categorized it into wealth quintiles.[50] Graphical distributions of the categorization of wealth indices were compared, as well as distributions by sample. We cross-referenced the wealth quintiles across the study populations to determine the proportion of FSW and MC who fell within each wealth quintile and whether the distribution was similar across the two study years. We used SPSS 15 for this examination of socioeconomic equity and to determine if the target populations for Aphaw were as poor as originally assumed.

Case Study 2: Viet Nam. We ran basic descriptive statistics on condom access and condom use in STATA 11. To measure relationships between different sectors of condoms (free, socially marketed, and commercial) and use, we ran chi-squared tests through cross tabulations in STATA 11.

Results

Myanmar Results

Making the Myanmar Condom Market More Effective. By 2010, coverage for Aphaw in 13 cities had grown; Aphaw could be found in 63% of pharmacies and kiosks in areas near brothels. Access was also high; 54% of FSW working within catchment areas for Aphaw outlets had access to Aphaw condoms.[51]

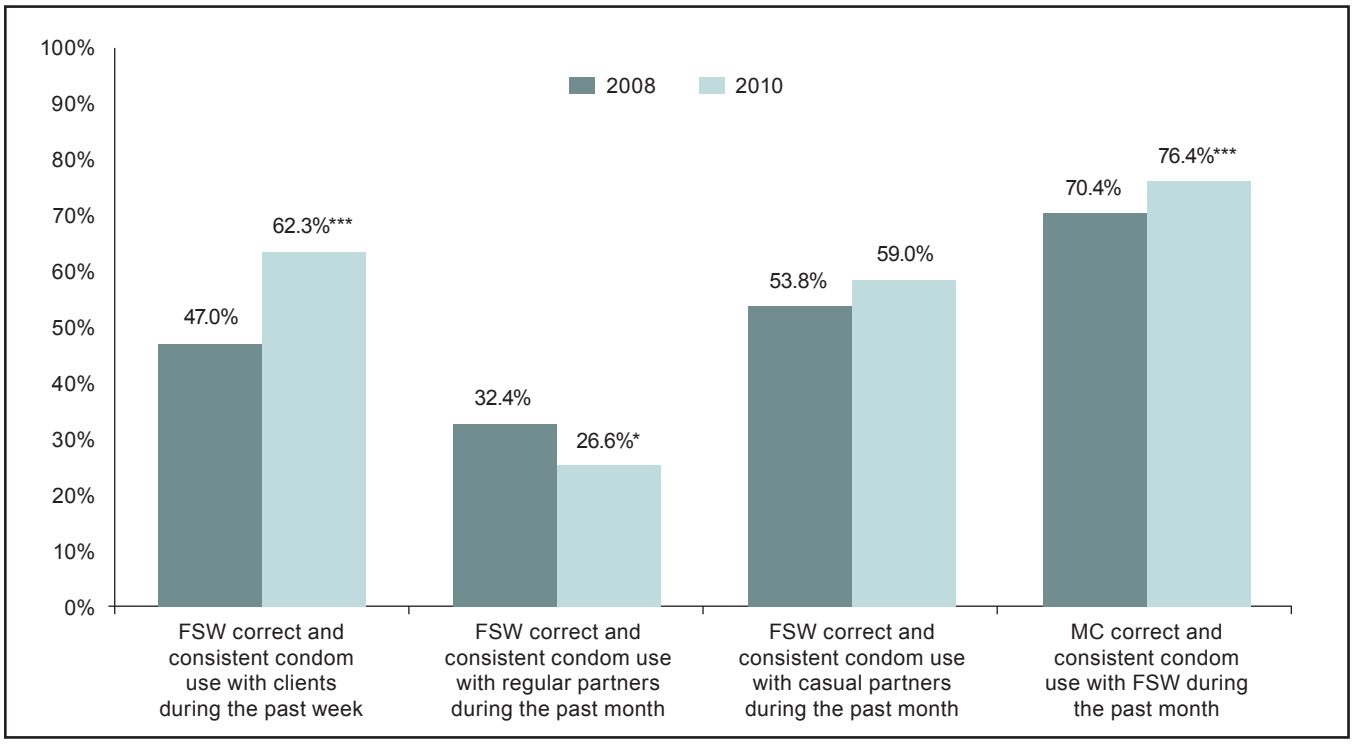
Between 2008 and 2010, there was a significant increase among FSW in correct and consistent condom use with clients during the past week

from 47.0% to 62.3% ($P < .001$), and an increase in consistent condom use with casual partners in the last month from 53.8% to 59.0%, although this was not statistically significant (Figure 1).[52,53] Among MC, there was also a significant increase in correct and consistent condom use during the past month with FSW from 70.4% to 76.4% ($P < .001$).[54,55] However, there was a significant decline for FSW's condom use with regular partners during the past month from 32.4% to 26.6% ($P < .05$). For both MC and FSW, 24% to 74% of sex acts remained unprotected in 2010, which was an indication that there was more to do to increase informed demand for condoms.

Making the Myanmar Market More Efficient. The Myanmar market was relatively effective. While rates of condom use were still less than optimal, coverage of Aphaw was sufficient. However, there were concerns about efficiency. Market share for subsidized condoms, both free condoms and Aphaw, was too high. In 2011, free condoms were more than half of the market and Aphaw condoms were 40.5% of the market.[44] Compared with 2009 figures, it became apparent that as more free condoms came onto the market in 2011, they replaced some of Aphaw's market share. There was also evidence of "free" condoms leaking into the market and being sold to consumers at a retail price. Commercial condoms held only a small fraction of the market: in 2011, there were 29 commercial condom brands on the market, but they had just 6% of the market share.[44]

Survey data from 2010 showed that among key populations who reported using condoms, more than 90% said they used Aphaw at last sex.[53,55,56] We used a second layer of analysis to understand how key populations were distributed across wealth quintiles and to determine if FSW and MC were as poor as originally assumed. Since the majority of FSW and MC reported using Aphaw,

Figure 1. Myanmar: Condom use among key populations (2008-2010) [a,b]



[a] Where FSW = Female Sex Workers, MC = Male Clients.
[b] Where Chi-squared tests for significance * = $P < 0.05$, ** = $P < .01$, *** = $P < 0.001$.

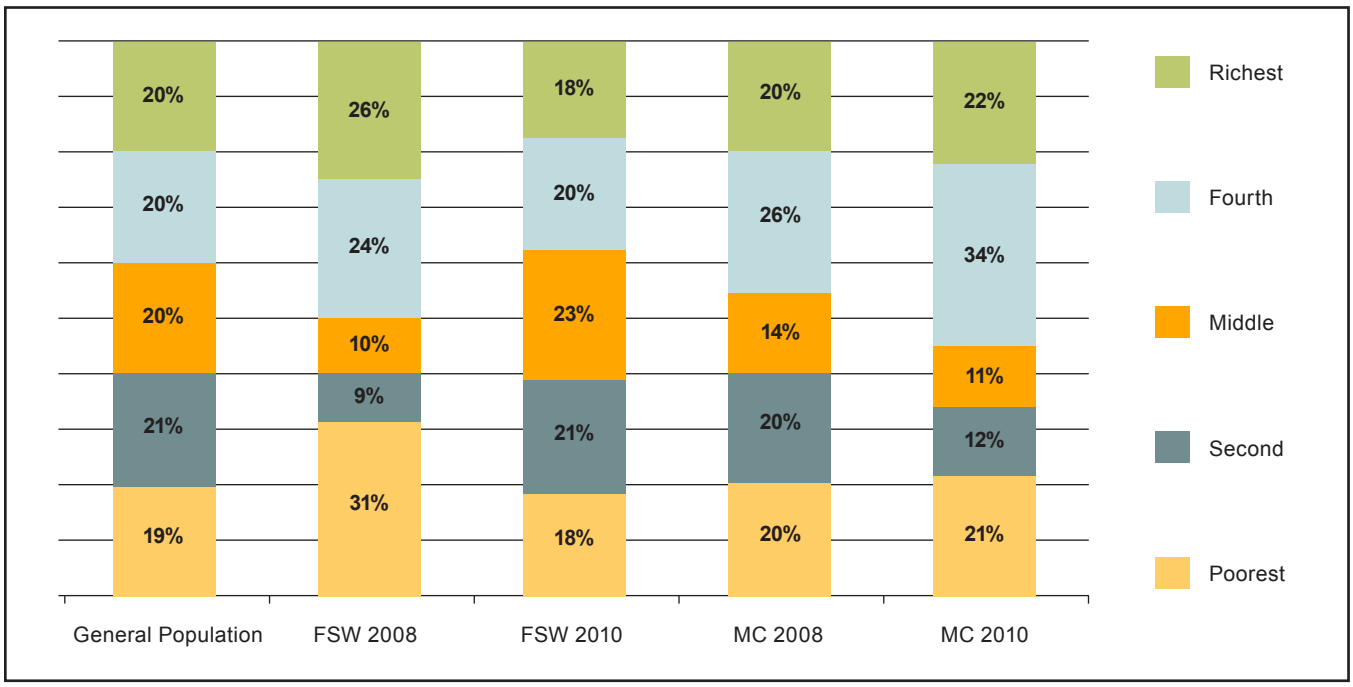
we were able to examine if subsidies were well used and reaching the poor. The distribution of FSW in 2010 was relatively the same as the general population: they were no poorer than the rest of the population and their socioeconomic equity had improved since 2008 (see Figure 2). MC had, however, become wealthier over time: in 2010, 56% of MC were in the highest two quintiles compared to 46% in 2008. PSI/M concluded that there were many MC who could afford to pay commercial prices, but who were using subsidized condoms, and primarily the Aphaw brand. This meant the market was less efficient than it could be.

One explanation for this inefficiency was Aphaw's extremely low consumer price of just $0.04 USD for regular and $0.05 USD for scented Aphaw. Aphaw prices were at least three times lower than the commercial sector condom brands, where retail prices ranged from $0.15 to $0.49. In addition, PSI/M was undercutting the commercial sector by selling regular and scented Aphaw to retailers for $0.02 USD, just 54% of the cost of goods sold.[57]

The leakage of free condoms into the commercial sector was also an indicator of inefficiency. Those "leaked" condoms were actually being sold at a higher consumer price than Aphaw, $0.07 USD. This suggested that retailers understood what the market could bear in terms of consumer pricing and were meeting that price. It also suggested that donor subsidies were not being used efficiently.

In 2010, PSI/M started applying TMA concepts and took several steps to improve the market's efficiency and to stop crowding out the commercial sector. One of the first steps was to bring the issue of leaked free condoms that were being sold on the market to the attention of the United Nations Population Fund (UNFPA), the supplier of these condoms. UNFPA took corrective action in 2011 to control the leakage and the market share for these condoms. UNFPA engaged with other market players, added a

Figure 2. Myanmar: Wealth quintile analysis among key populations (2008-2010) [a]



[a] Where FSW = Female Sex Workers, MC = Male Clients, MSM = Men who have Sex with Men.

"not for sale" mark to their condom boxes, and improved monitoring for free condoms distributed by partners.

At the same time, PSI/M started working with the commercial sector and prioritized improved targeting for MC since they had the greatest ability to pay for condoms. Initially, it was difficult to find commercial brands with whom to partner. Most condom brands were of insufficient quality and could not be promoted by PSI/M. After some time, PSI/M identified three high quality brands, SPUR+ and two other brands, and asked them to participate in a condom coordination group. The intent was to ensure a healthier market for condoms that would include a larger commercial sector and condoms at varied price points for MC who could afford to pay. The two unnamed brands did not appear to prioritize the condom coordination group's activities and progress was slow. For example, they only sent junior staff to meetings who were not empowered to make decisions and their participation was inconsistent. After nearly one year of discussions, the two unnamed brands decided not to participate in the group any further; they were suspicious of PSI/M's intentions, willingness to sacrifice the Aphaw market share, and offers to promote their condom brands. Only SPUR+ agreed to work with PSI/M.

PSI/M felt it was inappropriate to use donor money to promote a single commercial brand and wanted to have a more equitable strategy for segmenting the market. In 2011, after trying once again and inviting all other high quality commercial brands to collaborate, one other company agreed to participate, M-Lite. Together, PSI/M, SPUR+, and M-Lite segmented the MC market by ability to pay: 1) Aphaw for low income MC and MSM; 2) SPUR+ for middle income MC; and 3) M-Lite for high income MC. As part of the agreement between the three brands, PSI/M hired an entertainment agency to promote SPUR+ and M-Lite at high-end restaurants, beer pubs and nightclubs, and reach MC in the higher economic quintiles.

The condom coordination group made another key decision and closed price gaps in the market and expanded brand choice for MC. In 2012, Aphaw introduced three brand extensions to close the gap between Aphaw and SPUR+. In turn, SPUR+ introduced two brand extensions to close the price gap between SPUR+ and M-Lite. The new Aphaw brand extensions targeted MC in the middle and high-income categories.

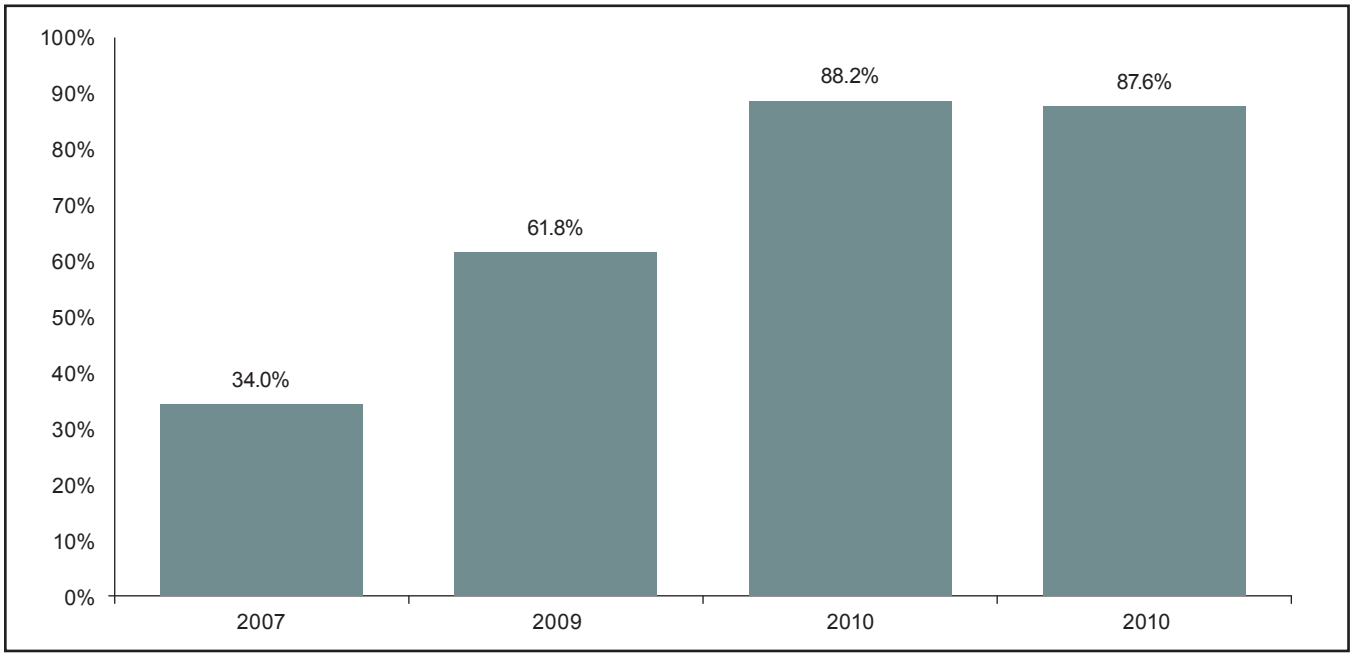
In addition to the above actions, the condom coordination group put other formal agreements into place. PSI/M agreed to share market research with the two commercial brands. It also agreed to endorse SPUR+ and M-Lite to the National AIDS Program and the Food and Drug Administration, and to guarantee that those condom brands met the minimum International Organization for Standardization quality requirements (ISO 4074/2002). In exchange, the two commercial partners agreed to share their quality certificates, including the GMP certificate, ISO certificate, and the certificate of analysis, as well as their sales data with PSI/M, which PSI/M agreed to keep confidential.

Viet Nam Results

Making the Viet Namese Condom Market More Effective. In 2007, prior to the initiation of the new program, condom coverage in H/Gs was an issue. The percentage of H/Gs stocking condoms was approximately 34%. After shifting PSI/V's focus to promote sales in H/Gs, condom coverage increased in this channel to 62% in 2008, increased again to 88% in 2010, and stablilized at 88% in 2012 (Figure 3).[47]

To address non-supply side barriers to consistent condom use and help de-stigmatize use, PSI collaborated with the Government of Viet Nam

Figure 3. Viet Nam: Percentage of hotels and guesthouses stocking condoms over time (2007-2012)



at central and provincial levels, as well as other stakeholders, to design and implement multi-channel campaigns promoting consistent condom use among key populations. One of these, "Nho Toi Moi Lan" ("Remember Me Every Time"), was endorsed by the Ministry of Health and linked to the national "100% Condom Use Program" logo. Consistent condom use among MC with their FSW partners increased in the provinces where PSI and other PEPFAR partners focused HIV prevention efforts from 87% in 2007 to 97% in 2011.[48]

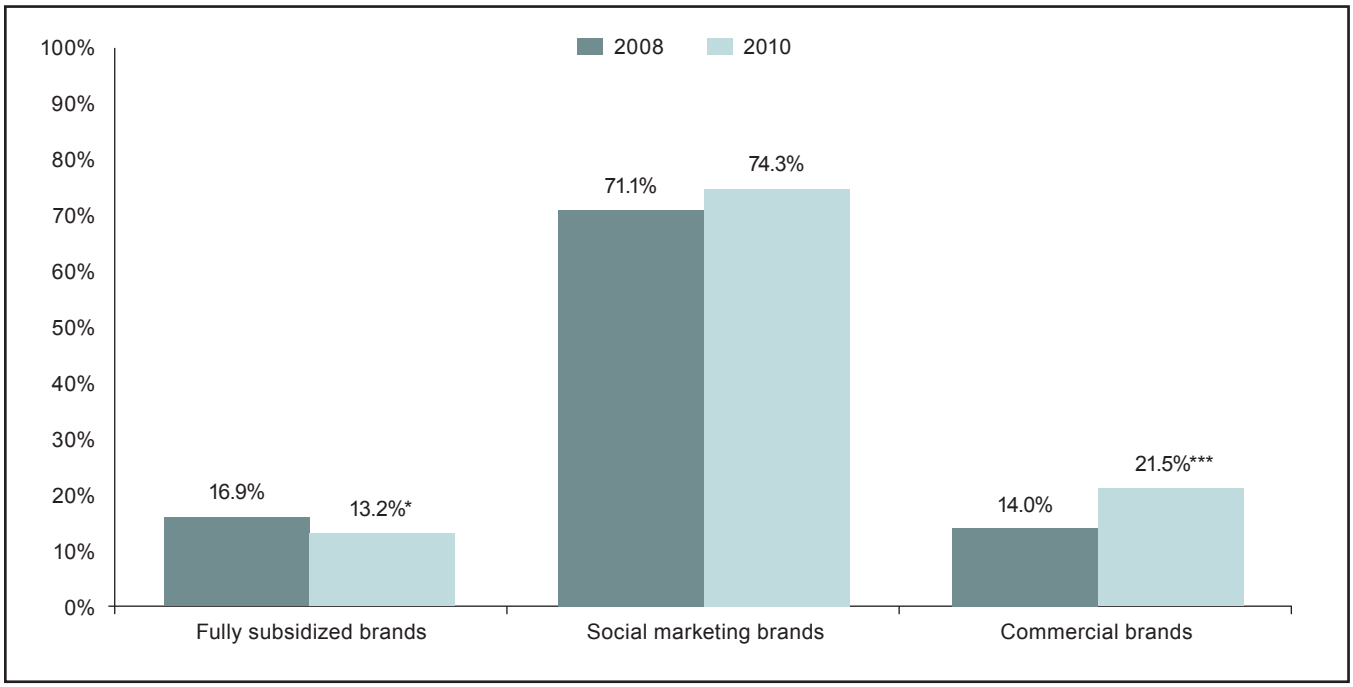
Making the Viet Namese Condom Market More Efficient. Once condom coverage and levels of consistent condom use stabilized, PSI/V took steps to improve H/G channel efficiency and the use of donor subsidy supporting condom distribution. Despite the gains in coverage and condom use, the H/G market channel was overwhelmingly reliant on subsidized condoms, with only approximately 14% of H/Gs stocking a non-subsidized, commercial condom brand in 2010.[58] According to a 2012 survey of H/Gs in seven provinces, subsidized brands were available in H/Gs that charged a price for room rental and other amenities, like drinks and snacks.[59]

To reduce and better target distribution of fully-subsidized condom brands, PSI partnered with Provincial AIDS Committees and co-facilitated "condom market coordination" meetings, which included participants from all partners involved in condom distribution, and representatives from the government, civil society, the commercial sector, and non-profit organizations involved in reproductive health and HIV programming. During these meetings, partners reviewed market data, including condom availability by brand and subsidy type within H/Gs. Estimates of the number of Protector Plus (PEPFAR-supported), fully-subsidized condoms needed were based upon the following: the size of the key populations requiring full subsidy, the availability of other fully-subsidized brands in the province (ie, supported by non-PEPFAR projects), and PEPFAR's free condom distribution guidelines for Viet Nam.

Condom market coordination meetings resulted in consensus about the number of fully-subsidized condoms needed in each province and an agreement to focus fully-subsidized brands on key populations with the lowest ability to pay, such as street-based sex workers. In cases where fewer fully-subsidized condoms were needed, partners required documentation of the factors contributing to revisions in the estimates of need, and made adjustments accordingly. Interpersonal communicators, who were managed by the Provincial AIDS Committees, distributed subsidized condoms to street-based sex workers and other key populations with an inability to pay. This process resulted in a 60% reduction in provincial requests for Protector Plus (PEPFAR-supported) fully-subsidized condoms between 2010 and 2012.[60] In addition, the proportion of H/Gs stocking Protector Plus condoms fell from 5% in 2010 to 3% in 2012. And, as is shown in Figure 4, more H/Gs stocked commercial brands (14.0% vs 21.5%, $P < .001$) and fewer relied on fully subsidized brands (16.9% vs. 13.2%, $P < .01$).[59]

In 2011, PSI/V solicited proposals from commercial sector manufacturers, importers, and distributors interested in increasing their share of the H/G market and employed a manufacturer's model for additional gains in efficiency. PSI/V selected a Viet Namese condom importer and distributor, Tan Cuoc Song Medicine Company Limited (TCS), and its Karol brand, the only one of their five condom brands which met the necessary criteria. PSI/V and TCS signed a memorandum of understanding outlining their respective responsibilities, including PSI's commitment to provide targeted sales, distribution, and promotional support to increase Karol sales through the H/G channel. In return, TCS committed to ensuring sufficient stock levels of Karol condoms for commercial sub-distributors affiliated with PSI's distribution network covering H/G, and participated in marketing planning sessions. TCS also contributed financially by providing a temporary price reduction for Karol condoms, cost-sharing the branded promotion, and supporting other

Figure 4. Viet Nam: Availability of condoms in hotels and guesthouses by sector (2010-2012) [a]



[a] Where Chi-squared tests for significance * = $P < 0.05$, ** = $P < .01$, *** = $P < 0.001$.

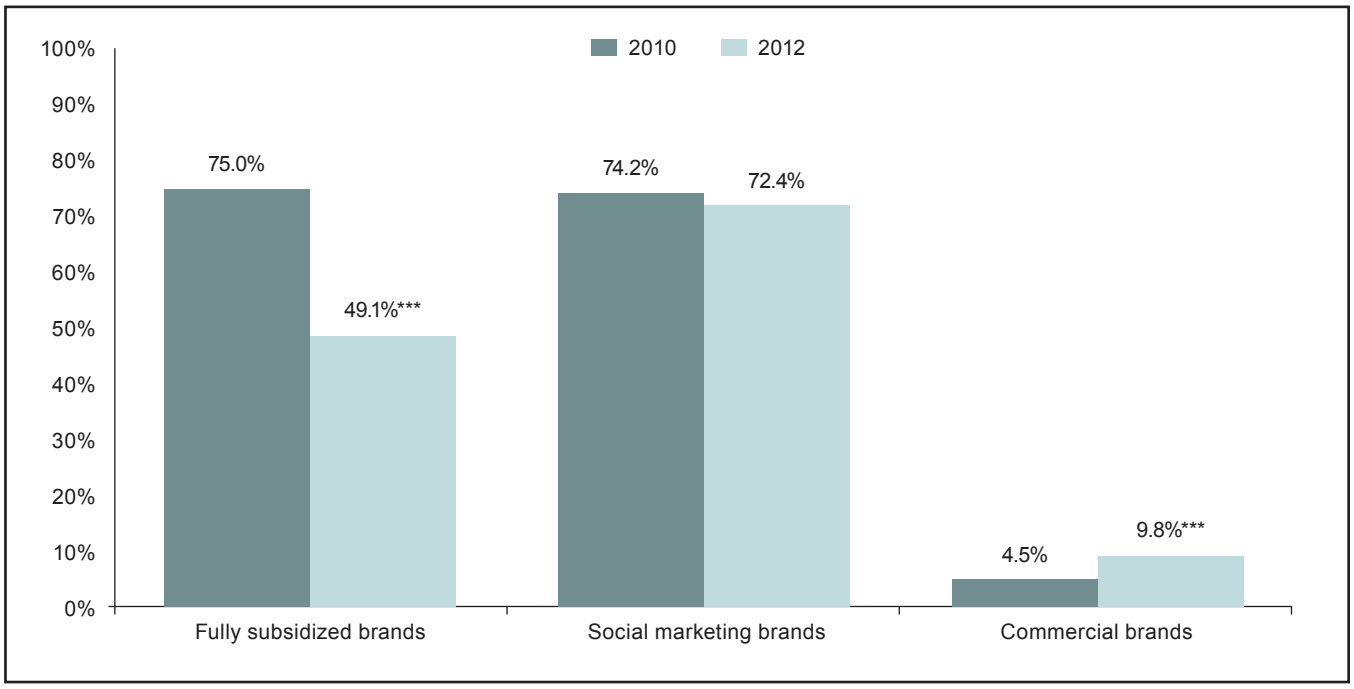
sales promotion activities for H/G. PSI/Viet Nam's field-based sales team used targeted sales and trade marketing techniques to motivate H/G operators to stock Karol, which was a previously unknown brand in this channel, because TCS distribution had focused exclusively on pharmacies. Karol was priced approximately 2.5 times higher than the other, largely subsidized brands available to H/Gs (Figure 5).

These efforts appear to have been successful as survey results indicated that fewer MC and FSW with an ability to pay for condoms were using subsidized products. Between 2010 and 2012 the proportion of guesthouses stocking a commercial brand, including Karol, rose from 14.0% to 21.5% ($P < .001$).[60] During a similar period, the proportion of commercial sex acts reported by FSW and their MC that were protected by Karol increased from 0% to 5%.[61] Between 2010 and 2012 (Figure 6), there was also an increase in the proportion of FSW who reported using commercial condom brands in the last month

Figure 5. Viet Nam: Promotional campaign for Karol condoms

Building brand appeal for Karol condoms through a campaign that positioned the Viet Namese commercial condom brand as a positive sign of a modern, male style.

Figure 6. Viet Nam: Condom brands used by female sex workers in the last month by sector (2010-2012) [a]



[a] Where Chi-squared tests for significance * = $P < 0.05$, ** = $P < .01$, *** = $P < 0.001$.

from 4.5% to 9.8% ($P < .001$) and a decrease in the proportion of FSW who reported using fully subsidized brands from 75.0% to 49.1% ($P < .001$).[61] In addition, among FSW who reported purchasing condoms, the proportion who reported purchasing them at H/Gs increased from 20% to 40% between 2010 and 2012.[61]

Discussion

Condom social marketing interventions are one of the most important components of sexual health programs in the developing world. In many cases, social marketing efforts have satisfied a latent demand for condoms that neither the public nor commercial sector could meet. Condom social marketing, namely the manufacturer and NGO models, have been effective in increasing access and use by leveraging commercial sector strategies and using donor subsidy to create an affordable price, provide dedicated distribution networks, and develop appealing brands to drive awareness and consumer demand.[10] In addition, social marketing puts the target population, including the market, at the center of its approach.[62]

The examples from Myanmar and Viet Nam presented in this paper illustrate the next phase of social marketing, TMA. They outlined actions social marketers took once access and levels of condom use stabilized and the programs wanted to improve the effectiveness and efficiency of the local condom market. PSI/M and PSI/V achieved two of three processes for TMA success:1) engagement between the public, social marketing, and commercial sectors, and 2) planning for market coverage, which included input from the commercial sector.[25] The third process, capacity to regulate the market, was more difficult to undertake and outside of the social marketers' control as responsibility for this process usually rests with the government.[63]

In the case of Myanmar, the market was relatively effective, but not efficient. Condom access and use improved over time, but wealthier MC were benefitting from subsidized products. PSI/M focused on three areas to help strengthen the commercial sector by 1) helping to control leaked free condoms that were undermining the market, 2) endorsing two commercial brands and segmenting the MC market according to their ability to pay, and 3) closing price gaps in the market and expanding brand choices for MC and FSW. Through these processes, PSI/M learned about the volatility and strength of the commercial sector. M-Lite decided not to continue promoting condoms for wealthier men: they focused their efforts on other business and products. Market share for SPUR+, however, grew and the company introduced a new brand, One Touch, which now serves as the new "high-end" brand.[57] A new commercial brand, Max Mate, also entered the market and PSI/M has been working with SPUR+ and Max Mate on new promotional activities. Finally, PSI/M increased the price of Aphaw and moved to a cost-recovery strategy.

In the case of Viet Nam, PSI focused on the H/G market and worked through a multi-sector "condom market coordination" committee to better forecast the number of subsidized condoms needed for H/Gs. PSI/V also endorsed a commercial sector brand to move FSW and MC with an ability to pay off of subsidized condoms.

By 2013, the proportion of H/Gs stocking condoms decreased slightly but was still high at 86%. Hotels and guest houses also continued to increase their stock of commercial brands and decrease their reliance on social marketing brands and fully subsidized condoms.

Lessons Learned

While much TMA work has been done in the public and social marketing sectors, little has been documented in the peer-reviewed literature on engagement with the commercial sector. The case studies from Myanmar and Viet Nam provide tangible examples of how social marketers can work toward transforming a market, the steps required to generate active engagement from private sector players, and the strategies used to contribute to health behavior outcomes. There is still a great deal of progress to be made and working with the commercial sector is not without its challenges. In Myanmar, we saw how suspicious the commercial sector can be of social marketers' intentions and how threatened they were by collaboration with competitors or disclosing sales figures. In some cases, commercial sector players may not see the business value of expanding their market footprint in developing countries, particularly if the profits are limited. Beyond the actions presented in this paper, there may be other options for partnering with commercial partners of all types, manufacturers, distributors, wholesalers, retailers, and media agencies, to increase their contributions to public health priorities.[64]

Over the last 50 years, social marketing has matured and organizations like PSI are committed to applying a TMA lens to their work while filling market gaps and satisfying the unmet health needs of populations at risk. Social marketers' mandate is to achieve health impact; one very important means to that end is strengthening the markets in which they operate. Social marketers are now focused on sustainability, on working across sectors, and on helping to poise the commercial sector to also meet those health needs. Many argue that TMA is the future of social marketing because it incorporates a broader, more inclusive perspective than social marketers have used in the past and one that is aligned with growing economic development and opportunity in developing countries.[24]

Limitations of the Study

A study like this, which relied on several retrospective data sources, inevitably has limitations. Survey methods differed across the time periods covered in the Myanmar and Viet Nam case studies, which restricted direct comparisons for some variables related to condom use. The original intent of the behavioral surveys was for program design and monitoring purposes, not to assess a TMA, which limited the number of indicators that could be analyzed. For the equity analysis in Myanmar, we could not calculate wealth quintiles among users of Aphaw. We could only measure the extent to which each target population was poor and then draw conclusions about the degree to which the poor and wealthy were using Aphaw based on FSW and MC reported condom brand use. There were no data that could be used for equity analyses in Viet Nam. Market data came from different sources, such as MIS, PSI's retail audits, and UNAIDS. All used different methodologies, which made it challenging to calculate market dynamics and cross-reference the results.

Conclusions

Social marketers can increase and sustain health impact by strengthening the commercial sector in developing countries. Over the last 50 years, social marketing has matured and social marketers are now applying a TMA lens to their work, while filling market gaps and satisfying the unmet health needs of target populations. Core to the concept of TMA is improved market

segmentation to ensure that those in need are reached with the appropriate products. Social marketers want their programs to be as effective as possible, but they must also ensure that programs are efficient and ultimately sustainable. One very important means for ensuring sustainability is to strengthen the markets in which social marketers operate. Many TMA efforts have focused on actions within the public sector. The case study examples we presented from Myanmar and Viet Nam demonstrate how social marketers can actually work towards transforming a market by generating active engagement from commercial sector players to also contribute to health outcomes.

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