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Developing PeerLink to engage out-of-care HIV+ substance users: Training peers to deliver a peer-led motivational intervention with fidelity

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Abstract

Substance use among HIV+ individuals can be a barrier to HIV care, resulting in poor health outcomes. Motivational interviewing (MI) is an effective intervention to reduce substance abuse and increase HIV-related health. Healthcare workers from various backgrounds can be effectively trained in delivering MI interventions; however, there has been limited evidence that peers can effectively deliver MI interventions with fidelity. Peers have traditionally worked in HIV care settings and represent a valid context for a peer-delivered intervention focused on motivational issues. We trained four peers in MI. In this paper, we describe the intervention, explain the MI training methods, and investigate whether peers can be trained in MI with fidelity. The MI training included didactic instruction, group workshops, and individual feedback sessions. Two of four peers achieved MI treatment fidelity as measured by the Motivational Interviewing Treatment Integrity Code Version 3.0. Overall, peers had difficulty using open-ended questions and querying pros and cons, skills thought necessary to elicit change talk. They also tended to give too much direct advice where reflections would have been appropriate. A challenge was training peers to change familiar ways of communicating. Nonetheless, they did well at assessing and highlighting motivation to change. The total training hours (40 h) was long compared with other published MI studies. However, the intervention included several components with two targeted change behaviors. It is likely that peers can be trained in MI with fidelity in less time given a more streamlined intervention. When working with peers who have life stressors similar to the target group, it is important to be flexible in the training.

Keywords

motivational interviewing; peer training; substance use; HIV/AIDS; MITI

Introduction

Substance use is prevalent among people living with HIV (Bing et al., 2001; Kinkenberg & Sacks, 2004) and is a barrier to engagement in HIV care (Knowlton et al., 2001). Among those with HIV/AIDS, substance users use healthcare less (Sohler et al., 2007), decline in health more rapidly (Khalsa & Royal, 2004), and have increased morbidity and mortality (Mugavero et al., 2012; Mugavero, Davila, Nevin, & Giordano, 2010). Fortunately, HIV+ drug users who have access to HIV care can reach the same levels of adherence to antiretroviral therapies as HIV+ individuals who never use drugs (Malta, Strathdee, Magnanini, & Bastos, 2008). Furthermore, successful engagement and treatment of HIV+ substance users benefits the community at large because access to antiretroviral treatment can significantly reduce their HIV load and their infectivity to the broader community (Malta et al., 2008). Motivating substance users living with HIV who are not in HIV care to engage in care and receive treatment for HIV disease is an important goal.

Peers can effectively reach HIV+ individuals not in care and help facilitate their engagement in HIV and related health care (Bradford, 2007; Cabral et al., 2007; Gwadz et al., 2011; Tobias, Cunningham, Cunningham, & Pounds, 2007). Peers are effective, in part, through their understanding the targeted group's needs and concerns and offering valuable social support (Whittemore, Rankin, Callahan, Leder, & Carroll, 2000) and improving HIV services utilization (Broadhead et al., 2002; Knowlton, Hua, & Latkin, 2005). Peers have traditionally worked in HIV care settings, and peer support is a common intervention to address the needs associated with living with HIV (Marino, Simoni, & Silverstein, 2007); thus, HIV care settings are a good context for a peer delivered intervention focusing on motivational issues that affect engagement in care (NaarKing, Outlaw, Green-Jones, Wright, & Parsons, 2009).

Motivational interviewing (MI) is a strategic, client-centered approach for eliciting behavior change (Miller & Rollnick, 2002) that promotes a variety of healthy behaviors, especially in drug and alcohol settings (Burke, Arkowitz, & Menchola, 2003; Hettema, Steele, & Miller, 2005). Reviews of studies utilizing MI with substance users demonstrate reductions in drug use (Burke et al., 2003; Dunn, Deroo, & Rivara, 2001) and increases in access and retention in substance use treatment (Carroll et al., 2006). Within HIV care, MI interventions can reduce substance use and improve HIV-related health (Naar-King et al., 2007). Specifically, MI counseling interventions for people living with HIV/AIDS can promote sexual risk behavior reduction (Borsari & Carey, 2000; Naar-King et al., 2006) and improve adherence to antiretroviral drugs (DiIorio et al., 2008; Golin et al., 2006; Ingersoll et al., 2011; Parsons, Rosof, & Mustanski, 2007). By utilizing MI to deliver an engagement intervention, peers can capitalize on their current influential relationships and their ability to relate to the needs of the targeted group (Naar-King et al., 2009; Outlaw et al., 2010).

MI has the advantage of clearly defined skills that can be acquired, measured, and monitored over time with available training protocols and reliable, validated coding systems (Madson & Campbell, 2006; Moyers, Martin, Manuel, Hendrikson, & Miller, 2005). The Motivational Interviewing Treatment Integrity Code Version 3.0 (MITI-3) is a reliable tool for evaluating MI skills (Moyers et al., 2005) and is utilized by trained members of the Motivational Interviewing Network of Trainers (MINT) to code MI skills. Professionals of various backgrounds have been trained successfully to practice MI (Madson, Loignon, & Lane, 2009), but few studies demonstrate successful MI training of peers. One study suggests that with adequate training and follow-up, HIV+ peers are able to deliver MI-based interventions while achieving adequate fidelity and competence (Naar-King et al., 2009).

The purpose of this study, part of a larger study to test the efficacy of a peer-driven intervention (PeerLink) using MI to engage out-of-care HIV+ substance users into substance abuse treatment and HIV care, is to demonstrate that peers can attain MI fidelity with proper training. In this paper, a brief description of the intervention is provided, MI peer training is described, and we investigate whether peers can attain MI fidelity.

Methods

Intervention development

The outline of the PeerLink intervention was developed by the principal investigator and co-investigator who prepiloted a draft intervention with four patients. Research staff and selected peers collaborated to develop three key components of the intervention that included a video, role model stories, and educational materials.

First, was the development of a “virtual tour” video, *Connecting with Care*, used to introduce study participants to HIV and addiction treatment options. The story line depicted in the video reflected the peer’s stages to successful change, the journey of an HIV-infected substance user from hospitalization, to participation in HIV and substance use treatment, to becoming a peer. As appropriate, study participants were given the option of viewing the *Connecting to Care* video on a portable DVD player.

Second, role model stories were developed by each peer using guidelines produced by the Center for Disease Control and Prevention’s AIDS Community Demonstration Project (Centers for Disease Control and Prevention, 1996). The stories included characterization (HIV positive) and experience with a risk behavior (drug use) to establish credibility, a behavioral goal from the stages-of-change model, influencing factors that spurred change, barriers to change and overcoming them, and what their lives are like now (positive outcome). Peers began each intervention by introducing themselves as members of the study team and related the purpose of the intervention. As appropriate, they asked for permission to share some of their own story, the role model story.

Third, educational materials (fact cards) were developed that were easily understandable and were shared with study participants as appropriate. The fact cards detailed information on HIV, substance use, tobacco use, and mood disorders. Three other components included a summary of study participant baseline data; assessments of study participant’s importance, confidence, and readiness to change; and advice and options. All of the components were blended into the MI intervention in a manner consistent with MI styles and strategies. The intervention, 30–45 min in duration, was refined through an iterative process with peers and the research team and involved repeated role playing of the intervention with progressive alterations and refinements. Table 1 shows the PeerLink intervention components with a brief description of each.

Peers

Peers were selected from a group of peer counselors already working within one of three NYC-based HIV clinics that make up the Center for Comprehensive Care who had completed a “basic” training program in 2005 and 2006. Selection criteria included work within the peer program, a demonstration of reliability, a display of good boundaries as assessed by clinical staff, and individuals who have a role model story (i.e., successfully changed the target behavior of the specific intervention). The PeerLink study design required two HIV+ peers to deliver the intervention. Anticipating attrition due to the multiple life stressors the peers face, and estimating that only half of the peers might achieve MI proficiency, five peers were selected in the first study phase based on the following criteria: (1) already receiving regular HIV care; (2) in recovery from substance use for at

least 1 year; (3) displaying an interest in further training; and (4) reliable in their previous peer work. The peers were demographically similar to anticipated study participants. Four of the peers were African-American (three men, one woman); one was a Latino man. Ages ranged from 54 to 69 years; all five peers had high school diplomas; one had completed 2 years of college. One peer left the study after 3 weeks due to health problems.

Peer training

Intervention development and peer training spanned 10 months. The MI training component took place over four of those months and consisted of two full-day didactic group sessions, weekly 1.5-h group sessions, and weekly 45-min individual sessions for a total of 40 h of training. The first day-long overview of MI was a didactic group session led by research staff with clinical experience using MI with substance users and people living with HIV. The initial focus was on MI Spirit and included concepts of empathy, showing respect, taking a collaborative stance, demonstrating acceptance, and eliciting the point of view of the participant. This was followed by the introduction of specific MI skills including delivering personal feedback, eliciting and amplifying “change talk,” and asking open-ended questions, affirmations, reflective statements, and summaries. Following this initial overview, audiotapes were made of each peer conducting a 20-min role play with an outside volunteer acting as a study participant. These tapes were rated by a MINT trainer using the MITI-3. The MINT trainer provided verbal feedback to each peer over the telephone on their strengths and weaknesses in MI practice and then delivered an in-person, second, day-long MI didactic group training based on the overall MI skills demonstrated by the peers. Following the didactic training, weekly group workshops were held, which consisted primarily of role playing, round-robin style, where each peer in turn acted as the interventionist (peer), the study participant, and an outside observer. These sessions were audiotaped. The group workshop followed recommended MI training guidelines (Miller & Moyers, 2006) and focused on global MI constructs including evocation, collaboration and autonomy/support that make up MI Spirit, along with direction and empathy; client-centered skills focused on learning how to deliver open-ended questions, reflections, affirmations, problem identification and rolling with resistance; and identification and reinforcement of change talk including emphasizing personal change, eliciting pros and cons of change, heightening discrepancies, and providing appropriate summaries. An interactive MI training video (“Body and Soul”) developed by the National Cancer Institute to train church-based peers in counseling their fellow congregants (Resnicow et al., 2004) was used for demonstration purposes. The video featured people of color as counselors, which was considered important given that all of the PeerLink peers were minorities. In addition to group sessions, weekly 45-min individual sessions were held and consisted of coaching and personalized feedback by research staff utilizing segments of audiotaped role play from the group sessions and focused on individual challenges the peer was facing in the delivery of MI.

Measures Research staff ratings

Adapted from a scale used to measure adherence and competence in psychotherapy research (Carroll et al., 2000), with demonstrated reliability and validity (Madson & Campbell, 2006), the research staff rating scales included 45 items related to several components of the intervention. Each item was scored on two different 7-point Likert scales: Thoroughness, ranging from “not at all” to “extensive”; and skill level, ranging from “extremely poor” to “excellent.” For the purposes of this study, we are reporting on the 20 items related to MI style and strategies including MI proscribed behaviors – behaviors that should not occur within an MI intervention. Ratings for each peer were conducted on average every other week, depending on scheduling, over the four-month training period and were based on the

peer led role play during the group session or the audiotape of a role play discussed in an individual session.

MITI-3 ratings

The MITI has been demonstrated as a reliable and valid instrument that formally assesses basic competence levels of MI in clinical and research settings (Moyer et al., 2005). The MITI-3 (Moyers, Martin, Manuel, Miller, & Ernst, 2007) is a revised edition of the MITI and provides scores for three global constructs of MI. Global constructs include (1) MI Spirit (the average ratings of collaboration, evocation, and autonomy support); (2) Direction (the degree to which peers maintained appropriate focus on specific targeted behavior); and (3) Empathy (the extent to which the peer sought to understand the study participant's perspective; reflective listening is an important aspect of this construct). Using a five-point scale, with higher scores indicating greater competence, scores are calculated by listening for verbal anchors for each of the global constructs of MI. Fidelity in MI required obtaining at least a score of 4 on all global ratings. Along with the global scores, the MINT trainer conducted an assessment of specific behaviors for each peer that identified the number of open-ended questions, reflections, and MI adherent and non-adherent behaviors. Scores were based on a random 20-min sample of an audiotaped session with the peer and an outside volunteer playing the role of a member of the targeted group.

Results

Research staff ratings

A total of 24 research staff rating scales were administered during the course of training among the four peers. The average score of each of the 20 behaviors associated with MI styles and strategies across all ratings was calculated to determine the highest and lowest rated behaviors. See Table 2 for highest and lowest rated behaviors along with means and standard deviations.

Peers did well assessing motivation to change, highlighting motivation to change, giving affirmations and support for behavior change, and aiding in planning for change. On the other hand, peers demonstrated too much authority and had difficulty querying the participant's perspective on the pros and cons of entering care, using open-ended questions, and emphasizing the personal choices of the participant.

MITI-3 ratings

The MINT trainer rated each peer utilizing the MITI-3 at baseline (following the initial didactic training) and at the end of the 4-month training period. MITI-3 ratings of global scores at baseline and after training are shown in Figure 1. As expected at baseline, all four peers were below competency as measured by the MITI-3. Following training, two peers achieved treatment fidelity as measured by the MITI-3 ratings on the global scores of MI Spirit, Direction, and Empathy with large increases seen in Empathy – the ability to take another's perspective. One peer rated below competency on the global score of Direction demonstrating difficulty maintaining afocus on the targeted behavior and another peer rated below competency on the global score of Empathy demonstrating difficulty understanding the client's perspective. Overall, peers asked open and closed questions more than they reflected. Peers also demonstrated some behaviors inconsistent with MI, such as excessive provision of information and advice and using personal disclosure when a reflective response would have been more appropriate.

Discussion

The PeerLink training was lengthy compared to MI trainings reviewed by Madson et al. (2009) where the majority of trainings lasted 9 to 16 h with the longest being 24 h in length. Components of the PeerLink intervention blended into the MI intervention targeting two behavior changes – engagement of out-of-care HIV+ substance users into substance abuse treatment and HIV care, added to the complexity of the intervention. We believe that, in a more streamlined intervention, peers can be trained to a level of MI competence in a shorter time frame (25 h) than our training (40 hours). Half of the peers (two of four) reached a satisfactory level of competence in MI skills as indicated by the MITI-3 and were able to perform the PeerLink MI intervention with fidelity. The levels of MI success by peers in this study are similar to those found in training professionals in MI (Moyers et al., 2007).

All four peers achieved competence in MI Spirit. They demonstrated a respectful, non-judgmental working relationship with clients (collaboration); were able to draw out the client's concerns and hopes, and perspective (evocation); and demonstrated respect for the decisions of the client (autonomy/support). Eliciting change talk proved more challenging. Peers had difficulty in consistently asking open-ended questions meant to elicit a discussion of change, including the participant's perspective on the pros and cons of engaging in care. Peers were able to acquire these MI-specific skills while they had to “unlearn” familiar ways of communicating. They had difficulty with reflections and gave too much direct advice. There are a couple of explanations for this finding. First, they lacked basic training in reflection, a psychotherapy skill that typically is taught over several years time. Second, peers noted that they were accustomed to receiving direct advice in their lives, so this was a new and unfamiliar way to communicate and a behavior they needed to “unlearn.” Similarly, peers noted that asking open-ended questions and eliciting pros and cons were challenging for them because they had not experienced this type of communication in their own lives.

Some limitations of this pilot study should be noted. First, because of the small number of peers in the study, it is difficult to generalize to a larger peer population. Second, the absence of a control group made up of individuals with therapeutic training makes it difficult to ascertain what MI skill deficiencies are due to lack of such training, as opposed to other factors such as life experiences and personal attitudes. Third, we cannot determine the effect of the inclusion of additional components in the intervention separate from MI skills-focused specific training.

A specific challenge in working with peers, which also impacts the feasibility of working with peers, includes the possibility of their own health problems or life stressors interrupting the training process. This study adds to the body of literature supporting the feasibility (and challenges) of training peers in the basics of MI and demonstrates that training in MI can be successful in those with relatively low therapeutic skills, consistent with findings of a previous HIV peer MI training study (Naar-King et al., 2009) and adds important ethnic diversity to the growing literature of MI studies that are limited with regard to ethnic background (Moyers et al., 2007).

To summarize, it is feasible to train HIV+ peers in recovery to deliver MI interventions designed to enhance linkage of HIV+ drug abusers to care. Similar to findings for professional therapists, about half are able to meet fidelity criteria. Based on these very preliminary findings, we recommend that a larger study be conducted with peers. We further suggest limiting the content of the intervention to fewer topics as this intervention, while single session, was overly complex for some peers to grasp. The initial training period may be extended for peers when compared to other professionals already familiar with therapeutic techniques and who have experience in evidence-based interventions; however,

the use of peers would appear to be a cost-effective approach over time in the delivery of an MI intervention.

References

- Bing EG, Burnam MA, Longshore D, Fleishman JA, Sherbourne CD, London AS. Psychiatric disorders and drug use among HIV-infected adults in the United States. *Archives of General Psychiatry*. 2001; 58:721–728. [PubMed: 11483137]
- Borsari B, Carey KB. Effects of a brief motivational intervention with college student drinkers. *Journal of Consulting and Clinical Psychology*. 2000; 68(4):728–733. [PubMed: 10965648]
- Bradford JB. The promise of outreach for engaging and retaining out-of-care persons in HIV medical care. *AIDS Patient Care and STDs*. 2007; 21(s1):S85–S91. [PubMed: 17563294]
- Broadhead RS, Heckathorn DD, Altice FL, Hulst Y, Carbone M, Friedland, Selwyn PA. Increasing drug users' adherence to HIV treatment: Results of a peer-driven intervention feasibility study. *Social Sciences and Medicine*. 2002; 55(2):235–246.
- Burke BL, Arkowitz H, Menchola M. The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology*. 2003; 71:843–861. [PubMed: 14516234]
- Cabral HJ, Tobias C, Rajabiun S, Sohler N, Cunningham C, Wong M, Cunningham W. Outreach program contacts: Do they increase the likelihood of engagement and retention in HIV primary care for hard-to-reach patients? *AIDS Patient Care and STDs*. 2007; 21(s1):S59–S67. [PubMed: 17563291]
- Carroll KM, Nich C, Sifry RL, Nuro KF, Frankforter TL, Ball SA, Rounsaville BJ. A general system for evaluating therapist adherence and competence in psychotherapy research in the addictions. *Drug and Alcohol Dependence*. 2000; 57:225–238. [PubMed: 10661673]
- Carroll KM, Ball SA, Nich C, Martino S, Frankforter TL, Farentinos C, Woody GE, for the National Institute on Drug Abuse Clinical Trials Network. Motivational interviewing to improve treatment engagement and outcome in individuals seeking treatment for substance abuse: A multisite effectiveness study. *Drug and Alcohol Dependence*. 2006; 81:301–312. [PubMed: 16169159]
- Centers for Disease Control and Prevention. Community-level prevention of human immunodeficiency virus infection among high risk populations: The AIDS community demonstration projects. *MMWR Recommendations and Reports*. 1996; 10(RR-6)
- DiIorio C, McCarty F, Resnicow K, McDonnell Holsad M, Soet J, Yeaker K, Lundberg B. Using motivational interviewing to promote adherence to antiretroviral medications: A randomized controlled study. *AIDS Care*. 2008; 20(3):273–283. [PubMed: 18351473]
- Dunn C, Deroo I, Rivara FP. The use of brief interventions adapted from motivational interviewing across behavioral domains: A systematic review. *Addiction*. 2001; 96:1725–1742. [PubMed: 11784466]
- Golin CE, Earp J, Tien H, Stewart P, Porter C, Howie L. A 2-arm, randomized, controlled trial of a motivational interviewing-based intervention to improve adherence to antiretroviral therapy, (ART) among patients failing or initiating ART. *Journal of Acquired Immune Deficiency Syndromes*. 2006; 42(1):42–51. [PubMed: 16763491]
- Gwadz MV, Leonard NR, Cleland CM, Riedel M, Banfield A, Mildvan D. The effect of peer-driven intervention on rates of screening for AIDS clinical trials among African Americans and Hispanics. *American Journal of Public Health*. 2011; 101(6):1096–1102. [PubMed: 21330587]
- Hettema J, Steele J, Miller WR. Motivational Interviewing. *Annual Review of Clinical Psychology*. 2005; 1:91–111.
- Ingersoll KS, Farrell-Carnahan L, Cohen-Filipic J, Heckman CJ, Ceperich SD, Hettema J, Marzani-Nissen G. A pilot randomized clinical trial of two medication adherence and drug use interventions for HIV+ crack cocaine users. *Drug and Alcohol Dependence*. 2011; 116:177–187. [PubMed: 21306837]
- Khalsa JH, Royal W. Do drugs of abuse impact on HIV disease? *Journal of Neuroimmunology*. 2004; 147(1-2):6–8. [PubMed: 14741417]

- Kinkenberg WD, Sacks S. Mental Disorders and drug abuse in persons living with HIV/AIDS. *AIDS Care*. 2004; 16(1):S22–S42. [PubMed: 15736820]
- Knowlton AR, Hoover DR, Chung SE, Celentano DD, Vlahov D, Latkin CA. Access to medical care and service utilization among injection drug users with HIV/AIDS. *Drug Alcohol Dependence*. 2001; 64(1):55–62. [PubMed: 11470341]
- Knowlton AR, Hua W, Latkin C. Social Support networks and medical service use among HIV-positive injection drug users: Implications to intervention. *AIDS Care*. 2005; 17(4):479–492. [PubMed: 16036234]
- Madson MB, Campbell TC. Measures of fidelity in motivational enhancement: A systematic review. *Journal of Substance Abuse Treatment*. 2006; 31:67–73. [PubMed: 16814012]
- Madson MB, Loignon AC, Lane C. Training in motivational interviewing: A systematic review. *Journal of Substance Abuse Treatment*. 2009; 36:101–109. [PubMed: 18657936]
- Malta M, Strathdee SA, Magnanini MM, Bastos FI. Adherence to antiretroviral therapy for human immunodeficiency virus/acquired immune deficiency syndrome among drug users: A systematic review. *Addiction*. 2008; 103(8):1242–1257. [PubMed: 18855813]
- Marino P, Simoni JM, Silverstein LB. Peer support to promote medication adherence among people living with HIV/AIDS: The benefits to Peers. *Social Work in Health Care*. 2007; 45(1):67–80. [PubMed: 17804348]
- Miller WR, Moyers TB. Eight stages in learning motivational interviewing. *Journal of Teaching in the Addictions*. 2006; 5(1):3–17.
- Miller, WR.; Rollnick, S. *Motivational interviewing: Preparing people for change*. 2nd ed. The Guilford Press; New York: 2002.
- Moyers TB, Manuel JK, Wilson PG, Hendrickson SML, Talcot W, Durand. A randomized trail investigating training in motivational interviewing for behavioral health providers. *Behavioural and Cognitive Psychotherapy*. 2007; 36:149–162.
- Moyers TB, Martin T, Manuel JK, Hendrickson SM, Miller WR. Assessing competence in the use of motivational interviewing. *Journal of Substance Abuse Treatment*. 2005; 28:9–26.
- Moyers, T.; Martin, T.; Manuel, J.; Miller, W.; Ernst, D. Revised global scales: The motivational interviewing treatment integrity code 3.0. University of New Mexico; Albuquerque: 2007.
- Mugavero MJ, Amico KR, Westfall AO, Crane HM, Zinski A, Willig JH, Saag MS. Early retention in HIV care and viral load suppression: Implications for a test and treat approach to HIV prevention. *Journal of Acquired Immune Deficiency Syndrome*. 2012; 59(1):86–93.
- Mugavero MJ, Davila JA, Nevin CR, Giordano TP. From access to engagement: Measuring retention in outpatient HIV clinical care. *AIDS Patient Care and STDS*. 2010; 24:607–613. [PubMed: 20858055]
- Naar-King S, Phebe L, Wang B, Wright K, Parsons JT, Frey MA. Brief report: Maintenance of effects of motivational enhancement therapy to improve risk behaviors and HIV-related health in a randomized controlled trial of youth living with HIV. *Journal of Pediatric Psychiatry*. 2007; 33(4):441–445.
- Naar-King S, Wright K, Parsons JT, Frey M, Templin T, Lam P, Murphy D. Healthy choices: Motivaitonal enhancement therapy for health risk behaviors in HIV-positive youth. *AIDS Education and Prevention*. 2006; 18(1):1–11. [PubMed: 16539572]
- Naar-King S, Outlaw AY, Green-Jones M, Wright K, Parsons JT. Motivational interviewing by peer outreach workers: A pilot randomized clinical trial to retain adolescents and young adults in HIV care. *AIDS Care*. 2009; 21(7):868–873. [PubMed: 20024744]
- Outlaw AY, Naar-King S, Parsons JT, Green-Jones M, Janisse H, Secord E. Using motivational interviewing in HIV field outreach with young African American men who have sex with men: A randomized clinical trial. *American Journal of Public Health*. 2010; 100(S1):S146–S151. [PubMed: 20147689]
- Parsons JT, Rosof E, Mustanski B. Patient-related factors predicting HIV medication adherence among men and women with alcohol problems. *Journal of Health Psychology*. 2007; 12(2):357–370. [PubMed: 17284499]

- Resnicow K, Campbell MK, Carr C, McCarty F, Wang T, Periasamy S, Stables G. Body and soul: A dietary intervention conducted through African-American churches. *American Journal of Preventive Medicine*. 2004; 27(2):97–105. [PubMed: 15261895]
- Sohler NL, Wong MD, Cunningham WE, Cabral H, Drainoni ML, Cunningham CO. Type and pattern of illicit drug use and access to health care services for HIV-infected people. *AIDS Patient Care and STDS*. 2007; 21(S1):S68–S76. [PubMed: 17563292]
- Tobias C, Cunningham WE, Cunningham CO, Pounds MB. Making the connection: The importance of engagement and retention in HIV medical care. *AIDS Patient Care and STDs*. 2007; 21(s1):S3–S8. [PubMed: 17563287]
- Whittemore R, Rankin SH, Callahan CD, Leder MC, Carroll DL. The peer advisor experience providing social support. *Qualitative Health Research*. 2000; 10(2):260–276. [PubMed: 10788287]

Figure 1.

MITI ratings at pre- and posttraining. Note: Peers 1 and 2 achieved treatment fidelity as measured by the post-training MITI-3 ratings as indicated by a score of four, or above, on all three global constructs of MI Spirit, Direction and Empathy. Peer 3 did not reach fidelity due to a score of three on Direction and Peer 4 did not fidelity due to a score of three on Empathy.

Table 1

PeerLink intervention components.

Video
<i>Peers as actors progressing through different stages to successful change and showing the various linkage options to health care.</i>
Role model story
<i>Peers delivered their own story of progression, as appropriate, to successful change in a MI consistent manner.</i>
Education
<i>Fact cards with information on HIV, substance use, tobacco use, and mood disorders utilized as appropriate with study participants.</i>
Health and substance abuse status of study participants
<i>Provided to peers prior to meeting with study participant. In other settings, this information may be unavailable and gleaned during the intervention.</i>
Assessment of importance, confidence, and readiness of study participants to engage in HIV and/or drug treatment.
<i>Based on Stages of Change Model, 10-point MI “rulers” administered by peers to participants to gauge change readiness.</i>
Advice and options
<i>Summarization and action plan to focus the study participant toward the targeted behavior.</i>

Table 2

Peers' highest and lowest staff-rated behaviors associated with MI styles and strategies.

	Mean	SD
Highest		
Assessing motivation to change	5.77	0.60
Highlighting motivation to change	5.38	0.87
Affirmation and support for change	5.38	1.20
Change planning	5.21	0.97
Lowest		
Authority: telling patient what to do	2.63	0.96
Pros and cons	3.66	2.18
Giving advice	4.46	0.94
Open-ended questions	4.52	1.06

Notes: Each item was scored on two different 7-point Likert scales: Thoroughness/extensiveness, ranging from "not at all" to "extensive"; and skill level, ranging from "extremely poor" to "excellent." Results are based on a total of 24 rating scales administered by research staff during the training period.