### Impact of Health Communication on Condoms

#### Community Engagement

<table>
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<tr>
<th>Country</th>
<th>Description</th>
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<tr>
<td>India</td>
<td>Among FSWs who reported exposure to an intervention that trained FSWs as social change agents to distribute and promote condoms, bring FSW to STI clinics and provide health education, the OR of consistent condom use was 2.5 times that of other FSWs for those who also reported high levels of collective agency.⁸</td>
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<td>Multi-country</td>
<td>Use of a combination prevention strategy among Central American MSM successfully resulted in reducing HIV risk. Men exposed to both behavioral and biomedical components were more likely to use condoms and water-based lubricant at last sex (OR 3.05, 95% CI 1.08-8.74). Men exposed to behavioral interventions were more likely to have been tested for HIV in the past year (OR 1.76, 95% CI 1.01-3.10).¹⁵</td>
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<td>Brazil</td>
<td>Sex workers exposed to the Encontros intervention, which included counseling, increased access to services, free condoms, peer education and outreach, workshops, material distribution and mobilization, had significantly higher odds of reporting consistent condom use with regular clients (OR 1.9, 95% CI 1.1–3.3). Participation was significantly associated with increased perceived cohesion and participation in networks.²⁵</td>
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<td>Laos</td>
<td>An intervention in Laos that focused on MtF transgender persons (kathoy) and their partners aimed to increase condom use through peer-led IPC activities. Exposure to the intervention was associated with higher levels of condom use at last anal sex with casual partners (p&lt;0.001).²⁶</td>
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<td>Malawi</td>
<td>The BRIDGE II Project in Malawi addressed barriers to individual action among adults in the general population and confronted societal norms related to sexual risk behavior and HIV through community-based activities and mass media messages. A mid-project evaluation of the program found that program exposure was a significant predictor of both HIV testing in the past year (OR = 1.40, p&lt;0.001) and condom use at last sex (OR = 1.26, p&lt;0.05).²⁰</td>
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<td>India</td>
<td>Engagement by FSWs with community mobilization activities, such as education and outreach, was associated with domains of empowerment. Measures of empowerment were associated with self-efficacy for condom and health service use (p&lt;0.001). Collective empowerment was most strongly associated with higher autonomy and reduced violence and coercion, particularly in districts with programs of longer duration (p&lt;0.05), and significantly positively associated with the odds of high condom use with regular partners in high-intensity districts. Empowerment was associated with higher odds of high self-efficacy for and actual condom use with clients in all districts.⁷</td>
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<td>Thailand</td>
<td>The Sisters program, which was comprised of DICs for counseling, social services, HTC, peer-led IPC and home visits by peer educators, evaluated four outcomes among transgender women who were exposed to: 1) condom use at last sex, 2) consistent condom use in the past three months, 3) consistent condom and water-based lubricant use in the past three months and 4) receipt of an HIV test in the past six months. Participation in outreach was associated with consistent condom/water-based lubricant use with commercial partners (AOR 3.22, 95% CI 1.64–6.31). Attendance at the Sisters DIC was associated with receiving an HIV test (AOR 2.58, 95% CI 1.47–4.52). Participation in any Sisters services was associated with an increased likelihood of condom use at last sex (OR 3.75, 95% CI 1.41-9.97).²⁷</td>
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#### Strength of Evidence

- Non-peer reviewed
- Higher
China
In two Chinese provinces with high HIV transmission among PWID, a comprehensive harm reduction intervention was implemented through community-based DiCs and peer-led outreach to reduce HIV risk among PWID. Evaluation in four cities (Kunming, Gejiu, Nanning and Luzhai) found significant relationships between participating in both peer-led DiC activities and outreach, and having new needles on hand (OR 1.53, p<0.05) and consistent condom use (OR 3.31, p<0.001). It also found a significant relationship between DiC activity exposure and outreach and HIV testing in Kunming (OR 2.92, p<0.01), and exposure to peer-led outreach and HIV testing through referrals in Gjiu, Nanning and Luzhai (OR 3.63, p<0.05).

Ethiopia
In Ethiopia, an audio HIV/AIDS prevention intervention targeted at rural illiterate women led to significant increases in self-efficacy, perceived vulnerability to HIV infection and condom use intention with mean increases of about 25%. In the intervention group, self-efficacy at post-test was the main determinant of condom use intention, with also a significant contribution of vulnerability.

Interpersonal Communication
Zambia
Exposure to IPC about HIV and AIDS, and exposure to HIV and AIDS-related EE led to increased consistent and occasional condom use among adolescents and adults, ages 15 to 49. Increases in communication in the community around HIV and AIDS also led to an increase in occasional and consistent condom use.

South Africa
The Stepping Stones HIV prevention program in South Africa uses participatory learning to build more gender equitable relationships and positions HIV within the broader context of sexual and reproductive health. It consisted of 13 3-hour sessions over six to eight weeks. Stepping Stones resulted in increased condom use among young people and participants advising friends to use condoms.

India
A campaign with truck drivers in India that utilized mass media, group discussion and other methods was successful in increasing the use of condoms among truck drivers from 41% to 87% (p<0.01). The intervention also enhanced the knowledge of the truck drivers on AIDS, changed their attitudes on sex and modified their sexual behavior.

Multi-country
A regional study in six countries in Central America aimed to evaluate a BCC program focused on PLHIV. Among those exposed to the program, specifically the mass media intervention, odds of condom use increased (AOR=1.8; 95% CI 1.3-2.5), as well as HIV status disclosure (AOR=1.5; 95% CI 1.7-4.3). IPC interventions also led to significant increases in condom use (AOR=2.7; 95% CI 1.7-4.3) and participation in support groups (AOR=4.4; 95% CI 3.5-5.6).

Cameroon
In Cameroon, the Entre Nous Jeunes peer-educator program was implemented to promote HIV and STI prevention. Adolescents in the intervention community who had an encounter with a peer educator were significantly more likely to be current condom users. Significant increases in knowledge were also seen due to the intervention.

India
Women in Kenya who were encouraged to return with their partners and underwent couples counseling and testing were more likely to return to engage in PMTCT care (for nevirapine (P = 0.02) and to report receiving nevirapine at delivery (P = 0.009). HIV-positive women receiving couples counseling were five-fold more likely to avoid breastfeeding (P = 0.03) compared with those counseled individually, and had a four-fold greater likelihood of using condoms (P = 0.004).
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<td>China</td>
<td>An intervention among young adults in China using written materials, videos, radio programs, group discussions and counseling resulted in an increase in condom use at last sex from 9% to 14% (p&lt;0.05) in the intervention group, while no increase was seen among the control group. Significant increases in HIV knowledge (p&lt;0.001) were also seen in the intervention group between baseline and follow-up, whereas none were seen in the control group.42</td>
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<td>Mass Media</td>
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<td>Uganda</td>
<td>Women who were exposed to two or more types of BCC messages on radio, TV, newspaper, magazines, brochures or leaflets were more than six times as likely to report using a condom at last sex. Among men, condom use at last sex was twice as high for those exposed to BCC messages vs. those who were not.6</td>
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<td>Multi-country</td>
<td>Mass media campaigns among the general population were associated with increases in condom use (d+ = 0.25, 95% CI = 0.18 to 0.21). Greater increases in condom use occurred following interventions conducted in African nations, in countries with lower Human Development Index scores, following longer campaigns, when message content was reportedly matched to the target audience and when refusal rates were low. Condom use also increased to the extent that campaigns increased knowledge of transmission (b = 0.56, P = 0.009, k =16) and prevention (b = 0.30, P = 0.03, k = 41). Results provide strong testimony to the power that mass media campaigns can have for people living in nations most at need for HIV prevention interventions.24</td>
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<td>Mozambique</td>
<td>The Jeito social marketing project in Mozambique demonstrated that evidence of above-average levels of condom use among men and women in Sofala and Manica provinces was due, in part, to their high level of exposure to the intervention. Findings indicate that the Jeito project’s BCC and condom distribution were effective in encouraging safer sex practices among those engaged in sex with non-regular partners.2</td>
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<td>Multi-country</td>
<td>Fifteen programs targeting the general population were reviewed in total for the years of 1990-2004. Five mass media interventions demonstrated significant differences between intervention and control groups on condom use, and three mass media interventions found significant increases in whether condoms had ever been used. Effect sizes varied by study.5</td>
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<td>Multi-country</td>
<td>This review examined 150 prevention intervention studies across a variety of risk groups to assess impact using the goals impact matrix. There were three aspects to the matrix: interventions, risk groups (high, medium and low) and key sexual behaviors (consistent condom use, STI treatment-seeking, number of sexual partners and age at first sex). Condom use social marketing found a reduction in non-use of condoms for all three risk populations ( -20.6%; -18.5%; -7.5%), as did peer education (-17%; -37.5%; -30.2%). VCT had a large effect among high-, medium- and low-risk populations in reduction of non-use of condoms (-44.2%; -23.4%; -16.1%). Community mobilization reduced non-use of condoms by -10.0% in medium-risk and -2.5% in low-risk. School-based programs had a -15.7% reduction in condom non-use among medium-risk groups. Mass media has a small impact on reduction of non-use of condoms among medium- and low-risk groups (-11.6%; -17%).10</td>
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<td>South Africa</td>
<td>Evaluation of the Soul City TV and radio program focused on reaching the general population in South Africa showed that the more exposure a person had, the more likely they were to request their partner to use a condom. Soul City television, radio and print separately were significantly associated with “always” using condoms. In addition, exposure to more than one source of Soul City had a significant association with respondents saying they always use condoms. There is also substantial qualitative evidence to support the association.16</td>
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<td>Zimbabwe</td>
<td>A multimedia campaign in Zimbabwe that aimed to encourage adolescents to adopt safer sexual behaviors and use health services, significantly increased the use of contraception (including condoms) and increased safer sexual behavior. In locations where the campaign was carried out, those surveyed were 2.5 times more likely to report saying no to sex than those in comparison sites. Sexually active youth exposed to the campaign were more likely than those in the comparison site to report only having one partner (OR 26.1) and to start using condoms (OR 5.7).21</td>
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<td>Liberia</td>
<td>A group RCT in Liberia compared an adapted eight-module HIV prevention course, Making Proud Choices!, to a general health curriculum in elementary and middle schools. It found that the frequency of condom use was significantly higher in the intervention group compared to the control group after nine months (p&lt;0.05).³</td>
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<td>South Africa</td>
<td>Students who participated in the Drama Approach to AIDS Education (DramAide), an in-school HIV drama education program, had higher rates of condom use compared to non-participating students in South Africa. In schools receiving the program, sexually active pupils reported an increase in condom use (p&lt;0.01).¹⁷</td>
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<td>Multiple SSA</td>
<td>In a review of 22 sexuality education interventions focused on young people, 16 had a significant effect on delaying sex, reducing the frequency of sex, decreasing the number of partners, increasing the use of condoms and reducing the incidence of unprotected sex.²³</td>
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<td>South Africa</td>
<td>Students exposed to life skills workbooks and mass media in South Africa that included sex-related topics had higher rates of condom use than students who were not exposed (p&lt;0.01). They also had better puberty/body knowledge, HIV knowledge and risk perception.²⁸</td>
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Acronyms

AHR  Adjusted hazard ratio
AOR  Adjusted odds ratio
ANC  Antenatal care
ART  Antiretroviral therapy
ARV  Antiretroviral
B4L  Brothers 4 Life
BCC  Behavior change communication
CBART  Community-based antiretroviral therapy
CHW  Community health worker
DIC  Drop-in center
EE  Entertainment education
FSW  Female sex worker
HTC  HIV testing and counseling
IPC  Interpersonal communication
Mtf  Male-to-female
MMC  Medical male circumcision
MSG  Mother support groups
MSM  Men who have sex with men
MSPs  Multiple sex partners
OR  Odds ratio
PA  Patient advocate
PHW  Peer health worker
PLHIV  People living with HIV
PMTCT  Prevention of mother-to-child transmission
PSA  Public service announcement
PWID  People who inject drugs
RCT  Randomized control trial
SBCC  Social and behavior change communication
SMS  Short message service
STI  Sexually transmitted infection
VCT  Voluntary counseling and testing
VMMC  Voluntary medical male circumcision

Citations

Reproductive Health, 4(1), 1.


