

## **Drivers and Sexual Behavior Change Literature Review**

### **Resource Inventory: Drivers, Sexual Behavior Change**

This is an optional resource for program development. The library is not exhaustive, and the programs and interventions described are not necessarily endorsed by HPS. The articles are offered only as a resource; applicants do not have to limit themselves to the models and approaches described in these articles.

All articles are available by request as a zip file from Betty Chan Lew. If you only wish one article, please reference the first author and title when making your request.

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## Drivers and Sexual Behavior Change Literature Review

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## Drivers and Sexual Behavior Change Literature Review

Addiction. 2005 Mar;100(3):367-78.

**Brief cognitive behavioural interventions for regular amphetamine users: a step in the right direction.**

Baker A, Lee NK, Claire M, Lewin TJ, Grant T, Pohlman S, Saunders JB, Kay-Lambkin F, Constable P, Jenner L, Carr VJ.

Centre for Mental Health Studies, University of Newcastle, University Drive, Callaghan, New South Wales, Australia.

### **Abstract**

**AIMS:** The present study sought to replicate and extend a small pilot study conducted by Baker, Boggs & Lewin (2001) which demonstrated that brief interventions consisting of motivational interviewing and cognitive-behaviour therapy (CBT) were feasible and associated with better outcomes compared with a control condition.

**DESIGN:** Randomized controlled trial (RCT).

**SETTING:** Greater Brisbane Region of Queensland and Newcastle, NSW, Australia.

**PARTICIPANTS:** The study was conducted among 214 regular amphetamine users.

**MEASUREMENTS:** Demographic characteristics, past and present alcohol and other drug use and mental health, treatment, amphetamine-related harms and severity of dependence.

**FINDINGS:** The main finding of this study was that there was a significant increase in the likelihood of abstinence from amphetamines among those receiving two or more treatment sessions. In addition, the number of treatment sessions attended had a significant short-term beneficial effect on level of depression. There were no intervention effects on any other variables (HIV risk-taking, crime, social functioning and health). Overall, there was a marked reduction in amphetamine use among this sample over time and, apart from abstinence rates and short-term effects on depression level, this was not differential by treatment group. Reduction in amphetamine use was accompanied by significant improvements in stage of change, benzodiazepine use, tobacco smoking, polydrug use, injecting risk-taking behaviour, criminal activity level, and psychiatric distress and depression level.

**CONCLUSIONS:** A stepped-care approach is recommended. The first step in providing an effective intervention among many regular amphetamine users, particularly those attending non-treatment settings, may include provision of: a structured assessment of amphetamine use and related problems; self-help material; and regular monitoring of amphetamine use and related harms. Regular amphetamine users who present to treatment settings could be offered two sessions of CBT, while people with moderate to severe levels of depression may best be offered four sessions of CBT for amphetamine use from the outset, with further treatment for amphetamine use and/or depression depending on response. Pharmacotherapy and/or longer-term psychotherapy may be suitable for non-responders. An RCT of a stepped-care approach among regular amphetamine users is suggested.

PMID: 15733250 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Br J Psychiatry. 2006 May;188:439-48.**

**Cognitive-behavioural therapy for substance use disorders in people with psychotic disorders: Randomised controlled trial.**

**Baker A, Bucci S, Lewin TJ, Kay-Lambkin F, Constable PM, Carr VJ.**

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### **Abstract**

**BACKGROUND:** Few randomised controlled trials have been aimed specifically at substance use reduction among people with psychotic disorders.

**AIMS:** To investigate whether a 10-session intervention consisting of motivational interviewing and cognitive-behavioural therapy (CBT) was more efficacious than routine treatment in reducing substance use and improving symptomatology and general functioning.

**METHOD:** A community sample of people with a psychotic disorder and who reported hazardous alcohol, cannabis and/or amphetamine use during the preceding month was recruited. Participants were randomly allocated to motivational interviewing/CBT (n = 65) or treatment as usual (n = 65), and were assessed on multiple outcomes at baseline, 15 weeks, 6 months and 12 months.

**RESULTS:** There was a short-term improvement in depression and a similar trend with regard to cannabis use among participants who received the motivational interviewing/CBT intervention, together with effects on general functioning at 12 months. There was no differential benefit of the intervention on substance use at 12 months, except for a potentially clinically important effect on amphetamine use.

**CONCLUSIONS:** The motivational interviewing/CBT intervention was associated with modest improvements.

PMID: 16648530 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

Addiction. 2001 Sep;96(9):1279-87.

**Randomized controlled trial of brief cognitive-behavioural interventions among regular users of amphetamine.**

Baker A, Boggs TG, Lewin TJ.

Centre for Mental Health Studies, University of Newcastle, Callaghan, New South Wales, Australia. amanda.baker@newcastle.edu.au

Comment in:

- Addiction. 2001 Oct;96(10):1511-2.

### **Abstract**

**AIMS:** To identify whether brief cognitive-behavioural interventions are feasible among regular users of amphetamine, to assess the effectiveness of intervention overall and to pilot two- and four-session interventions.

**DESIGN:** Subjects were assigned randomly to individually receive a cognitive-behavioural intervention (n = 32) of either two or four sessions' duration or a self-help booklet (control condition; n = 32).

**SETTING:** Subjects were volunteers recruited from needle exchange schemes and treatment centres in Newcastle, Australia.

**PARTICIPANTS:** Regular (at least monthly) users of amphetamine were recruited.

**INTERVENTION:** Either four sessions of cognitive-behaviour therapy, consisting of a motivational interview and skills training in avoidance of high-risk situations, coping with craving and relapse prevention, or two sessions consisting of a motivational interview and discussion of skills.

**MEASUREMENTS:** The Opiate Treatment Index was the main measure at pre-treatment and 6-month follow-up.

**FINDINGS:** There was a significant reduction in amphetamine use among the sample as a whole, with inconclusive differences between intervention subgroups. There was a moderate overall intervention effect, with the intervention group reporting over twice the reduction in daily amphetamine use as the control group. Significantly more people in the cognitive-behavioural intervention condition abstained from amphetamine at 6-month follow-up compared to the control condition.

**CONCLUSION:** Brief cognitive-behavioural interventions appear feasible among regular users of amphetamine. A larger randomised controlled trial of the effectiveness of such interventions appears warranted.

PMID: 11672492

## Drivers and Sexual Behavior Change Literature Review

**Addiction**, 2002 Oct;97(10):1329-37.

**Evaluation of a motivational interview for substance use within psychiatric in-patient services.**

**Baker A**, **Lewin T**, **Reichler H**, **Clancy R**, **Carr V**, **Garrett R**, **Sly K**, **Devir H**, **Terry M**.

Centre for Mental Health Studies, University of Newcastle, Callaghan, Australia.

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### **Abstract**

**AIMS:** To assess the effectiveness of a motivational interview among hospitalized psychiatric patients with comorbid substance use disorder in reducing alcohol and other drug (AOD) use.

**DESIGN:** Subjects were assigned randomly to receive an individual motivational interview (n=79) or a self-help booklet (control condition; n=81).

**SETTING:** Subjects were volunteers recruited from a major public psychiatric hospital.

**PARTICIPANTS:** Subjects met abuse or dependence criteria on the structured clinical interview for diagnosis (SCID) for alcohol, cannabis or amphetamine or they reported hazardous use during the last month of one or more of these drug types on the opiate treatment index (OTI).

**INTERVENTION:** Either one 30-45-minute motivational interview or brief advice.

**MEASUREMENTS:** The SCID and OTI were the main measures.

**FINDINGS:** There was a modest short-term effect of the motivational interview on an aggregate index of alcohol and other drug use (polydrug use on the OTI). Cannabis use remained high among the sample over the 12-month follow-up period.

**CONCLUSION:** Although motivational interviewing appears feasible among in-patients in psychiatric hospital with comorbid substance use disorders, more extensive interventions are recommended, continuing on an out-patient basis, particularly for cannabis use.

PMID: 12359037

## Drivers and Sexual Behavior Change Literature Review

**AIDS Behav. 2010 Jun;14(3):549-57. Epub 2009 Jun 5.**

**Efficacy of a web-based intervention to reduce sexual risk in men who have sex with men.**

**Carpenter KM, Stoner SA, Mikko AN, Dhanak LP, Parsons JT.**

Talaria, Inc., 1121 34th Avenue, Seattle, WA 98122, USA. kcarpenter@talariainc.com

### **Abstract**

To the extent that men who have sex with men (MSM) use the Internet, it serves as a promising medium for behavioral intervention. The present study sought to investigate the efficacy of a web-based skills training and motivational intervention in a randomized trial (N = 112) conducted completely online. After a detailed assessment, MSM were randomly assigned to an online intervention or a control website. The experimental intervention consisted of risk assessment and feedback, motivational exercises, skills training, and education while the control intervention focused on relaxation skills. Follow-up data were collected 3 months later and analyzed with repeated-measures MANOVA. Although both groups evidenced across-the-board reductions in unprotected sex, perhaps due to the detailed assessment, the experimental group showed greater reductions with the riskiest partners, those of positive or unknown serostatus. Thus, this study gives preliminary evidence that a brief web-based intervention offering cognitive behavioral skills training and motivational enhancement can effectively reduce sexual risk in MSM.

PMID: 19499321 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

Am J Public Health. 2003 Jun;93(6):933-8.

**An individually tailored intervention for HIV prevention: baseline data from the EXPLORE Study.**

Chesney MA, Koblin BA, Barresi PJ, Husnik MJ, Celum CL, Colfax G, Mayer K, McKirnan D, Judson FN, Huang Y, Coates TJ; EXPLORE Study Team.

School of Medicine, University of California, San Francisco, USA. chesneym@mail.nih.gov

### Abstract

**OBJECTIVES:** We describe the intervention tested in EXPLORE, an HIV prevention trial aimed at men who have sex with men (MSM), and test the empirical basis of the individually tailored intervention.

**METHODS:** Data on participants' self-efficacy, communication skills, social norms, and enjoyment of unprotected anal intercourse were examined in relation to sexual risk.

Combinations of these factors, together with alcohol use and noninjection drug use, were also examined.

**RESULTS:** The individual factors examined were associated with sexual risk behavior. The cohort was shown to be heterogeneous in regard to the presence of combinations of these risk-related factors.

**CONCLUSIONS:** Baseline data from the EXPLORE study support the efficacy of the individually tailored intervention used.

PMID: 12773358 [PubMed - indexed for MEDLINE]PMCID: PMC1447873Free PMC Article

## Drivers and Sexual Behavior Change Literature Review

**J Urban Health. 2005 Mar;82(1 Suppl 1):i62-70. Epub 2005 Feb 28.**

**Longitudinal patterns of methamphetamine, popper (amyl nitrite), and cocaine use and high-risk sexual behavior among a cohort of san francisco men who have sex with men.**

**Colfax G, Coates TJ, Husnik MJ, Huang Y, Buchbinder S, Koblin B, Chesney M, Vittinghoff E; EXPLORE Study Team.**

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### **Abstract**

Most prior studies examining drug use among men who have sex with men (MSM) have been cross-sectional or retrospective and have not determined whether periods of increased drug use are associated with high-risk sexual behavior at the individual level. In this article, we describe patterns of use of methamphetamines, poppers, and sniffed cocaine and sexual risk behavior among 736 San Francisco MSM enrolled in the EXPLORE study and followed for up to 48 months. In longitudinal analysis, use of methamphetamines, poppers, and sniffed cocaine declined during follow-up. However, compared with older participants, younger participants were more likely to increase their drug use over time. Results of conditional logistic regression demonstrated that high-risk sexual behavior was more common during reporting periods characterized by increased methamphetamine, poppers, or sniffed cocaine use. This within-person analysis found that compared with periods of no drug use, periods of both light drug use (less than weekly use of drugs) and heavier drug use (at least weekly use of at least one drug) were significantly associated with increased risk of engaging in unprotected anal sex with an HIV-positive or unknown-status partner. These results suggest that even intermittent, recreational use of these drugs may lead to high-risk sexual behavior, and that, to reduce and prevent risks of HIV, no level of use of these drugs should be considered "safe." HIV prevention interventions should target MSM who report either light or heavy use of methamphetamines, poppers, and sniffed cocaine.

PMID: 15738319 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Curr HIV/AIDS Rep. 2005 Nov;2(4):194-9.**

**The methamphetamine epidemic: implications for HIV prevention and treatment.**

**Colfax G, Shoptaw S.**

San Francisco Department of Public Health, 25 Van Ness Avenue, Suite 710, San Francisco, CA 94102, USA. grant.colfax@sfdph.org.

### **Abstract**

Methamphetamine and related amphetamine compounds are among the most commonly used illicit drugs, with over 35 million users worldwide. In the United States, admissions for methamphetamine treatment have increased dramatically over the past 10 years.

Methamphetamine use is prevalent among persons with HIV infection and persons at risk for HIV, particularly among men who have sex with men. In addition to being associated with increased sexual risk behavior, methamphetamine causes significant medical morbidity, including neurologic deficits, cardiovascular compromise, dental decay, and skin infections, all of which may be worsened in the presence of HIV/AIDS. Methamphetamine use may also result in decreased medication adherence, particularly during "binging" episodes. Behavioral counseling remains the standard of treatment for methamphetamine dependence, although the effectiveness of most counseling interventions has not been rigorously tested. Pharmacologic and structural interventions may prove valuable additional interventions to reduce methamphetamine use.

PMID: 16343378 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**J Subst Abuse Treat. 2006 Sep;31(2):163-71. Epub 2006 Jul 13.**

**Behavioral HIV risk reduction among people who inject drugs: meta-analytic evidence of efficacy.**

**Copenhaver MM, Johnson BT, Lee IC, Harman JJ, Carey MP; SHARP Research Team.**

Department of Psychology, Center for Health/HIV Intervention and Prevention, CHIP,  
University of Connecticut, Storrs, 06269, USA.

### Abstract

We conducted a meta-analysis of randomized controlled trials (RCTs) to evaluate behavioral HIV risk reduction interventions targeting people who inject drugs. We included 37 RCTs evaluating 49 independent HIV risk reduction interventions with 10,190 participants. Compared to controls, intervention participants reduced injection drug use (IDU) and non-IDU, increased drug treatment entry, increased condom use, and decreased trading sex for drugs. Interventions were more successful at reducing IDU when participants were non-Caucasians, when content focused equivalently on drug-related and sex-related risks, and when content included interpersonal skills training specific for safer needle use. Condom use outcomes improved when two intervention facilitators were used instead of one. IDU outcomes did not decay, but condom use outcomes did. Behavioral interventions reduce risk behaviors among people who inject drugs, especially when interventions target both drug risk and sexual risk behaviors, and when they include certain behavioral skills components. Implications for future interventions are presented.

PMID: 16919744 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**AIDS Behav. 2010 Jul 31. [Epub ahead of print]**

**Efficacy of Personalized Cognitive Counseling in Men of Color who Have Sex with Men: Secondary Data Analysis from a Controlled Intervention Trial.**

**Dilley JW, Schwarcz S, Murphy J, Joseph C, Vittinghoff E, Scheer S.**

Department of Psychiatry and the AIDS Health Project, University of California, San Francisco, CA, USA.

### **Abstract**

In a previous report, we demonstrated the efficacy of a cognitively based counseling intervention compared to standard counseling at reducing episodes of unprotected anal intercourse (UAI) among men who have sex with men (MSM) seeking HIV testing. Given the limited number of efficacious prevention interventions for MSM of color (MOC) available, we analyzed the data stratified into MOC and whites. The sample included 196 white MSM and 109 MOC (23 African Americans, 36 Latinos, 22 Asians, eight Alaskan Natives/Native Americans/Hawaiian/Pacific Islander, and 20 of mixed or other unspecified race). Among MOC in the intervention group, the mean number of episodes of UAI declined from 5.1 to 1.6 at six months and was stable at 12 months (1.8). Among the MOC receiving standard counseling, the mean number of UAI episodes was 4.2 at baseline, 3.9 at six months and 2.1 at 12 months. There was a significant treatment effect overall (relative risk 0.59, 95% confidence interval 0.35-0.998). These results suggest that the intervention is effective in MOC.

PMID: 20680432 [PubMed - as supplied by publisher]

## Drivers and Sexual Behavior Change Literature Review

**J Acquir Immune Defic Syndr. 2007 Apr 15;44(5):569-77.**

**Brief cognitive counseling with HIV testing to reduce sexual risk among men who have sex with men: results from a randomized controlled trial using paraprofessional counselors.**

**Dilley JW, Woods WJ, Loeb L, Nelson K, Sheon N, Mullan J, Adler B, Chen S, McFarland W.**

AIDS Health Project, University of California-San Francisco, San Francisco, CA 94143, USA.

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### **Abstract**

**OBJECTIVES:** To test the efficacy and acceptability of a single-session personalized cognitive counseling (PCC) intervention delivered by paraprofessionals during HIV voluntary counseling and testing.

**METHODS:** HIV-negative men who have sex with men (MSM; n = 336) were randomly allocated to PCC or usual counseling (UC) between October 2002 and September 2004. The primary outcome was the number of episodes of unprotected anal intercourse (UAI) with any nonprimary partner of nonconcordant HIV serostatus in the preceding 90 days, measured at baseline, 6 months, and 12 months. Impact was assessed as "intent to treat" by random-intercept Poisson regression analysis. Acceptability was assessed by a standardized client satisfaction survey.

**RESULTS:** Men receiving PCC and UC reported comparable levels of HIV nonconcordant UAI at baseline (mean episodes: 4.2 vs. 4.8, respectively; P = 0.151). UAI decreased by more than 60% to 1.9 episodes at 6 months in the PCC arm (P < 0.001 vs. baseline) but was unchanged at 4.3 episodes for the UC arm (P = 0.069 vs. baseline). At 6 months, men receiving PCC reported significantly less risk than those receiving UC (P = 0.029 for difference to PCC). Risk reduction in the PCC arm was sustained from 6 to 12 months at 1.9 (P = 0.181), whereas risk significantly decreased in the UC arm to 2.2 during this interval (P < 0.001 vs. 6 months; P = 0.756 vs. PCC at 12 months). Significantly more PCC participants were "very satisfied" with the counseling experience (78.2%) versus UC participants (59.2%) (P = 0.002).

**CONCLUSIONS:** Both interventions were effective in reducing high-risk sexual behavior among MSM repeat testers. PCC participants demonstrated significant behavioral change more swiftly and reported a more satisfying counseling experience than UC participants.

PMID: 17310937 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

Open AIDS J. 2010 May 14;4:105-15.

### Formative Assessment of ARM-U: A Modular Intervention for Decreasing Risk Behaviors Among HIV-Positive and HIV-Negative Methamphetamine-Using MSM.

Garfein RS, Metzner M, Cuevas J, Bousman CA, Patterson T.

Division of Global Public Health, Department of Medicine, University of California, San Diego, La Jolla, California, USA.

#### Abstract

**BACKGROUND:** Methamphetamine is a major contributor to HIV transmission among men who have sex with men (MSM). Recent studies show that up to one-third of methamphetamine-using MSM (MUMSM) inject the drug. We developed a behavioral intervention for MUMSM to decrease unprotected anal intercourse and increase awareness of parenteral HIV transmission risk. This 6-session (3 in-person, 3 by telephone) modular intervention was designed to be tailored to participants' HIV (+/-) and injection drug user ([IDU] yes/no) status. We present results of formative research used to evaluate the content and to assess feasibility and acceptability of this individual-level HIV risk-reduction intervention.

**SETTING:** HIV research clinic in a high MSM and methamphetamine prevalence neighborhood.

**PROJECT:** Avoiding Risks from Methamphetamine-Use (ARM-U) is a brief toolbox intervention that allows counselors to select modules that suit a client's individual risk profile and intervention needs employing motivational interviewing and cognitive behavioral theory. We evaluated the format and content of the intervention through focus groups and pre-testing of the entire intervention using volunteers from the target population stratified into four groups (HIV+/IDU, HIV-/IDU, HIV+/non-IDU, HIV-/non-IDU). Four individuals in each stratum were recruited to undergo the intervention and complete a satisfaction survey at the end of each in-person session.

**RESULTS:** In total, 25 MUMSM attended one of five focus groups. Participants thought all proposed intervention topics were important and could aid in reducing sexual risk behaviors among MUMSM. However, the neurocognitive effects of methamphetamine were reported to be a barrier to practicing safer sex, condom use negotiation or HIV status disclosure. Fifteen (94%) of 16 participants completed all 6 sessions and the satisfaction survey. On average, participants felt the intervention was useful for MUMSM, made them contemplate and move toward behavior change, and would recommend the program to their peers.

**LESSONS LEARNED:** Based on our formative research, we revised the ARM-U intervention to emphasize pre-planning to avoid combining methamphetamine use and sex or develop strategies to avoid sex risk following methamphetamine use. We also increased emphasis on referrals for care and other requested services. Future efficacy trials are needed to evaluate the intervention's ability to reduce HIV-associated risk behaviors.

PMID: 20657829 [PubMed - in process]PMCID: PMC2905777Free PMC Article

## Drivers and Sexual Behavior Change Literature Review

**Curr Opin Infect Dis. 2010 Feb;23(1):39-44.**

**Sexual risk behaviour of men who have sex with men: emerging patterns and new challenges.**

**Hart GJ, Elford J.**

Research Department of Infection and Population Health, University College London, UK.  
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### **Abstract**

**PURPOSE OF REVIEW:** Antiretroviral treatment means that an increasing number of men who have sex with men (MSM) are living with HIV. The present review focuses on continuing transmission of HIV, risk factors for HIV infection in HIV-negative MSM, risk behaviour and risk reduction interventions among HIV-positive MSM, sexually transmitted infections, HIV and ageing and new and emerging populations of MSM communities.

**RECENT FINDINGS:** Transmission of HIV infection continues in populations of MSM; transmission may be particularly high from main partners. Serosorting offers limited protection against HIV infection for HIV-negative MSM; negotiated safety and strategic positioning may be partially protective. For HIV-positive men, serosorting is a strategy to prevent HIV transmission, but has contributed to high rates of new non-HIV sexually transmitted infections. Sexual networks are important to the understanding of emerging sexually transmitted infections; ageing brings a new dimension to research on HIV.

**SUMMARY:** Strategies other than exclusive condom use have emerged in communities of MSM to reduce the risk of HIV transmission, including serosorting and strategic positioning.

'Combination prevention' - using social structural, behavioural and biomedical approaches in tandem - could reduce the risk of HIV transmission, and may be particularly suited to HIV-positive MSM.

PMID: 19949328 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

Cochrane Database Syst Rev. 2008 Jul 16;(3):CD001230.

**Behavioral interventions to reduce risk for sexual transmission of HIV among men who have sex with men.**

**Johnson WD**, Diaz RM, Flanders WD, Goodman M, Hill AN, Holtgrave D, Malow R, McClellan WM.

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Update of: Cochrane Database Syst Rev. 2003;(1):CD001230.

### **Abstract**

**BACKGROUND:** Men who have sex with men (MSM) remain at great risk for HIV infection. Program planners and policy makers need descriptions of interventions and quantitative estimates of intervention effects to make informed decisions concerning prevention funding and research. The number of intervention strategies for MSM that have been examined with strong research designs has increased substantially in the past few years.

**OBJECTIVES:** 1. To locate and describe outcome studies evaluating the effects of behavioral HIV prevention interventions for MSM. 2. To summarize the effectiveness of these interventions in reducing unprotected anal sex. 3. To identify study characteristics associated with effectiveness. 4. To identify gaps and indicate future research, policy, and practice needs.

**SEARCH STRATEGY:** We searched electronic databases, current journals, manuscripts submitted by researchers, bibliographies of relevant articles, conference proceedings, and other reviews for published and unpublished reports from 1988 through December 2007. We also asked researchers working in HIV prevention about new and ongoing studies.

**SELECTION CRITERIA:** Studies were considered in scope if they examined the effects of behavioral interventions aimed at reducing risk for HIV or STD transmission among MSM. We reviewed studies in scope for criteria of outcome relevance (measurement of at least one of a list of behavioral or biologic outcomes, e.g., unprotected sex or incidence of HIV infections) and methodologic rigor (randomized controlled trials or certain strong quasi-experimental designs with comparison groups).

**DATA COLLECTION AND ANALYSIS:** We used fixed and random effects models to summarize rate ratios (RR) comparing intervention and control groups with respect to count outcomes (number of occasions of or partners for unprotected anal sex), and corresponding prevalence ratios (PR) for dichotomous outcomes (any unprotected anal sex vs. none). We used published formulas to convert effect sizes and their variances for count and dichotomous outcomes where necessary. We accounted for intraclass correlation (ICC) in community-level studies and adjusted for baseline conditions in all studies. We present separate results by intervention format (small group, individual, or community-level) and by type of intervention delivered to the comparison group (minimal or no HIV prevention in the comparison condition versus standard or other HIV prevention in the comparison condition). We examine rate ratios stratified according to characteristics of participants, design, implementation, and intervention content. For small group and individual-level interventions we used a stepwise selection process to identify a multivariable model of predictors of reduction in occasions of or partners for unprotected anal sex. We used funnel plots to examine publication bias, and  $Q$  (a chi-squared statistic with degrees of freedom = number of interventions minus 1) to test for heterogeneity.

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**MAIN RESULTS:** We found 44 studies evaluating 58 interventions with 18,585 participants. Formats included 26 small group interventions, 21 individual-level interventions, and 11 community-level interventions. Sixteen of the 58 interventions focused on HIV-positives. The 40 interventions that were measured against minimal to no HIV prevention intervention reduced occasions of or partners for unprotected anal sex by 27% (95% confidence interval [CI] = 15% to 37%). The other 18 interventions reduced unprotected anal sex by 17% beyond changes observed in standard or other interventions (CI = 5% to 27%). Intervention effects were statistically homogeneous, and no independent variable was statistically significantly associated with intervention effects at  $\alpha=.05$ . However, a multivariable model selected by backward stepwise elimination identified four study characteristics associated with reduction in occasions of or partners for unprotected anal sex among small group and individual-level interventions at  $\alpha=.10$ . The most favorable reductions in episodes of or partners for unprotected anal sex (33% to 35% decreases) were observed among studies with count outcomes, those with shorter intervention spans ( $\leq 1$  month), those with better retention in the intervention condition than in the comparison condition, and those with minimal to no HIV prevention intervention delivered to the comparison condition. Because there were only 11 community-level studies we did not search for a multivariable model for community-level interventions. In stratified analyses including only one variable at a time, the greatest reductions (40% to 54% decreases) in number of episodes of or partners for unprotected anal sex among community-level interventions were observed among studies where groups were assigned randomly rather than by convenience, studies with shorter recall periods and longer follow-up, studies with more than 25% non-gay identifying MSM, studies in which at least 90% of participants were white, and studies in which the intervention addressed development of personal skills.

**AUTHORS' CONCLUSIONS:** Behavioral interventions reduce self-reported unprotected anal sex among MSM. These results indicate that HIV prevention for this population can work and should be supported. Results of previous studies provide a benchmark for expectations in new studies. Meta-analysis can inform future design and implementation in terms of sample size, target populations, settings, goals for process measures, and intervention content. When effects differ by design variables, which are deliberately selected and planned, awareness of these characteristics may be beneficial to future designs. Researchers designing future small group and individual-level studies should keep in mind that to date, effects of the greatest magnitude have been observed in studies that used count outcomes and a shorter intervention span (up to 1 month). Among small group and individual-level studies, effects were also greatest when the comparison condition included minimal to no HIV prevention content. Nevertheless, statistically significant favorable effects were also seen when the comparison condition included standard or other HIV prevention content. Researchers choosing the latter option for new studies should plan for larger sample sizes based on the smaller expected net intervention effect noted above. When effects differ by implementation variables, which become evident as the study is conducted but are not usually selected or planned, caution may be advised so that future studies can reduce bias. Because intervention effects were somewhat stronger (though not statistically significantly so) in studies with a greater attrition in the comparison condition, differential retention may be a threat to validity. Extra effort should be given to retaining participants in comparison conditions. Among community-level interventions, intervention effects were strongest among studies with random assignment of groups or communities. Therefore the inclusion of studies where assignment of groups or communities was by convenience did not exaggerate the summary effect. The greater effectiveness of interventions including more than 25% non-gay identifying

## **Drivers and Sexual Behavior Change Literature Review**

MSM suggests that when they can be reached, these men may be more responsive than gay-identified men to risk reduction efforts. Non-gay identified MSM may have had less exposure to previous prevention messages, so their initial exposure may have a greater impact. The greater effectiveness of interventions that include efforts to promote personal skills such as keeping condoms available and behavioral self-management indicates that such content merits strong consideration in development and delivery of new interventions for MSM. And the finding that interventions were most effective for majority white populations underscores the critical need for effective interventions for MSM of African and Latino descent. Further research measuring the incidence of HIV and other STDs is needed. Because most studies were conducted among mostly white men in the US and Europe, more evaluations of interventions are needed for African American and Hispanic MSM as well as MSM in the developing world. More research is also needed to further clarify which behavioral strategies (e.g., reducing unprotected anal sex, having oral sex instead of anal sex, reducing number of partners, avoiding serodiscordant partners, strategic positioning, or reducing anal sex even with condom use) are most effective in reducing transmission among MSM, the messages most effective in promoting these behaviors, and the methods and settings in which these messages can be most effectively delivered. PMID: 18646068 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**AIDS Educ Prev. 2005 Dec;17(6):568-89.**

**HIV intervention research for men who have sex with men: a 7-year update.**

**Johnson WD, Holtgrave DR, McClellan WM, Flanders WD, Hill AN, Goodman M.**

Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA 30312, USA. wjohnson@cdc.gov

### Abstract

We conducted a systematic review and meta-analysis to locate, characterize, and summarize effects of behavioral HIV prevention interventions for men who have sex with men (MSM). We found 54 interventions with 16,224 participants that were evaluated in 40 randomized trials and controlled observational studies with independent comparison groups. Formats included 26 small group interventions, 18 individual-level interventions, and 10 community-level interventions. Fifteen interventions focused on HIV-positive individuals including MSM. The 38 interventions that were compared with minimal or no HIV prevention interventions, reduced unprotected sex by 27% (95% confidence interval [CI] = 15-37%). The other 16 interventions reduced unprotected sex by 17% beyond changes observed in standard or other HIV prevention interventions (CI = 5-27%). Behavioral interventions reduce self-reported unprotected sex among MSM.

PMID: 16398578 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**AIDS Behav. 2007 Sep;11(5 Suppl):S117-26. Epub 2007 Jun 26.**

**Developing an HIV-prevention intervention for HIV-infected men who have sex with men in HIV care: project enhance.**

**Knauz RO**, Safren SA, O'Cleirigh C, Capistrant BD, Driskell JR, Aguilar D, Salomon L, Hobson J, Mayer KH.

Fenway Community Health, 7 Haviland Street, Boston, MA 02115, USA.

### **Abstract**

Men who have sex with men (MSM) represent the largest group with HIV in the U.S. (CDC 2005). Interventions for prevention with HIV-infected MSM are urgently needed, and integrating prevention into HIV care represents one opportunity for this advancement. This article describes the development and results of initial pilot testing of a behavioral intervention to reduce HIV sexual risk transmission behavior for HIV-infected MSM that is integrated into HIV care. To illustrate our intervention development process, we describe the setting and population (HIV-infected MSM patients at Fenway Community Health in Boston) for the project, the initial conceptualization of the project including its guiding conceptual model (information, motivation, and behavioral skills model, IMB: Fisher and Fischer 1993), the iterative process of attaining and integrating input from stakeholders, the use of peer interventionists, the open phase pilot and participant input, an overview of the intervention content, and, finally, lessons learned. The result of this process is an example of an intervention developed with strong input from the community and other stakeholders, which is ready for further testing in a randomized controlled trial.

PMID: 17592765 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**AIDS**. 2006 Mar 21;20(5):731-9.

**Risk factors for HIV infection among men who have sex with men.**

**Koblin BA**, **Husnik MJ**, **Colfax G**, **Huang Y**, **Madison M**, **Mayer K**, **Barresi PJ**, **Coates TJ**,  
**Chesney MA**, **Buchbinder S**.

Laboratory of Infectious Disease Prevention, The New York Blood Center, New York, New York 10021, USA. bkoblin@nybloodcenter.org

### **Abstract**

**OBJECTIVES:** Risk factors for HIV acquisition were examined in a recent cohort of men who have sex with men (MSM).

**DESIGN:** A longitudinal analysis of 4295 HIV-negative MSM enrolled in a randomized behavioral intervention trial conducted in six US cities.

**METHODS:** MSM were enrolled and assessed for HIV infection and risk behaviors semi-annually, up to 48 months.

**RESULTS:** In multivariate analysis, men reporting four or more male sex partners, unprotected receptive anal intercourse with any HIV serostatus partners and unprotected insertive anal intercourse with HIV-positive partners were at increased risk of HIV infection, as were those reporting amphetamine or heavy alcohol use and alcohol or drug use before sex. Some depression symptoms and occurrence of gonorrhea also were independently associated with HIV infection. The attributable fractions of high number of male partners, use of alcohol or drugs before sex, and unprotected receptive anal intercourse with unknown status partners and the same with presumed negative partners accounted for 32.3, 29.0, 28.4 and 21.6% of infections, respectively.

**CONCLUSIONS:** The challenge is to develop strategies to identify men in need. Interventions are needed to help men reduce their number of sexual partners, occurrences of unprotected anal intercourse, alcohol or drug use before sex and address other mental health issues.

PMID: 16514304 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**PLoS Med. 2010 Aug 24;7(8):e1000329.**

**An intervention to reduce HIV risk behavior of substance-using men who have sex with men: a two-group randomized trial with a nonrandomized third group.**

**Mansergh G, Koblin BA, McKirnan DJ, Hudson SM, Flores SA, Wiegand RE, Purcell DW, Colfax GN; Project MIX Study Team.**

Collaborators (27)

Flores SA, Mansergh G, Purcell DW, Spikes P, Taylor R, Dyslan K, Ferro C, Jamenez D, Hopwood J, Martin N, McKirnan D, Powers C, Rodriguez P, Copeland J, Fernandez L Jr, Gatson B, Hudson SM, Bonelli J, Bonner S, Curtis K, Frye V, Goodman K, Hoover D, Koblin BA, Colfax GN, Guzman R, Matheson T.

Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America. [gmansergh@cdc.gov](mailto:gmansergh@cdc.gov)

### **Abstract**

**BACKGROUND:** Substance use during sex is associated with sexual risk behavior among men who have sex with men (MSM), and MSM continue to be the group at highest risk for incident HIV in the United States. The objective of this study is to test the efficacy of a group-based, cognitive-behavioral intervention to reduce risk behavior of substance-using MSM, compared to a randomized attention-control group and a nonrandomized standard HIV-testing group.

**METHODS AND FINDINGS:** Participants (n = 1,686) were enrolled in Chicago, Los Angeles, New York City, and San Francisco and randomized to a cognitive-behavioral intervention or attention-control comparison. The nonrandomized group received standard HIV counseling and testing. Intervention group participants received six 2-h group sessions focused on reducing substance use and sexual risk behavior. Attention-control group participants received six 2-h group sessions of videos and discussion of MSM community issues unrelated to substance use, sexual risk, and HIV/AIDS. All three groups received HIV counseling and testing at baseline. The sample reported high-risk behavior during the past 3 mo prior to their baseline visit: 67% reported unprotected anal sex, and 77% reported substance use during their most recent anal sex encounter with a nonprimary partner. The three groups significantly ( $p < 0.05$ ) reduced risk behavior (e.g., unprotected anal sex reduced by 32% at 12-mo follow-up), but were not different ( $p > 0.05$ ) from each other at 3-, 6-, and 12-mo follow-up. Outcomes for the 2-arm comparisons were not significantly different at 12-mo follow-up (e.g., unprotected anal sex, odds ratio = 1.14,

## **Drivers and Sexual Behavior Change Literature Review**

confidence interval = 0.86-1.51), nor at earlier time points. Similar results were found for each outcome variable in both 2- and 3-arm comparisons.

**CONCLUSIONS:** These results for reducing sexual risk behavior of substance-using MSM are consistent with results of intervention trials for other populations, which collectively suggest critical challenges for the field of HIV behavioral interventions. Several mechanisms may contribute to statistically indistinguishable reductions in risk outcomes by trial group. More explicit debate is needed in the behavioral intervention field about appropriate scientific designs and methods. As HIV prevention increasingly competes for behavior-change attention alongside other "chronic" diseases and mental health issues, new approaches may better resonate with at-risk groups.

**TRIAL REGISTRATION:** ClinicalTrials.gov NCT00153361. Please see later in the article for the Editors' Summary.

PMID: 20811491 [PubMed - in process]PMCID: PMC2927550Free PMC Article

## Drivers and Sexual Behavior Change Literature Review

Drug Alcohol Depend. 2007 March 16; 87(2-3): 249–257.

**Efficacy of a behavioral intervention for increasing safer sex behaviors in HIV-positive MSM methamphetamine users: results from the EDGE study.**

Mausbach BT, Semple SJ, Strathdee SA, Zians J, Patterson TL.

Department of Psychiatry, University of California San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0680, USA.

### Abstract

**BACKGROUND:** Methamphetamine use has been associated with rising STI/HIV transmission rates, particularly among men who have sex with men (MSM). Interventions which successfully reduce risk for HIV transmission among this population are a public health priority. This study examined the efficacy of a behavioral intervention for increasing safer sex behaviors in the context of ongoing methamphetamine use in a sample of HIV-positive, methamphetamine-using MSM.

**METHODS:** Three-hundred and forty-one participants from San Diego, CA were randomly assigned to receive either a safer sex behavioral intervention (EDGE) or a time-equivalent diet-and-exercise attention-control condition. Random effects regression analyses were used to evaluate change in safer sex behaviors over a 12-month period.

**RESULTS:** Participants in the EDGE intervention engaged in significantly more protected sex acts at the 8-month ( $p=0.034$ ) and 12-month assessment ( $p=0.007$ ). By 12-months post-baseline, a greater percentage of protected sex acts was observed for EDGE (25.8%) vs. control participants (18.7%) ( $p=0.038$ ). There was a significant time-by-intervention interaction ( $p=0.018$ ) for self-efficacy for condom use, suggesting that EDGE participants' self-efficacy demonstrated a greater increase over time compared to control participants.

**CONCLUSIONS:** These results suggest that it is possible to reduce high risk sexual behaviors in the context of ongoing methamphetamine use among HIV-infected MSM.

PMID: 17182196 [PubMed - indexed for MEDLINE]PMCID: PMC1904343Free PMC Article

## Drivers and Sexual Behavior Change Literature Review

Ann Behav Med. 2007 Nov-Dec;34(3):263-74.

**Efficacy of a behavioral intervention for increasing safer sex behaviors in HIV-negative, heterosexual methamphetamine users: results from the Fast-Lane Study.**

Mausbach BT, Semple SJ, Strathdee SA, Zians J, Patterson TL.

Department of Psychiatry, University of California San Diego, La Jolla, CA 92093-0680, USA.

### Abstract

**BACKGROUND:** The risk of acquiring HIV is particularly high among persons who use methamphetamine, which is often associated with unprotected sex and high numbers of sexual partners.

**PURPOSE:** This study examined the efficacy of a behavioral intervention emphasizing motivational interviewing and social cognitive theory for increasing safer sex behaviors in the context of ongoing methamphetamine use in a sample of HIV-negative, heterosexual methamphetamine users.

**METHODS:** Four hundred fifty-one participants from San Diego, California, were randomly assigned to receive one of three treatment conditions: (a) a safer sex behavioral intervention (Fast-Lane [FL]), (b) the FL intervention with boosters (FL + B), or (c) a time-equivalent diet-and-exercise attention-control (D&E) condition. Random effects regression analyses were used to evaluate change in safer sex behaviors over an 18-month period.

**RESULTS:** Compared to those in the D&E condition, participants in the FL + B condition ( $p = .019$ ) and FL condition ( $p = .020$ ) significantly increased their engagement in protected sex acts over the active intervention phase. Also, compared to the D&E condition, those in the FL condition demonstrated a significant decrease in unprotected sex ( $p = .005$ ) and an increase in percent protected sex ( $p = .001$ ) during the active intervention. Finally, relative to D&E participants, FL participants demonstrated significant improvements in self-efficacy for negotiating safer sex ( $p = .011$ ), and change in self-efficacy mediated the efficacy of the FL condition for increasing safer sex behaviors ( $p = .033$ ).

**CONCLUSIONS:** These results suggest that our behavioral intervention was successful in terms of reducing high-risk sexual behaviors in the context of ongoing methamphetamine use among HIV-negative heterosexuals. Reductions in high-risk sexual behavior were likely because of the impact of the intervention on participants' self-efficacy for negotiating safer sex.

PMID: 18020936

## Drivers and Sexual Behavior Change Literature Review

**J Consult Clin Psychol. 2010 Oct 4. [Epub ahead of print]**

**The treatment advocacy program: A randomized controlled trial of a peer-led safer sex intervention for hiv-infected men who have sex with men.**

**McKirnan DJ, Tolou-Shams M, Courtenay-Quirk C.**

### **Abstract**

Objective: Primary care may be an effective venue for delivering behavioral interventions for sexual safety among HIV-positive men who have sex with men (MSM); however, few studies show efficacy for such an approach. We tested the efficacy of the Treatment Advocacy Program (TAP), a 4-session, primary-care-based, individual counseling intervention led by HIV-positive MSM "peer advocates" in reducing unprotected sex with HIV-negative or unknown partners (HIV transmission risk). Method: We randomized 313 HIV-positive MSM to TAP or standard care. HIV transmission risk was assessed at baseline, 6 months, and 12 months (251 participants completed all study waves). We conducted intent-to-treat analyses using general estimating equations to test the interaction of group (TAP vs. standard care) by follow-up period. Results: At study completion, TAP participants reported greater transmission risk reduction than did those receiving standard care,  $\chi^2(2, N = 249) = 6.6, p = .04$ . Transmission risk among TAP participants decreased from 34% at baseline to about 20% at both 6 and 12 months: Transmission risk ranged from 23% to 25% among comparison participants. Conclusions: TAP reduced transmission risk among HIV-positive MSM, although results are modest. Many participants and peer advocates commented favorably on the computer structure of the program. We feel that the key elements of TAP-computer-based and individually tailored session content, delivered by peers, in the primary care setting-warrant further exploration. (PsycINFO Database Record (c) 2010 APA, all rights reserved).

PMID: 20919760 [PubMed - as supplied by publisher]

## Drivers and Sexual Behavior Change Literature Review

**Drug Alcohol Depend. 2008 May 1;95(1-2):37-44. Epub 2008 Feb 19.**

**HIV-positive patients' discussion of alcohol use with their HIV primary care providers.**

**Metsch LR, Pereyra M, Colfax G, Dawson-Rose C, Cardenas G, McKirman D, Eroglu D.**

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### **Abstract**

**OBJECTIVES:** We investigated the prevalence of HIV-positive patients discussing alcohol use with their HIV primary care providers and factors associated with these discussions.

**METHODS:** We recruited 1225 adult participants from 10 HIV care clinics in three large US cities from May 2004 to 2005. Multivariate logistic regression analysis was used to assess the associations between self-reported rates of discussion of alcohol use with HIV primary care providers in the past 12 months and the CAGE screening measure of problem drinking and sociodemographic variables.

**RESULTS:** Thirty-five percent of participants reported discussion of alcohol use with their primary care providers. The odds of reporting discussion of alcohol were three times greater for problem drinkers than for non-drinkers, but only 52% of problem drinkers reported such a discussion in the prior 12 months. Sociodemographic factors associated with discussion of alcohol use (after controlling for problem drinking) were being younger than 40, male, being non-white Hispanic (compared with being Hispanic), being in poorer health, and having a better patient-provider relationship.

**CONCLUSIONS:** Efforts are needed to increase the focus on alcohol use in the HIV primary care setting, especially with problem drinkers. Interventions addressing provider training or brief interventions that address alcohol use by HIV-positive patients in the HIV primary care setting should be considered as possible approaches to address this issue.

PMID: 18243580 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**AIDS Patient Care STDS. 2008 Sep;22(9):745-51.**

**Polysubstance use and HIV/STD risk behavior among Massachusetts men who have sex with men accessing Department of Public Health mobile van services: implications for intervention development.**

**Mimiaga MJ, Reisner SL, Vanderwarker R, Gaucher MJ, O'Connor CA, Medeiros MS, Safren SA.**

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Polysubstance use has been posited to be a significant contributor to excess burden of HIV disease among men who have sex with men (MSM). The current study investigated polysubstance use and sexual risk among men who utilize Massachusetts Department of Public Health (MDPH) van services (such as HIV, chlamydia, gonorrhea, or syphilis testing; Hepatitis A and B vaccinations) at venues targeting MSM. Participants (n = 214) completed a one-time, cross-sectional survey via an audio computer-assisted self-interview (ACASI) in English or Spanish between June 2007 and September 2007. Fifteen percent of the overall sample did not know their HIV status; 11% reported polysubstance use (concurrent use of three or more: poppers, ecstasy, GHB, cocaine, crystal methamphetamine, Viagra) during sex in the 12 months prior to study enrollment. Polysubstance users were more likely to be HIV infected (odds ratio [OR] = 4.62; p = 0.03) and to have a history of one or more sexually transmitted diseases (STDs; OR = 4.74; p = 0.03) relative to participants who did not report polysubstance use during sex. After controlling for covariates of age, race/ethnicity, education level, insurance status, sexual orientation, STD history, HIV status, and depression, multivariable logistic regression analyses revealed that polysubstance users were 9 times more likely to have reported unprotected anal (insertive or receptive) sex in the 12 months prior to study enrollment (adjusted OR = 9.53; p = 0.007) compared to nonpolysubstance-using MSM. Polysubstance users lacked access to care (21% were uninsured) and the overwhelming majority (96%) were first time users of mobile health van services. Accessible outreach services for MSM such as mobile van services need to include drug screening and interventions that triage men into treatment programs; year-round availability of van services is warranted.

PMID: 18754704 [PubMed - indexed for MEDLINE]

## **Drivers and Sexual Behavior Change Literature Review**

**J Evid Based Soc Work. 2010 Jan;7(1):144-61.**

**An ecological approach to addressing HIV/AIDS in the African American community.**

**Moore D, Carr CA, Williams C, Richlen W, Huber M, Wagner J.**

Substance Abuse Resources and Disability Issues Program, Boonshoft School of Medicine,  
Wright State University, Dayton, Ohio, USA. dennis.moore@wright.edu

The disproportionate impact of HIV/AIDS on African Americans is a significant public health challenge. The complex constellation of individual, social, and environmental factors influencing transmission, require ecological solutions that recognize these multiple levels of influence and actively involve communities. This article describes the formation of a community-based coalition and highlights three initiatives it has undertaken in the areas of mobile HIV testing, HIV education, and faith-based work to improve HIV services for African Americans.

PMID: 20178031 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**J Consult Clin Psychol. 2009 Aug;77(4):645-56.**

**Randomized trial to reduce club drug use and HIV risk behaviors among men who have sex with men.**

**Morgenstern J, Bux DA Jr, Parsons J, Hagman BT, Wainberg M, Irwin T.**

Research Foundation for Mental Hygiene, Columbia University College of Physicians and Surgeons, New York, NY 10032, USA. jm977@columbia.edu

### **Abstract**

The authors examined the effectiveness of motivational interviewing (MI) on club drug use and risky sex in non-treatment-seeking men who have sex with men (MSM). MSM (N = 150) were assessed and randomly assigned to 4 sessions of MI or an educational control intervention. Follow-up occurred at quarterly intervals for 1 year. Primary outcomes were days of any club drug use and number of unsafe sex acts. On average, club drug use declined during follow-up. A significant interaction effect showed that MI was associated with less club drug use during follow-up compared with education but only among participants with lower severity of drug dependence ( $p < .02$ ; small to medium effect size). MI did not result in a significant reduction in risky sex relative to education. The results support the use of MI targeting club drug use in at-risk or mildly dependent users not seeking treatment but not in more severely dependent users. MI does not appear effective in reducing risky sexual behavior in this population.

PMID: 19634958 [PubMed - indexed for MEDLINE]PMCID: PMC2758623

## Drivers and Sexual Behavior Change Literature Review

Arch Gen Psychiatry. 2006 Feb;63(2):201-8.

**Effects of lower-cost incentives on stimulant abstinence in methadone maintenance treatment: a National Drug Abuse Treatment Clinical Trials Network study.**

Peirce JM, Petry NM, Stitzer ML, Blaine J, Kellogg S, Satterfield F, Schwartz M, Krasnansky J, Pencer E, Silva-Vazquez L, Kirby KC, Royer-Malvestuto C, Roll JM, Cohen A, Copersino ML, Kolodner K, Li R.

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### Abstract

**BACKGROUND:** Contingency management interventions that provide tangible incentives based on objective indicators of drug abstinence have improved treatment outcomes of substance abusers, but have not been widely implemented in community drug abuse treatment settings.

**OBJECTIVE:** To compare outcomes achieved when a lower-cost prize-based contingency management treatment is added to usual care in community methadone hydrochloride maintenance treatment settings.

**DESIGN:** Random assignment to usual care with (n = 198) or without (n = 190) abstinence incentives during a 12-week trial.

**SETTING:** Six community-based methadone maintenance drug abuse treatment clinics in locations across the United States.

**PARTICIPANTS:** Three hundred eighty-eight stimulant-abusing patients enrolled in methadone maintenance programs for at least 1 month and no more than 3 years.

**INTERVENTION:** Participants submitting stimulant- and alcohol-negative samples earned draws for a chance to win prizes; the number of draws earned increased with continuous abstinence time.

**MAIN OUTCOME MEASURES:** Total number of stimulant- and alcohol-negative samples provided, percentage of stimulant- and alcohol-negative samples provided, longest duration of abstinence, retention, and counseling attendance.

**RESULTS:** Submission of stimulant- and alcohol-negative samples was twice as likely for incentive as for usual care group participants (odds ratio, 1.98; 95% confidence interval, 1.42-2.77). Achieving 4 or more, 8 or more, and 12 weeks of continuous abstinence was approximately 3, 9, and 11 times more likely, respectively, for incentive vs usual care participants. Groups did not differ on study retention or counseling attendance. The average cost of prizes was 120 dollars per participant.

**CONCLUSION:** An abstinence incentive approach that paid 120 dollars in prizes per participant effectively increased stimulant abstinence in community-based methadone maintenance treatment clinics.

PMID: 16461864

## Drivers and Sexual Behavior Change Literature Review

Addiction. 2004 Jun;99(6):708-17.

**A multi-site comparison of psychosocial approaches for the treatment of methamphetamine dependence.**

Rawson RA, Marinelli-Casey P, Anglin MD, Dickow A, Frazier Y, Gallagher C, Galloway GP, Herrell J, Huber A, McCann MJ, Obert J, Pennell S, Reiber C, Vandersloot D, Zweben J;  
Methamphetamine Treatment Project Corporate Authors.

University of California, Los Angeles, Integrated Substance Abuse Programs, USA.

matrixex@ucla.edu

### **Abstract**

**AIMS:** The Center for Substance Abuse Treatment (CSAT) Methamphetamine Treatment Project (MTP) is the largest randomized clinical trial of treatments for methamphetamine (MA) dependence to date. The objective of the study was to compare the Matrix Model, a manualized treatment method, with treatment-as-usual (TAU) in eight community out-patient settings in the Western United States.

**DESIGN:** Over an 18-month period between 1999 and 2001, 978 treatment-seeking, MA-dependent people were randomly assigned to receive either TAU at each site or a manualized 16-week treatment (Matrix Model).

**SETTING:** The study was conducted as an eight-site out-patient trial, with six sites located in California and one each in Montana and Hawaii.

**FINDINGS:** In the overall sample, and in the majority of sites, those who were assigned to Matrix treatment attended more clinical sessions, stayed in treatment longer, provided more MA-free urine samples during the treatment period and had longer periods of MA abstinence than those assigned to receive TAU. Measures of drug use and functioning collected at treatment discharge and 6 months post-admission indicate significant improvement by participants in all sites and conditions when compared to baseline levels, but the superiority of the Matrix approach did not persist at these two timepoints.

**CONCLUSIONS:** Study results demonstrate a significant initial step in documenting the efficacy of the Matrix approach. Although the superiority of the Matrix approach over TAU was not maintained at the post-treatment timepoints, the in-treatment benefit is an important demonstration of empirical support for this psychosocial treatment approach.

PMID: 15139869

## Drivers and Sexual Behavior Change Literature Review

**Open AIDS J. 2010 May 14;4:116-22.**

**Developing a Text Messaging Risk Reduction Intervention for Methamphetamine-Using MSM: Research Note.**

**Reback CJ, Ling D, Shoptaw S, Rohde J.**

Friends Research Institute, Inc., USA.

### **Abstract**

Men who have sex with men (MSM) who use methamphetamine experience high risks for HIV infection due to sexual transmission behaviors often engaged in when under the influence of methamphetamine. Methamphetamine-using MSM use various forms of information technology (IT) communication such as instant messaging, social networking sites, and websites to facilitate a sexual and/or drug "hook up." Given the acceptability of IT communication in their daily lives, an IT intervention represents an appropriate strategy to reach and intervene with out-of-treatment, methamphetamine-using MSM. The aim of this study was to conduct formative work to develop a text messaging intervention to reduce methamphetamine use and high-risk sexual behaviors among out-of-treatment MSM, which involved conducting focus groups, community partners' meetings, and a pre-test intervention. These activities culminated in the development of a two-week, text-messaging intervention that delivered real-time electronic correspondence based on the behavioral change theories of Social Support Theory, Health Belief Model, and Social Cognitive Theory. The focus groups, community meetings, and pre-test were used to identify the IT communication device, the text messages that best support risk reduction and healthier behavioral choices, and logo, flyer and website development. The input and feedback from the target population and community partners were critical to the successful development of a culturally appropriate intervention. The knowledge gleaned from the formative work of this study will be vitally helpful in designing future IT studies.

PMID: 20657827 [PubMed - in process]PMCID: PMC2905770Free PMC Article

## Drivers and Sexual Behavior Change Literature Review

**Public Health Rep. 2010 Jan-Feb;125 Suppl 1:29-37.**

**A pilot intervention utilizing Internet chat rooms to prevent HIV risk behaviors among men who have sex with men.**

**Rhodes SD, Hergenrather KC, Duncan J, Vissman AT, Miller C, Wilkin AM, Stowers J, Eng E.**

Department of Social Sciences and Health Policy, Division of Public Health Sciences, Wake Forest University School of Medicine, Medical Center Blvd., Winston-Salem, NC 27157-1063, USA. SRhodes@wfubmc.edu

### Abstract

**OBJECTIVES:** Chat room-based prevention interventions for human immunodeficiency virus (HIV) are being implemented to reduce the risk of HIV exposure, infection, and re-infection among men who have sex with men (MSM).

**METHODS:** Our community-based participatory research partnership implemented a chat room-based intervention known as Cyber-Based Education and Referral/Men for Men (CyBER/M4M). We collected both quantitative and qualitative data to describe the characteristics of chat-room participants ("chatters") and their HIV risks and prevention needs, and to document intervention delivery.

**RESULTS:** Of the 1,851 chatters who participated in the 18-month intervention, 210 completed the online assessment. The mean age was 30 years. Although the majority self-identified as gay, 25.8% self-identified as bisexual. More than half self-identified as white and one-third as black or African American. A total of 8.6% reported being HIV-positive and 14.8% reported never having been tested for HIV. Grounded theory analysis of transcripts from chat-room instant-message discussions identified 13 thematic categories related to chatter characteristics, prevention needs, and intervention delivery. Chatters were looking for sexual partners, were not open about their orientation, lacked basic information about HIV, had questions about how to be tested, and perceived a lack of general community resources to meet their needs. Furthermore, CyBER educators had to understand and respect the online culture, build trust, and deliver well-crafted and focused messages.

**CONCLUSIONS:** Chat room-based interventions hold promise to systematically reach Internet communities of MSM, a group that is particularly at risk for infection with HIV and other sexually transmitted diseases.

PMID: 20408385 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

Am J Psychiatry. 2006 Nov;163(11):1993-9.

**Contingency management for the treatment of methamphetamine use disorders.**

Roll JM, Petry NM, Stitzer ML, Brecht ML, Peirce JM, McCann MJ, Blaine J, MacDonald M,  
DiMaria J, Lucero L, Kellogg S.

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### Abstract

**OBJECTIVE:** Theory and some preliminary evidence suggest that contingency management may be an effective treatment strategy or adjunct to psychosocial treatment for methamphetamine use disorders. An experimentally rigorous investigation on the topic was provided by a large multisite trial conducted under the auspices of the Clinical Trials Network of the National Institute on Drug Abuse.

**METHOD:** The authors report data on 113 participants who were diagnosed with methamphetamine abuse or dependence. They were randomly assigned to receive 12 weeks of either treatment as usual or treatment as usual plus contingency management. Urine samples were tested for illicit drugs, and breath samples were tested for alcohol. The reinforcers for drug-negative samples were plastic chips, some of which could be exchanged for prizes. The number of plastic chips drawn increased with each week of negative samples but was reset to one after a missed or positive sample.

**RESULTS:** The participants in both groups remained in treatment for equivalent times, but those receiving contingency management in addition to usual treatment submitted significantly more negative samples, and they were abstinent for a longer period of time (5 versus 3 weeks).

**CONCLUSIONS:** These results suggest that contingency management has promise as a component in treatment strategies for methamphetamine use disorder.

PMID: 17074952

## Drivers and Sexual Behavior Change Literature Review

**AIDS Behav. 2010 Jun;14(3):658-68. Epub 2009 Sep 11.**

**Reducing HIV risks among active injection drug and crack users: the safety counts program.**

**Rotheram-Borus MJ, Rhodes F, Desmond K, Weiss RE.**

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### **Abstract**

The efficacy of Safety Counts, a CDC-diffused intervention, was reanalyzed. In a quasi experimental, cross-over design, injection drug users (IDU) and crack users in two neighborhoods were assigned by neighborhood to receive individual Voluntary HIV Counseling and Testing or Safety Counts and 78% were reassessed at 5-9 months. Drug users in the Safety Counts program reported significantly greater reductions in risky sex, crack and hard drug use, and risky drug injection. The more sessions of Safety Counts attended, the greater were the reductions in risky acts. Different analytic decisions result in very different findings for the same intervention. Safety Counts is an effective intervention for IDU and crack users. Analytic decision of intervention outcomes is highly related to evaluations of an intervention's efficacy.

PMID: 19757019 [PubMed - indexed for MEDLINE] **Free PMC Article**

## Drivers and Sexual Behavior Change Literature Review

**J Urban Health. 2007 Mar;84(2):226-42.**

**Co-located substance use treatment and HIV prevention and primary care services, New York State, 1990-2002: a model for effective service delivery to a high-risk population.**

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### Abstract

The New York State Department of Health (NYSDOH) AIDS Institute (AI) began an initiative in 1990 in collaboration with the Office of Alcoholism and Substance Abuse Services (OASAS) to colocate HIV prevention and clinical services at drug treatment clinics. In 1990, the initiative began funding drug treatment programs to provide HIV counseling, testing, and prevention services. HIV primary care was added the following year. Program implementation and development are described. An analysis is included of HIV counseling and testing data for the period 1990-2002 and quality of care data for five standardized quality measures with comparisons to data from other clinical settings. In the first 13 years of the initiative 168,340 HIV-antibody tests were conducted including 52,562 tests of injection drug users (IDUs) identifying 14,612 HIV-infected persons; the seroprevalence was 8.68%. By the end of 2000, the HIV primary care caseload peaked at 3,815 patients. Quality of primary medical care services among participating drug treatment programs has consistently matched or exceeded that provided in more conventional health care settings such as the hospitals and community health centers that were used as a basis for comparison. Colocating HIV primary care within substance use treatment is an effective strategy for providing accessible high-quality HIV prevention and primary care services.

PMID: 17216572 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**AIDS Educ Prev. 2009 Apr;21(2):113-27.**

**Informing interventions: the importance of contextual factors in the prediction of sexual risk behaviors among transgender women.**

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### Abstract

This study identifies contextual factors that predict risky sexual behavior among 153 transgender women who participated in a structured survey soliciting information on demographics, substance use, HIV status, risk behaviors, and other health and psychosocial factors. Multivariate logistic regression models were used to determine predictors. Inconsistent condom use was associated with stimulant use, unstable housing, and recruitment site. Substance use during sex was associated with unstable housing and stimulant use. Sex work was associated with hormone use, gender confirming surgeries, and younger age. When developing interventions for transgender women, it may be useful to focus on predictors of risk behavior rather than predictors of current HIV status (i.e., race/ethnicity as "risk factor"), because these behaviors are the target of interventions aimed at sexual risk reduction. Implications include potential benefits of context-specific interventions, structural interventions addressing barriers to housing and health care, and culturally specific substance abuse treatment programs for transgender women.

PMID: 19397434 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Soc Sci Med. 2009 Jan;68(1):69-79. Epub 2008 Nov 3.**

### **Evaluation of a peer network intervention trial among young methamphetamine users in Chiang Mai, Thailand.**

**Sherman SG, Sutcliffe C, Srirojn B, Latkin CA, Aramratanna A, Celentano DD.**

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#### **Abstract**

Since the 1990s, there has been a proliferation of methamphetamine use in Thailand, particularly among young people. Simultaneously, risky sexual behaviors among this population have increased. This study examined the effects of a peer network intervention and a life-skills intervention on methamphetamine and HIV risk behaviors among 18-25 year olds in Chiang Mai, Thailand. Between April 2005 and June 2007, we conducted a randomized behavioral trial to compare the efficacy of a peer educator, network-oriented intervention with a best practice, life-skills curriculum on methamphetamine use, sexual behaviors, and incident sexually transmitted infections (STIs). Follow-up occurred at 3-, 6-, 9-, and 12 months. Both conditions consisted of seven, 2h, small group sessions. Longitudinal analyses of the three outcomes were conducted by fitting repeated measures logistic regression models using generalized estimating equations. Participants (N=983) attended a median of six sessions, with no differences between arms. At each follow-up visit, retention was greater than 85%. Participants were 75% male and were a median of 19 years old. Over time, participants in both conditions showed a significant and dramatic decline in self-reported methamphetamine use (99% at baseline vs. 53% at 12 months,  $p<0.0001$ ) and significant increase in consistent condom use (32% baseline vs. 44% at 12 months,  $p<0.0001$ ). Incident STIs were common, with no differences between arms. Chlamydia had the highest incidence rate, 9.85/100 person years and HIV had a low incidence rate of 0.71/100 person years. Among young Thais, we found that a peer educator, network-oriented intervention was associated with reductions in methamphetamine use, increases in condom use, and reductions in incident STIs over 12 months. We also found parallel reductions with the life-skills condition. To our knowledge, this is the first such trial targeting this population. Small group interventions are an effective means of reducing methamphetamine use and sexual risk among Thai youth.

PMID: 18986746

## Drivers and Sexual Behavior Change Literature Review

**J Subst Abuse Treat. 2008 Oct;35(3):285-93. Epub 2008 Mar 7.**

**Outcomes using two tailored behavioral treatments for substance abuse in urban gay and bisexual men.**

**Shoptaw S, Reback CJ, Larkins S, Wang PC, Rotheram-Fuller E, Dang J, Yang X.**

Department of Family Medicine, David Geffen School of Medicine at UCLA, Los Angeles, CA 90024, USA.

### **Abstract**

This project evaluated two behavioral therapies for substance abuse and concomitant sexual risk behaviors applied to primarily stimulant-abusing gay and bisexual men in Los Angeles. One hundred twenty-eight participants were randomly assigned to 16 weeks of a gay-specific cognitive-behavioral therapy (GCBT, n = 64) or to a gay-specific social support therapy (GSST; n = 64), with follow-up evaluations at 17, 26, and 52 weeks after randomization. No overall statistically significant differences were observed between conditions along retention, substance use, or HIV-related sexual risk behaviors. All participants showed a minimum of twofold reductions in substance use and concomitant sexual risk behaviors from baseline to 52-week evaluations. Among methamphetamine-using participants, the GCBT condition showed significant effects over GSST for reducing and sustaining reductions of methamphetamine. Findings replicate prior work and indicate that GCBT produces reliable, significant, and sustained reductions in stimulant use and sexual risk behaviors, particularly in methamphetamine-abusing gay and bisexual men.

PMID: 18329226

## Drivers and Sexual Behavior Change Literature Review

**Drug Alcohol Depend. 2005 May 9;78(2):125-34. Epub 2004 Nov 28.**

**Behavioral treatment approaches for methamphetamine dependence and HIV-related sexual risk behaviors among urban gay and bisexual men.**

**Shoptaw S, Reback CJ, Peck JA, Yang X, Rotheram-Fuller E, Larkins S, Veniegas RC, Freese TE, Hucks-Ortiz C.**

Friends Research Institute, Los Angeles, CA 90025, USA. Sshoptaw@mednet.ucla.edu

### **Abstract**

**BACKGROUND:** Methamphetamine-dependent gay and bisexual men (GBM) are at high risk for HIV transmission, largely due to drug-associated sexual risk behaviors. This project evaluated the efficacy of four behavioral drug abuse treatments for reducing methamphetamine use and sexual risk behaviors among this population.

**METHODS:** In this randomized controlled trial, 162 methamphetamine-dependent (SCID-verified) GBM in Los Angeles County were randomly assigned to one of four treatment conditions for 16 weeks: standard cognitive behavioral therapy (CBT, n=40), contingency management (CM, n=42), combined cognitive behavioral therapy and contingency management (CBT+CM, n=40), and a culturally tailored cognitive behavioral therapy (GCBT, n=40). Stimulant use was assessed thrice-weekly during treatment using urine drug screens (48 measures). Sexual risk behaviors were monitored monthly (four measures). Follow-up assessments were conducted at 6 (80.0%) and 12 months (79.9%).

**RESULTS:** Statistically significant differences in retention ( $F(3,158)=3.78, p<.02$ ), in longest period of consecutive urine samples negative for methamphetamine metabolites ( $F(3,158)=11.80, p<.001$ ), and in the Treatment Effectiveness Score were observed by condition during treatment ( $F(3,158)=7.35, p<.001$ ) with post hoc analyses showing the CM and CBT+CM conditions to perform better than standard CBT. GEE modeling results showed GCBT significantly reduced unprotected receptive anal intercourse (URAI) during the first 4 weeks of treatment ( $X^2=6.75, p<.01$ ). During treatment between-group differences disappeared at follow-up with overall reductions in outcomes sustained to 1-year.

**CONCLUSIONS:** Among high-risk methamphetamine-dependent GBM, drug abuse treatments produced significant reductions in methamphetamine use and sexual risk behaviors. Drug abuse treatments merit consideration as a primary HIV prevention strategy for this population.

PMID: 15845315 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Am J Addict. 2007 Mar-Apr;16(2):111-6.**

**Brief intervention for students with methamphetamine use disorders: a randomized controlled trial.**

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### **Abstract**

This study evaluated the short-term (eight-week) benefits of brief intervention (BI) in students aged 14-19 years old who met the DSM-IV diagnostic criteria for methamphetamine (MA) dependence or abuse. The participants were randomly assigned to receive two 20-minute sessions of BI or one 15-minute session of psychoeducation (PE). Primary outcomes of interest were the decrease of MA use in days of use (per week) units and MA tablets used (per day when used). All outcomes were assessed at baseline (week 0), week 4, and week 8 (endpoint). A total of 48 participants were enrolled in the study (24 on BI and 24 on PE treatment). At week 4, the numbers of dropouts in the BI and PE groups were 7 and 5, respectively. The frequency and amount of MA use decreased significantly in both groups. At week 8, the days of MA use had decreased in the BI group by a significantly larger number than in the PE group ( $t=2$ ,  $df=34$ ,  $p=0.04$ ). BI appears to have some minimal short-term benefits for adolescents with MA use disorders. It may decrease the number of days that MA is used.

PMID: 17453612 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Curr Opin Psychiatry. 2010 Mar;23(2):139-44.**

**Innovation in sexually transmitted disease and HIV prevention: internet and mobile phone delivery vehicles for global diffusion.**

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**PURPOSE OF REVIEW:** Efficacious behavioral interventions and practices have not been universally accepted, adopted, or diffused by policy makers, administrators, providers, advocates, or consumers. Biomedical innovations for sexually transmitted disease (STD) and HIV prevention have been embraced but their effectiveness is hindered by behavioral factors. Behavioral interventions are required to support providers and consumers for adoption and diffusion of biomedical innovations, protocol adherence, and sustained prevention for other STDs. Information and communication technology such as the Internet and mobile phones can deliver behavioral components for STD/HIV prevention and care to more people at less cost.

**RECENT FINDINGS:** Recent innovations in STD/HIV prevention with information and communication technology-mediated behavioral supports include STD/HIV testing and partner interventions, behavioral interventions, self-management, and provider care. Computer-based and Internet-based behavioral STD/HIV interventions have demonstrated efficacy comparable to face-to-face interventions. Mobile phone STD/HIV interventions using text-messaging are being broadly utilized but more work is needed to demonstrate efficacy. Electronic health records and care management systems can improve care, but interventions are needed to support adoption.

**SUMMARY:** Information and communication technology is rapidly diffusing globally. Over the next 5-10 years smart-phones will be broadly disseminated, connecting billions of people to the Internet and enabling lower cost, highly engaging, and ubiquitous STD/HIV prevention and treatment support interventions.

PMCID: PMC2881840 [Available on 2011/3/1]

PMID: 20087189 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Health Educ Res. 2010 Nov 8. [Epub ahead of print]**

**SOMOS: evaluation of an HIV prevention intervention for Latino gay men.**

**Vega MY, Spieldenner AR, Deleon D, Nieto BX, Stroman CA.**

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### **Abstract**

Latino gay men face multiple barriers to human immunodeficiency virus (HIV) prevention, in particular a lack of intervention programs that integrate prevention messages with cultural norms and address issues of social marginalization from multiple communities (gay community and Latino community), homophobia and racism. In order to address these specific issues, a multilayered HIV intervention was designed to incorporate and integrate psychosocial and community factors through multiple session groups, social marketing and community presentations. Participants learned strategies for effective community leadership and were encouraged to provide HIV education and address internalized homophobia in their communities. There were a total of 113 Latino gay male participants. Pretests and post-tests at 90-day follow-up were administered to measure knowledge, attitudes and behaviors related to HIV infection, self-efficacy, internalized homophobia and connectedness (i.e. gay community affiliation and social provisions); a risk index was calculated to measure level of behavioral risk for HIV infection. Participants demonstrated lower risk indices and a decrease in partners at 3 and 6 months after the intervention. There was also an increase in reported social support resources, along with an increase in group identification. Connectedness was a strong predictor of the number of sexual partners at the 90-day follow-up. This homegrown program represents a culturally responsive, highly needed and relevant intervention that should be subjected to further rigorous testing.

PMID: 21059799 [PubMed - as supplied by publisher]

## Drivers and Sexual Behavior Change Literature Review

**Infect Dis Clin North Am. 2009 Jun;23(2):309-14.**

**Meta-analyses on behavioral interventions to reduce the risk of transmission of HIV.**

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Boston Medical Center, Dowling 3N, Boston, MA 02118, USA.

### **Abstract**

Different behavioral interventions have found to be efficacious in reducing high-risk sexual activity. Interventions have been evaluated in both original research and meta-analytic reviews. Most of the studies have shown that interventions are efficacious among different study populations. In adolescents, both in- and out-of-the classroom interventions showed a decrease in the risk of unprotected sex. In African Americans, greater efficacy was found for interventions including peer education. For Latinos, effect was larger in interventions with segmentation in the same gender. Geographic and social isolation are barriers in approaching MSM. For IDUs, interventions provided within a treatment program have an impact on risk reduction above that produced by drug treatment alone. Finally, people diagnosed with HIV tend to reduce their sexual risk behavior. However, adherence to safe sex practices for life can be challenging. Relentless efforts for implementation of behavioral interventions to decrease high-risk behavior are necessary to decrease HIV transmission.

PMID: 19393911 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

### Effect of a brief video intervention on incident infection among patients attending sexually transmitted disease clinics.

Warner L, Klausner JD, Rietmeijer CA, Malotte CK, O'Donnell L, Margolis AD, Greenwood GL, Richardson D, Vrungos S, O'Donnell CR, Borkowf CB; Safe in the City Study Group.

#### Collaborators (42)

Warner L, Margolis A, Patterson J, Borkowf C, Purcell D, O'Leary A, Zhang F, Wang T, Neumann M, Iqbal K, Byers B, Burstein G, Peterman T, Satterwhite CL, Rietmeijer C, Douglas J, Bull S, Richardson D, Foster M, Cooper S, Caine J, Rothbard R, Sapp-Jones T, Brooks L, O'Donnell L, San Doval A, Myint-U A, Duran R, O'Donnell C, Malotte K, Vrungos S, DeAugustine N, Kau C, Denson I, Smorick MO, Bernhard AM, Klausner J, Greenwood G, Hunt C, Varela E, Filocamo K, Bandy D.

Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America.

#### **Abstract**

**BACKGROUND:** Sexually transmitted disease (STD) prevention remains a public health priority. Simple, practical interventions to reduce STD incidence that can be easily and inexpensively administered in high-volume clinical settings are needed. We evaluated whether a brief video, which contained STD prevention messages targeted to all patients in the waiting room, reduced acquisition of new infections after that clinic visit.

**METHODS AND FINDINGS:** In a controlled trial among patients attending three publicly funded STD clinics (one in each of three US cities) from December 2003 to August 2005, all patients (n = 38,635) were systematically assigned to either a theory-based 23-min video depicting couples overcoming barriers to safer sexual behaviors, or the standard waiting room environment. Condition assignment alternated every 4 wk and was determined by which condition (intervention or control) was in place in the clinic waiting room during the patient's first visit within the study period. An intent-to-treat analysis was used to compare STD incidence between intervention and control patients. The primary endpoint was time to diagnosis of incident laboratory-confirmed infections (gonorrhea, chlamydia, trichomoniasis, syphilis, and HIV), as identified through review of medical records and county STD surveillance registries. During 14.8 mo (average) of follow-up, 2,042 patients (5.3%) were diagnosed with incident STD (4.9%, intervention condition; 5.7%, control condition). In survival analysis, patients assigned to the intervention condition had significantly fewer STDs compared with the control condition (hazard ratio [HR], 0.91; 95% confidence interval [CI], 0.84 to 0.99).

**CONCLUSIONS:** Showing a brief video in STD clinic waiting rooms reduced new infections nearly 10% overall in three clinics. This simple, low-intensity intervention may be appropriate for adoption by clinics that serve similar patient populations.

**TRIAL REGISTRATION:** <http://www.ClinicalTrials.gov> (#NCT00137670).

PMID: 18578564 [PubMed - indexed for MEDLINE]PMCID: PMC2504047Free PMC Article

## Drivers and Sexual Behavior Change Literature Review

Arch Sex Behav. 2008 Oct;37(5):763-72.

**Risk reduction for HIV-positive African American and Latino men with histories of childhood sexual abuse.**

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### **Abstract**

While the HIV epidemic has disproportionately affected African American and Latino men who have sex with men (MSM), few HIV prevention interventions have focused on African American and Latino men who have sex with both men and women (MSMW). Even fewer interventions target HIV-positive African American and Latino MSM and MSMW with histories of childhood sexual abuse (CSA), a population that may be vulnerable to high-risk sexual behaviors, having multiple sexual partners, and depression. The Men's Health Project, a small randomized clinical trial, compared the effects of two 6-session interventions, the Sexual Health Intervention for Men (S-HIM), guided by social learning theory and aimed at decreasing high-risk sexual behaviors, number of sexual partners, and depressive symptoms, and a standard health promotion control (SHP). A community sample of 137 HIV-positive gay and non-gay identifying African American and Latino MSM and MSMW with histories of CSA was recruited. Results were based on an "intent to treat" analyses of baseline to post, 3 and 6 month follow-ups. The sample as a whole reported reductions in sexual risk behaviors and number of sexual partners from baseline to post-test, and from the 3 to 6 month follow-ups, although the decrease in sexual risk behavior from baseline to post-test was significant only for S-HIM participants. No significant differences between conditions were reported for depressive symptoms, but the total sample reported a significant decrease at 6 months. These findings highlight the importance of addressing sexual decision-making and psychological adjustment for ethnic men, while being sensitive to CSA histories and sexual minority status, and suggest the need to develop additional strategies to heighten HIV risk reduction over time.

PMID: 18506611 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

**Sex Transm Dis. 2005 Oct;32(10 Suppl):S48-52.**

**Using gay men's sexual networks to reduce sexually transmitted disease (STD)/human immunodeficiency virus (HIV) transmission.**

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California Department of Health Services, Sexually Transmitted Diseases (STD) Control Branch, Oakland, California 94612, USA. [dwohlfei@dhs.ca.gov](mailto:dwohlfei@dhs.ca.gov)

### **Abstract**

An individual's risk of acquiring or transmitting a sexually transmitted disease or HIV is affected both by individual risk factors and by one's location within a sexual network. Therefore, prevention efforts must consider intervening with both individuals and with network conformations. Helping gay and bisexual men make more informed choices about their partners and fragmenting networks to reduce the likelihood of risky encounters between high-risk core group members and those at lower risk are two strategies for reducing transmission in this population. Network-level interventions are particularly well suited for places such as commercial sex venues and Internet sites where gay and bisexual men meet new sexual partners.

PMID: 16205293 [PubMed - indexed for MEDLINE]

## Drivers and Sexual Behavior Change Literature Review

Open AIDS J. 2010 May 14;4:123-31.

### **Adaptation of a Couple-Based HIV Intervention for Methamphetamine-Involved African American Men who have Sex with Men.**

Wu E, El-Bassel N, Donald McVinney L, Fontaine YM, Hess L.

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#### **Abstract**

In the U.S., incidence of HIV infection among men who have sex with men (MSM) has steadily increased since the 1990s. This points to a need for innovation to address both emerging trends as well as longer-standing disparities in HIV risk and transmission among MSM, such as the elevated rates of HIV/STIs among African American MSM and methamphetamine users. While couple-based sexual risk reduction interventions are a promising avenue to reduce HIV/STI transmission, prior research has been almost exclusively with heterosexual couples. We sought to adapt an existing, evidence-based intervention-originally developed and tested with heterosexual couples-for a new target population consisting of African American MSM in a longer-term same-sex relationship where at least one partner uses methamphetamine. The adaptation process primarily drew from data obtained from a series of focus groups with 8 couples from the target population. Attention is given to the methods used to overcome challenges faced in this adaptation process: limited time, a lead investigator who is phenotypically different from the target population, a dearth of descriptive information on the experiences and worldviews among the target population, and a concomitant lack of topical experts. We also describe a visualization tool used to ensure that the adaptation process promotes and maintains adherence to the theory that guides the intervention and behavior change. The process culminated with an intervention adapted for the new target population as well as preliminary indications that a couple-based sexual-risk reduction intervention for African American, methamphetamine-involved male couples is feasible and attractive.

PMID: 20657720 [PubMed - in process]PMCID: PMC2908928