



Research to Prevention

CONDOM SOCIAL MARKETING

Rigorous Evidence – Usable Results

June 2011

Fifth in a series, this summary fact sheet presents existing evidence from rigorously evaluated interventions to prevent HIV transmission in developing countries. Results are presented here from the meta-analysis of condom social marketing studies published in leading scientific journals. In contrast to the many anecdotal reports of best practices, this series provides readers with the strongest evidence available in a user-friendly format. The evidence provides program planners, policy makers, and other stakeholders with information about “what works.”

Condom Social Marketing (CSM) is a type of intervention in which condom brands are developed, marketed with a promotional campaign, and sold to a specific target population. CSM is one approach to increase condom availability and use; other approaches include public/free and private distribution of condoms. The social marketing of condoms began in earnest in developing countries in tandem with global family planning efforts. CSM was dramatically expanded as part of an early response to the global AIDS pandemic which brought about a coordinated effort to assure a steady supply of quality condoms at the local level in developing countries. Ongoing professional market research is used to inform three main intervention components of condom social marketing:

1. condom branding
2. development of a commodity logistics system
3. a sustained marketing campaign.

For all three components local adaptation and implementation are stressed. A key principle in such programs is that condoms should be sold at an affordable price to those who can afford it.

On the supply side, condom branding and commodity logistics systems are designed to increase the availability of desirable and affordable quality condoms. On the demand side the

sustained marketing campaigns are designed to increase desire for and use of condoms. The increased demand for condoms, coupled with enhanced availability of condoms, promotes condom sales and use, which can ultimately reduce HIV, sexually transmitted infections, and unwanted pregnancies.

It is important to the field, however, to understand the relationship between condom social marketing programs and condom use behaviors. A meta-analysis by Sweat et al.¹ was conducted to systematically examine the evidence for the relationship between implementation of condom social marketing campaigns and changes in condom use.

Effectiveness of Condom Social Marketing Interventions: Summary Findings			
Outcome	Number of studies	Odds ratio	Confidence interval (95% confidence level)
Condom use at last sex			
Overall condom use at last sex			
Males and Females	6	2.0*	1.4-2.8
Males Only	5	1.7*	1.1-2.7
Females Only	3	2.2	0.5-8.7
With casual partner			
Males and Females	3	3.45*	2.19-5.44
Males Only	2	2.56*	2.11-3.10
General population			
Males and Females	4	2.11*	1.42-3.13
Males Only	3	1.69	0.83-3.47
Overall condom use: composite score			
Overall condom use (Composite)			
Males and Females	6	2.1*	1.5-2.9
Males Only	5	2.0*	1.0-4.0
Females Only	3	1.9	0.7-4.8
General population			
Males and Females	4	2.01*	1.47-2.76
Males Only	3	1.78	0.80-3.97

* Significant at p<0.05



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Effectiveness of Condom Social Marketing Interventions

Results from the Sweat et al. meta-analysis¹ show that condom social marketing interventions in developing countries had the following effects on participants:

Condom Use at Last Sex

(6 studies, 6 subgroup results)²⁻⁷

- In general, studies showed that persons exposed to condom social marketing were approximately twice as likely to use a condom as those not exposed. When restricted to those reporting sex with a casual partner, persons exposed to condom social marketing were approximately three times as likely to report condom use at last sex compared to those not exposed.
- Condom use at last sex, with males and females combined, increased significantly for those who were exposed to a condom social marketing program compared to those who were not exposed.
- When stratified by gender, the positive effect of condom social marketing on condom use at last sex remained significant for males and became insignificant for females.
- When examining only sex with a casual partner, exposure to a condom social marketing program was significantly associated with increased condom use at last sex compared to those not exposed to the program for males and females. The effect remains significant when restricted to males only.
- Among studies targeting the general population (e.g. excluding studies with specialized populations, such as male miners³ and clients of female sex workers⁴), there is a positive effect of condom social marketing on condom use at last sex for both males and females, although this effect becomes insignificant when further restricted to males only.

Condom Use Overall (Across All Measures of Condom Use) (6 studies, 4 subgroup results)²⁻⁷

- Those exposed to condom social marketing were approximately twice as likely to use a condom as those not exposed. However, in studies that examined results separately by gender, these effects were only significant for males.



A billboard in The Gambia promotes condom use among truck drivers. Credit: © 2006 Sara A. Holtz, Courtesy of Photoshare

- When restricted to general population studies, the effect of condom social marketing on condom use is positive and significant for both males and females, but becomes insignificant when further restricted to males only.

How is the Effectiveness of a Condom Social Marketing Intervention Determined?

The findings presented in this fact sheet come from a recent meta-analysis of six studies. The review looked at the following outcomes: condom use at last sex and condom use overall (a composite measure of all condom use variables measured in a study). Of the six studies included in the meta-analysis, five were conducted in sub-Saharan Africa (Mozambique, South Africa, Cameroon, and Zambia), and one was conducted in India. Three studies examined the effects of CSM on the general population; other study populations included male miners, male and female adolescents, and male clients of female sex workers.

Selection Criteria and Rigor Criteria of Studies Included in the Sweat et al. Meta-analysis¹

A study had to meet three criteria to be included in the analysis:

1. present behavioral, psychological, or biological outcomes related to HIV prevention in developing countries

2. use either a pre-/post- or multi-arm design
3. appear in a peer-reviewed journal between January 1990 and March 22, 2010

Studies that did not meet these criteria were excluded.

The studies in the meta-analysis either report effect sizes for each outcome or provide sufficient information in tables or text to calculate an effect size. For the categorical outcomes typically presented in the studies, these data include sample size information for each outcome, and either percentages or frequencies for each response category.

What do the Data Tell us about Implementing Condom Social Marketing as Part of a Prevention Program?

- The meta-analysis results show that individuals exposed to condom social marketing programs were twice as likely to report using condoms compared to those who were not exposed. All individual studies showed trends for a positive effect; however, the magnitudes of effects were inconsistent across studies. Because of these inconsistencies, the results from the meta-analysis have very wide confidence intervals, which suggest a large amount of uncertainty regarding the overall estimates. Additionally, the evidence base for the efficacy of condom social marketing in affecting condom use is limited, due mainly to an inadequate number of studies of high methodological rigor.
- In all interventions, mass media was used extensively, and often this was supplemented with community-based outreach efforts such as peer education and promotional events.

What More Do We Need to Know about Condom Social Marketing Effectiveness?

- There were only six studies that met the inclusion criteria for meta-analysis; all of these studies were of low methodological rigor. For example, no studies used a randomized design, and few studies used control groups as a basis for comparison in measuring the intervention's effectiveness. There were also inconsistencies in the effects of condom social marketing on condom use across studies. In addition, several included studies took place over ten years ago,^{3,6} which



A billboard in N'Djamena, Chad, promotes Prudence condoms. The sign reads, "Confidence first, prudence above all – Abstinence, Fidelity (be faithful), or Prudence (condom)." Credit: © 2002 Sara A. Holtz, Courtesy of Photoshare.

may limit their usefulness given the changes in time trends and contextual factors that may have occurred in the interim.

Currently there are many resources being devoted to condom social marketing; however, the Sweat et al.¹ review found that few studies have actually evaluated the effectiveness of CSM on changing behaviors such as condom use. In many cases groups working in the field to provide and promote low cost quality condoms in developing country settings have not had the resources to fully evaluate their programs. In the future, more robust research and evaluation of the efficacy of condom social marketing's effects on condom use is needed.

- While the effect size across studies was modest in this meta-analysis, with longer term follow up evaluations there is the possibility that the cumulative effect of condom social marketing could be substantial. More rigorous evaluations of interventions need to be performed to help understand the relationship between CSM and condom use. In addition, more information on how condom social marketing affects condom use by different types of partners would be beneficial.
- All studies assessed self-reported condom use, which can be influenced by social desirability and a potential responder bias. Using a biological endpoint, such as HIV incidence, could help clarify the relationship between changes in condom use and its impact on population-level HIV transmission;

however, no studies found in this review measured HIV incidence. Additionally, due to the often overlapping implementation of multiple HIV prevention programs carried out in one location over a certain time period, isolating the effects of one particular intervention on either behavioral or biological endpoints is challenging.

- Results may be subject to publication bias, where studies showing positive results are more likely to be published than studies showing negative results. In addition, there is the possibility that some articles that should have been included in the review were not identified by the search methods used.

Additional Resources

UNAIDS (2000). Condom Social Marketing: Selected Case Studies. UNAIDS Best Practices Collection. Geneva, Switzerland.

http://data.unaids.org/publications/IRC-pub02/jc1195-condsocmark_en.pdf

References

1. Sweat MD, Denison, J, Kennedy, C, Tedrow, V, O'Reilly K. Effects of condom social marketing on condom use in developing countries: A systematic review and meta-analysis: 1990-2010. In progress.
2. Agha S, Karlyn A, Meekers D. The promotion of condom use in non-regular sexual partnerships in urban Mozambique. Health Policy Plan. 2001;16(2):144-51.
3. Meekers D. Going underground and going after women: Trends in sexual risk behaviour among gold miners in South Africa. Int J STD AIDS. 2000;11(1):21-6.
4. Lipovsek V, Mukherjee A, Navin D, Marjara P, Sharma A, Roy KP. Increases in self-reported consistent condom use among male clients of female sex workers following exposure to an integrated behaviour change programme in four states in southern India. Sex Transm Infect. 2010;86 Suppl 1:i25-32.
5. Plautz A, Meekers D. Evaluation of the reach and impact of the 100% Jeune youth social marketing program in Cameroon: findings from three cross-sectional surveys. Reprod Health. 2007;4:1.
6. Van Rossem R, Meekers D. An evaluation of the effectiveness of targeted social marketing to promote adolescent and young adult reproductive health in Cameroon. AIDS Educ Prev. 2000;12(5):383-404.
7. Van Rossem R, Meekers D. The reach and impact of social marketing and reproductive health communication campaigns in Zambia. BMC Public Health. 2007;7:352.

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Terminology and Acronyms

CSM

Condom social marketing

Confidence interval

The range of values within which the “true value” can be expected to fall.

Confidence level

The likelihood that the “true value” will fall within the confidence interval.

Meta-analysis

Analytic method that gathers information from multiple studies and combines them statistically to determine whether an intervention is effective.

Odds ratio

The ratio of the probability of an event occurring in one group to the probability of the same even occurring in a referent group; for example, an odds ratio of 2.0 for a condom promotion means that those in the treatment group were twice as likely as those in the control group to use condoms in last casual sexual encounter.