Using Motivational Interviewing in HIV Field Outreach With Young African American Men Who Have Sex With Men: A Randomized Clinical Trial

Angulique Y. Outlaw, PhD, Sylvie Naar-King, PhD, Jeffrey T. Parsons, PhD, Monique Green-Jones, MPH, Heather Janisse, PhD, and Elizabeth Secord, MD

Young African American men who have sex with men (MSM) are among the highest risk groups for contracting HIV, furthering health disparities among African Americans. According to the Centers for Disease Control and Prevention, in the 7 cities that participated in the Young Men’s Survey between 1994 and 1998, 14% of young African American MSM were infected with HIV, as compared with 7% of young Hispanic MSM and 3% of young White MSM.1

HIV seroprevalence surveys of MSM have identified alarmingly high levels of HIV infection and unsafe sexual practices, with higher HIV prevalence rates among communities of color, especially young African American MSM.2,3 Early identification and treatment of HIV is necessary to not only reduce morbidity and mortality but also to decrease HIV transmission, given that confirmation of a diagnosis has been associated with reductions in unprotected sex.4 Although young African American MSM are a subgroup at high risk of HIV infection, they are less likely than members of other racial/ethnic groups to test because they often do not recognize their risk.1–3,5

To our knowledge, no studies have specifically compared HIV testing rates among young African American MSM with those of other subgroups (e.g., young White MSM). However, data from 5 of the 17 cities participating in the National HIV Behavioral Surveillance System that surveyed MSM indicated that African American MSM tested at a lower rate (25%) than White MSM (35%) and Hispanic MSM (27%), and of those testing HIV positive, 46% were African American (64% with an unrecognized infection), 21% were White (11% with an unrecognized infection), and 17% were Hispanic (18% with an unrecognized infection).6

The literature also indicates that rates of return for HIV test results are suboptimal among adolescents, young adults, members of minority groups, and MSM.7–12 For example, a pair of analyses of publicly funded HIV counseling and testing sites showed that 55.9% of African Americans, 34% to 40% of young people, and 15% to 24% of MSM failed to return for their results.13,14 These data underscore the need for new initiatives to increase HIV counseling and testing and rates of return for test results among young African American MSM.

Field outreach involving the use of peers is 1 of the most common methods of promoting and linking individuals to HIV counseling and testing. It has been recommended that, to increase the acceptability and effectiveness of HIV counseling and testing, field outreach especially be used to reach those at heightened risk of HIV infection.13,15 Field outreach entails a face-to-face interaction between a worker and an individual in a natural environment and is often focused on delivering education and safe sex supplies. Thus, offering HIV counseling and testing at the end of an outreach encounter is seemingly a natural fit.

However, data indicate that despite outreach efforts that involve a culturally sensitive approach, minority and high-risk young people are still accessing HIV counseling and testing services at a lower rate than other populations.15 Thus, there is a need to retarget outreach efforts to improve their effectiveness.16 Innovative techniques are needed to increase the acceptability and effectiveness of outreach if an increase in HIV counseling and testing with high-risk populations is the goal.

The incorporation of evidenced-based behavior change interventions into field outreach is 1 possibility. Outreach training often includes a focus on safety issues, as well as assessment

**Objectives.** We sought to determine whether field outreach with motivational interviewing, as compared with traditional field outreach, leads to increases in HIV counseling and testing and rates of return for test results among young African American men who have sex with men (MSM).

**Methods.** In a randomized, 2-group, repeated-measures design, 96 young African American MSM completed a motivational interviewing—based field outreach session and 92 young African American MSM completed a traditional field outreach session. The percentages of participants agreeing to traditional HIV counseling and testing (an oral swab of the cheek) and returning for test results were the primary outcome measures.

**Results.** More of the participants in the motivational interviewing condition than the control condition received HIV counseling and testing (49% versus 20%; \( \chi^2 = 17.94; P = .000 \)) and returned for test results (98% versus 72%; \( \chi^2 = 10.22; P = .001 \)).

**Conclusions.** The addition of motivational interviewing to field outreach is effective in encouraging high-risk young African American MSM to learn their HIV status. Also, peer outreach workers can be effectively trained to reduce health disparities by providing evidence-based brief counseling approaches targeting high-risk minority populations. (Am J Public Health. 2010;100:S146–S151. doi:10.2105/AJPH.2009.166991)
and delivery of information regarding HIV. There is little, if any, focus on the elicitation of motivation, autonomy, or support. Even less attention is paid to specific role play practice. Brief interventions designed to increase motivation for behavior change can be incorporated into field outreach to increase the likelihood of high-risk populations agreeing to HIV counseling and testing and returning for results. Motivational interviewing, a brief, client-centered yet goal-oriented method of communication designed to increase motivation and boost confidence for behavior change while addressing ambivalence, has been successful in reducing HIV risk behaviors. Motivational interviewing has been successfully delivered by peer outreach workers when significant attention is paid to training and maintaining treatment fidelity.

Our goal was to integrate motivational interviewing with field outreach to promote knowledge of HIV status among young African American MSM in the context of oral swab HIV testing. We hypothesized that young African American MSM randomized to field outreach in combination with motivational interviewing would be more likely to agree to receive HIV counseling and testing and return for test results than would young African American MSM randomized to traditional field outreach.

METHODS

We recruited a convenience sample of adolescents and young adults from community venues between 2006 and 2008 in Detroit, Michigan. To be eligible, young people were required to self-identify as African American and MSM, to not currently be aware of their HIV status (i.e., no HIV testing or results within 3 months prior to enrollment), and to be aged between 16 and 24 years. Two hundred thirty-nine eligible young people were approached to participate in this study; 51 (22%) of those who were eligible refused participation (i.e., they were not interested, too busy, or were not comfortable participating). The final sample consisted of 188 respondents, with 96 randomized to field outreach combined with motivational interviewing and 92 randomized to traditional field outreach (Figure 1).

Procedure

Participants were recruited by peer outreach workers, all of whom were young African American MSM aged between 18 and 26 years, and were approached in the field (i.e., community venues) to participate in this study. Venues selected included those providing services and programs for young African American MSM as well as those providing services and programs to young people in general. Participating venues were familiar to the research team as they were community partners in the areas of prevention and care services. Young men with an active psychiatric disorder (e.g., bipolar disorder, depression with psychotic features, or schizophrenia) were excluded.

When the young men were approached, the peer outreach workers told them that they were working on a project targeting young African American MSM that involved talking with a peer outreach worker about HIV and completing surveys. They were also informed that the session might be audio recorded. The peer outreach workers informed potential participants of the overall amount of time required for the study. If the young men displayed an interest, written informed consent was obtained prior to study enrollment; a waiver of parental consent was permitted for youth aged less than 18 years. If they expressed an interest in participating but could not be enrolled when approached (i.e., they did not enough time to complete the study), an appointment was scheduled for them at our outreach center to provide consent and be enrolled in the study within 5 days of initial recruitment.

Random assignment was accomplished via an Internet-based random number generator. Peer outreach workers were not blinded to treatment condition because the study was conducted in the field. However, bias was minimized by the objective outcome measures. Furthermore, as can be seen in Table 1, there were minimal differences between members of the intervention and control groups at baseline.

Two peer outreach workers were trained to deliver motivational interviewing during field outreach, and 2 were trained to deliver field outreach. They were all trained in traditional outreach strategies and techniques by an agency designated to provide such training by the state of Michigan. In addition, all were certified by the state of Michigan to deliver HIV counseling and testing. Once written consent was obtained, participants provided demographic information, completed a brief survey, and completed a single 30-minute field outreach session based on motivational interviewing or a traditional field outreach session of the same length. Sessions took place in the field (at places of recruitment) unless, as mentioned, participants could not complete the
Outreach Conditions

Both the intervention and the control condition consisted of 30-minute encounters with a peer outreach worker in an outreach venue (e.g., agency serving young African American MSM, youth outreach center). In both conditions, peer outreach workers followed a standard protocol provided by the state of Michigan in which they approached young men, identified themselves, and explained the purpose of the encounter. Safe sex supplies were offered in both conditions. However, the traditional field outreach condition focused on provision of education (“HIV 101”) in a standard way to all participants, whereas the motivational interviewing intervention condition focused on expressing empathy, exploring ambivalence, and building motivation for change via a motivational interviewing style of communication (client centered and goal oriented). The session ended with reaffirmation of any commitment to change and an option to complete a change plan. Table 2 further illustrates the differences between the intervention and control conditions.

Peer outreach workers in the intervention condition received 2 full days of basic motivational interviewing training by a clinical psychologist who was a member of the Motivational Interviewing Network of Trainers. Training was followed by role plays and protocol-specific practice for several weeks and maintained by weekly motivational interviewing coaching from the same trainer. All training and participant sessions were audio recorded, and all recordings were coded by independent coders using Motivational Interviewing Treatment Integrity codes. Peer outreach workers were able to review audio recordings and the coding scores of those tapes during coaching sessions. They were required to achieve fidelity tape coding scores for training sessions, indicating at least beginner-level competency before they were allowed to recruit participants. No study participants refused audio recording. However, a few participants who were initially uncomfortable with audio recording became more comfortable and agreed to the session being recorded after they were provided additional information and assurance regarding the purpose of audio recording the session.

HIV Counseling and Testing and Posttest Counseling

HIV counseling and testing were offered after intervention and control sessions; if participants accepted the offer, they received pretest counseling and testing immediately after the session. HIV test results and posttest counseling were provided at the original venue where the session took place unless otherwise requested. Contact information obtained at baseline was used to contact participants by telephone to schedule face-to-face appointments for delivery of test results and posttest counseling. In instances in which contact via telephone was not made in 7 days, participants were sent a letter (containing no identifying information) instructing them to contact their peer outreach worker to schedule a face-to-face appointment to receive test results and posttest counseling.

Measures and Data Analysis

We calculated the percentages of participants in each condition (i.e., field outreach combined with motivational interviewing or traditional field outreach) who received HIV counseling and testing at baseline. We also calculated the percentages of participants in each condition who returned for test results.

SPSS version 17.0 (SPSS Inc, Chicago, IL) was used in conducting the statistical analyses. Prior to the analyses, we evaluated assumptions of normality and linearity and screened for outliers. We did not detect outliers or

| TABLE 1—Baseline Sample Characteristics, by Intervention Condition: Detroit, MI, 2006–2008 |
|-----------------|----------------|----------------|
| Field Outreach Plus | Motivational Interviewing | Traditional Field Outreach |
| Age, y, mean (SD) | 19.79 (2.2) | 19.71 (2.3) | 19.88 (2.2) |
| Marital status, % (No.) |
| Single | 95 (177) | 96 (92) | 94 (85) |
| Married | 1 (1) | 1 (1) | 0 (0) |
| Divorced/separated | 2 (1) | 1 (1) | 1 (1) |
| Living with partner | 3 (6) | 2 (2) | 4 (4) |
| Education, % (No.) |
| Less than 12th grade | 24 (44) | 20 (19) | 28 (25) |
| High school graduate | 25 (47) | 29 (28) | 21 (19) |
| Trade/vocational school | 4 (8) | 6 (6) | 2 (2) |
| Some college | 45 (84) | 43 (41) | 47 (43) |
| College graduate | 2 (4) | 2 (2) | 2 (2) |
| Risk behaviors in past 90 d, % (No.) |
| Alcohol use | 84 (135) | 89 (71) | 88 (64) |
| Marijuana use | 48 (77) | 50 (40) | 46 (37) |
| Other drug use | 5 (9) | 8 (8) | 1* (1) |
| Insertive anal intercourse without condom | 30 (47) | 36 (28) | 24 (19) |
| Receptive anal intercourse without a condom | 27 (44) | 30 (24) | 25 (20) |
| Vaginal intercourse without condom | 10 (16) | 9 (7) | 11 (9) |

*P < .05 versus field outreach plus motivational interviewing condition.
significant skewness, and therefore we left variables untransformed. Frequency distributions and means were used to describe categorical and continuous variables, respectively. We conducted $\chi^2$ analyses to determine whether differences in outcome variables by treatment group were significant.

**RESULTS**

The sample consisted of 188 young African American MSM. Participants ranged in age from 16 to 24 years, and the mean age was 19.79 years (SD=2.2). Table 1 shows the baseline characteristics of the sample. Eighty-four percent of the participants reported alcohol use, and 48% reported marijuana use. In terms of sexual behavior, 30% of the participants reported having had vaginal sex without a condom, and 48% reported having had receptive intercourse without a condom. Ten percent reported having had anal intercourse without a condom, and 27% reporting having had receptive intercourse without a condom. There were no preintervention between-group differences with the exception of the “other substance use” category. More participants in the intervention (field outreach combined with motivational interviewing) condition reported having used drugs in this category (i.e., ecstasy and cocaine) in the preceding 90 days ($\chi^2=5.41; P=.02$), although rates were low for both groups.

Almost half (49%) of the participants in the intervention group received HIV counseling and testing after the intervention, as compared with 20% of the participants in the control group. This difference was significant ($\chi^2=17.94; P=.000$). Those in the intervention group were also more likely than those in the control group to return for test results (98% versus 72%). This difference was significant as well ($\chi^2=10.22; P=.001$).

**DISCUSSION**

Our results suggest that the addition of motivational interviewing to field outreach is effective in encouraging high-risk young African American MSM to learn their HIV status. A brief intervention that focuses not only on outreach but on motivation may be an effective way of engaging this high-risk population and reducing HIV-related health disparities. Despite reported exposure risks (e.g., multiple partners, unprotected intercourse), many young African American MSM do not perceive themselves to be at risk for HIV, thus interventions designed to encourage knowledge of their HIV status are critical. Failure to return for HIV test results is also a concern. There are age and ethnic disparities in knowledge of HIV status, with adolescents, young adults, and African Americans of all age groups being less likely than are members of other age and ethnic groups to return for test results.

The effectiveness of traditional HIV testing (an oral swab of the cheek) depends on receipt of test results and posttest counseling. Because rapid testing involves a single session of HIV counseling and testing, it is believed to be the most efficient method for high-risk populations to learn their HIV status.

However, according to research from 2003 through 2006, rapid testing was conducted in only about 10% of community-based organizations during that period. Many community-based organizations, despite serving high-risk populations, do not have the capacity to provide rapid testing. Thus, our findings provide some encouragement for the effectiveness of traditional HIV counseling and testing and suggest that it can be a viable alternative for increasing knowledge of HIV status among young African American MSM in community settings where barriers to rapid testing may exist (e.g., anxiety due to the lack of sufficient preparation time for delivering preliminary positive results, apprehension about false-positive results). Alternatively, a motivational intervention can be used with rapid testing as a tool to assess and encourage readiness to know one’s HIV status, given that this is a concern in a single-session HIV testing context.

In this study, peer outreach workers were effectively trained to provide evidence-based brief counseling to high-risk minority populations as a means of reducing health disparities. Workers were similar in demographic background and age to the target population, which promoted participants’ engagement in and acceptance of the intervention. Integrating motivational interviewing into HIV counseling

---

**TABLE 2—Component Comparisons of Traditional Field Outreach vs Field Outreach Combined With Motivational Interviewing**

<table>
<thead>
<tr>
<th>Intervention Component</th>
<th>Traditional Field Outreach</th>
<th>Field Outreach Plus Motivational Interviewing</th>
</tr>
</thead>
<tbody>
<tr>
<td>General presentation</td>
<td>Peer outreach worker presents as expert providing information and services</td>
<td>Peer outreach worker communicates respect for clients as the experts on their own behavior and emphasizes personal choice and responsibility</td>
</tr>
<tr>
<td>Assessment</td>
<td>Peer outreach worker focuses on brief risk assessment</td>
<td>Peer outreach worker focuses on assessment of readiness to learn HIV status in addition to brief risk assessment</td>
</tr>
<tr>
<td>Education</td>
<td>Peer outreach worker focuses on providing standardized HIV education</td>
<td>Peer outreach worker focuses on exploring ambivalence about learning HIV status with tailored education as needed</td>
</tr>
<tr>
<td>Support for self-efficacy</td>
<td>No specific component for peer outreach worker to increase self-efficacy</td>
<td>Peer outreach worker verbally affirms specific strengths to boost confidence for behavior change</td>
</tr>
<tr>
<td>Overall communication</td>
<td>Peer outreach worker training involves presentation of information in a nonjudgmental, respectful manner</td>
<td>Peer outreach worker training involves specific client-centered micro-skills and strategies to elicit and reinforce motivational statements</td>
</tr>
</tbody>
</table>
and testing may promote behavior change in populations such as young African American MSM with high rates of unrecognized HIV infection.2,3

This behavior change approach can be expanded to target reduction of risk behaviors. If peer outreach workers are able to engage participants with an intervention promoting HIV counseling and testing and return for results, posttest counseling can be used as an opportunity to encourage motivation to reduce risk behavior as well. Quality assurance protocols (i.e., specified training, ongoing coaching, and fidelity monitoring to ensure high-quality service delivery) are necessary as peer outreach workers begin to provide evidence-based services in public health domains.25

Limitations
Young African American MSM were recruited from community venues via outreach. Although recruitment occurred at a number of community venues, the decision of which venues to target was made before study recruitment. Thus, given that young African American MSM who did not patronize the targeted locations were less likely to be recruited to participate in our study, our results may not be generalizable to all groups of young African American MSM. Another limitation is that risk reduction was not formally addressed during the brief intervention, which left little time to adequately address this issue. Future studies should incorporate motivational interviewing for risk reduction into the context of HIV counseling and testing (i.e., posttest counseling).

In addition, this was an urban sample, thus the results may not translate well to rural areas where the epidemic among young African American MSM is growing. Replication of our findings in rural areas is needed to determine their reliability. Finally, only motivational interviewing sessions were audio recorded and coded for treatment fidelity. Future studies should incorporate audio recording of both intervention and control group sessions for fidelity, which would also allow for detailed assessments of between-condition similarities and differences. Our study suggests that audio recordings in field venues were acceptable to this high-risk population. Although our data suggest the feasibility of an intervention to increase HIV counseling and testing among young African American MSM, studies in other cities with other peer outreach workers are necessary to determine how replicable our results are.

Conclusions
The high prevalence of HIV among African Americans, especially young African American MSM, further increases health disparities for this racial group. However, these disparities can be decreased if HIV-infected individuals know their HIV status and are provided with access to care, which in turn reduces morbidity. Also, knowledge of HIV status can lead to reductions in transmission behaviors among African Americans who are newly diagnosed.4

The addition of motivational interviewing to HIV counseling and testing has the potential to increase African Americans’ knowledge of their HIV status, and training peer outreach workers to deliver such evidence-based interventions via field outreach may be a worthwhile, cost-effective strategy to reduce health disparities in this population. Future studies can apply motivational interviewing to other health conditions in which early identification is necessary to reduce morbidity and mortality. ■

About the Authors
Angulique Y. Outlaw, Sylvie Naar-King, Monique Green-Jones, Heather Janisse, and Elizabeth Secord are with the Carman and Ann Adams Department of Pediatrics, Wayne State University, Detroit, MI. Jeffrey T. Parsons is with the Department of Psychology, Hunter College and the Graduate Center of the City University of New York.
Correspondence should be sent to Angulique Y. Outlaw, PhD, Department of Pediatrics, Pediatric Prevention Research Center, Wayne State University, University Health Center, 6E, 4201 St. Antoine, Detroit, MI 48201 (e-mail: aoutlaw@med.wayne.edu). Reprints can be ordered at http://www.atph.org by clicking the ‘Reprints/Reprints’ link.
This article was accepted July 23, 2009.

Contributors
A.Y. Outlaw, S. Naar-King, and J.T. Parsons originated the study, supervised all aspects of its implementation, and led the writing. M. Green-Jones and E. Secord assisted with study implementation. H. Janisse assisted with analyses. All of the authors helped conceptualize ideas and interpret findings and reviewed drafts of the article.

Acknowledgments
This study was funded by the Health Resources and Services Administration (Special Projects of National Significance grant H97HA03785).
Special thanks to Robert Kender, Anthony Harris, Kathryn Condon, Anthony Kilgore, Dwain Bridges, Amani Hall, Raynard Campbell, Wayne Stallworth, Terrance Terry, Kyra Sanders, Jeremy Toney, our community partners, and the young men who agreed to participate. Also, special thanks to Kathryn Wright, Horizons Project founder and pioneer of HIV services for young people in Detroit.

Human Participant Protection
This study was approved by Wayne State University’s institutional review board. Written informed consent was obtained prior to study enrollment, parental consent was obtained for participants younger than 18 years.

References


