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The Community-based Participatory Intervention Effect of "HIV-RAAP"

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Abstract

Objectives—To design and test HIV-RAAP (HIV/AIDS Risk Reduction Among Heterosexually Active African American Men and Women: A Risk Reduction Prevention Intervention) a coeducational, culture- and gender-sensitive community-based participatory HIV risk reduction intervention.

Methods—A community-based participatory research process included intervention development and implementation of a 7-session coeducational curriculum conducted over 7 consecutive weeks.

Results—The results indicated a significant intervention effect on reducing sexual behavior risk (P=0.02), improving HIV risk knowledge (P=0.006), and increasing sexual partner conversations about HIV risk reduction (P= 0.001).

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Conclusions—The HIV-RAAP intervention impacts key domains of heterosexual HIV transmission.

Keywords

African American men and women; HIV/AIDS prevention; community-based participatory research

Since the onset of the AIDS epidemic more than 2 decades ago, the disease has had a significantly disproportionate effect upon African Americans, who face the most severe burden of HIV in the United States.[1,2] A growing body of research indicates the HIV/AIDS epidemic is a public health emergency in the African American community.[2] In 1986, African Americans accounted for 25% of the HIV/AIDS cases in the United States.[3] The percentage of whites diagnosed with AIDS has decreased while the percentage among African Americans has increased, exceeding whites in 1994.[4] From 2006 through 2009 African Americans composed the greatest percentage of HIV diagnoses each year. Over this time span African Americans accounted for 50% of the persons diagnosed with HIV.[4] In 2009, African American males were an estimated 20% and African American females, 87% of those diagnosed with HIV infections attributed to heterosexual contact.[4] In 2008, 65% of persons in Georgia living with HIV/AIDS resided in Metropolitan Atlanta, which includes Atlanta, Fulton County, and other municipalities in adjacent counties. These 2008 Fulton County Public Health District data reported 3616 people diagnosed with HIV and 7039 with AIDS.[5]

Risk factors impacting African Americans must effectively focus upon HIV/AIDS in this population. Community-based organizations (CBOs) and academic institutions have made strides in increasing public awareness of HIV/AIDS; however, increased awareness does not always translate to HIV risk reduction behaviors.[6]

There are several challenges contributing to the spread of HIV/AIDS among African Americans such as (1) sexual risk behaviors, (2) higher rates of other STDs, (3) socioeconomic issues (ie, poverty, limited access to quality health care, housing, and HIV prevention education), and (4) stigma attached to HIV, including disclosure of HIV status.[1] Stigma causes many to fear testing, treatment if they are HIV positive, or open discussions about HIV awareness and prevention.[7] Additional studies cite interrelated factors that negatively impact HIV/AIDS rates among African Americans including continued health disparities, issues related to substance use/abuse, poverty, cultural differences from other targeted ethnic groups such as whites and Hispanics, and distrust of the health care system.[6,8–10] African American women are frequently unaware of their partner's HIV status, lack knowledge of factors associated with HIV transmission, and may have multiple sexual partners.[11,12] A study of African American, Hispanic, and white women in Los Angeles County revealed African American women were more likely than Hispanic or white women to make condom-related decisions independent of their partners, ultimately deciding not to use condoms believing this would increase their chances of establishing a long-term relationship with their partners.[12]

It is assumed that African Americans should be willing to adopt HIV risk reduction behaviors when being taught by knowledgeable professionals, but this is not always the case.[12] African Americans may be hesitant to receive health information from professionals they do not trust, particularly if they are affiliated with organizations or institutions with history of exploiting people of color.[12] The disproportionate burden of HIV/AIDS in the African American community must be addressed through development and implementation of ethnocentric studies that integrate innovative culturally congruent prevention strategies.[13]

Strategies must include a platform for both men and women in the African American community to jointly learn about and discuss pertinent social-cultural issues contributing to the spread of the disease. There are few coeducational, rather than individual-focused, HIV prevention intervention studies.[14] Effective communication and sexual negotiation between African American men and women are critical HIV/AIDS prevention skills.

Our Prevention Research Center (PRC) responded to the aforementioned challenges by developing and testing HIV-RAAP (HIV/AIDS Risk Reduction Among Heterosexually Active African American Men and Women: A Risk Reduction Prevention Intervention). HIV-RAAP is a community-based participatory research (CBPR) intervention developed to reduce HIV/AIDS risk behavior among self-identifying heterosexual African American men and women ages 18–44 years residing in targeted metropolitan Atlanta communities. The conceptual framework for HIVRAAP incorporates Africentric perspectives,[15–17] Nguzo Saba principles,[18,19] and selected components of the Theory of Gender and Power[20] The Africentric approach incorporates a set of social standards and norms that generally reflect African values that are essentially spiritual, communal in nature, and may influence African American community perspectives.[17] *Nguzo Saba*, commonly known as Kwanzaa, uses African culture-infused principles of Umoja-unity, Kujichagulia-self-determination, Ujima-collective work and responsibility, Ujama-cooperative economics, Niapurpose, Kuumba-creativity, and Imanifaith.[18,19] The theory of gender and power, 1987 seminal work of R.W. Connell, identifies 3 components of gender-focused relationships between men and women: sexual division of labor, sexual division of power, and the structure of cathexis that addresses the affective component of relationships.[20] Our PRC HIV prevention experience identifies the theory of gender and power as an important framework for intervention planning and development for the African American community. It provides context for understanding the impact of gender-focused relationships.

The overarching goal of HIV-RAAP was to use a CBPR approach supported by the community-academic partnership that identified the HIV risk behavior among heterosexually active African American men and women ages 18–44 years and developed and tested a culture- and gender-sensitive coeducational HIV risk reduction intervention among this target population. This study was guided by our community-academic partnership and informed by the tenets of CBPR. It was prevention focused, population centered, community-partnership led, multidisciplinary, and reached participants where they live and work.[21] The approach was guided by the set of values and priorities developed in 1999 by our PRC Community Coalition Board (CCB) (Table 1).[22] It espoused the CDC definition of community engagement:

> …the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices.[23]

These significant components align with the goals and objectives of HIV-RAAP.

METHODS

The methods used in planning and developing the intervention included community engagement, demographic surveillance, questionnaire design and piloting, intervention session development, community-assisted and supported participant recruitment, randomized intervention/control assignment, and intervention implementation.

Community Engagement

The PRC, in collaboration with its community coalition board (CCB), conducted a needs assessment in the CCB-represented communities to determine the health priorities and health concerns of the residents. The findings identified HIV/AIDS as the first health priority among these communities. The CCB ratified this priority and documented support of HIV/AIDS prevention research to be conducted through a community-academic partnership.

Demographic Survey and Identification of Intervention Communities

A demographic survey was conducted by the PRC researchers and community partners to develop a demographic profile of identified communities. An essential function of this survey was to identify geographic areas in metropolitan Atlanta with significantly high numbers of AIDS cases and with at least 50% African American population. Our data included population composition, eg, race, age, per capita income, education, school, gender distribution, and poverty levels.[24–26] Fourteen metropolitan Atlanta zip codes were identified that met these criteria. Maps, graphs, and tables were generated to provide a detailed and comprehensive view of these communities. Eleven of the zip codes were in Fulton County and 3 in neighboring Dekalb County.

Questionnaire Design and Piloting

Both institutional and community coalition board IRB approvals were obtained to allow study participant recruitment for questionnaire piloting. Both entities reviewed and approved the finalized questionnaire following pilot completion.

The HIV-RAAP questionnaire was adapted from our previous PRC CBPR project survey, HIV Risk Reduction for African American Women.[11,27,28] Our African American women's survey was based upon the seminal work of Sikkema, who, in 1997, authorized this author's adaptation of her Women's Health Project survey developed to identify levels and predictors of HIV risk behavior among women residing in low-income housing.[29,30] Sikkema's findings indicated women at lower HIV risk believed more strongly in personal efficacy of behavior change, were more likely to use condoms, and perceived risk reduction steps as more socially normative. Sikkema recommended development of culturally tailored HIV prevention interventions to address these dimensions. The HIV-RAAP questionnaire was adapted and piloted among both African American men and women to identify gender-related risk reduction beliefs and behaviors.

The HIV-RAAP 82-item instrument contains questions developed to assess change from baseline to postintervention in 8 domains that were identified as potential HIV risk. Predictor domains include (1) sexual behavior, (2) condom beliefs and behavior intentions, (3) HIV risk knowledge, (4) personal/perceived risk, (5) perceived risk level of sexual partners, (6) substance use behavior, (7) safer sex peer norms, and (8) conversations with sexual partners about condoms and HIV/AIDS concerns.

Intervention Session Development

The HIV-RAAP curriculum addresses beliefs, attitudes, and behaviors contributing to the spread of HIV/AIDS among African American men and women; stigma attached to HIV; and the impact of media on HIV/AIDS risk behavior. The program creates a supportive, culturally congruent coeducational setting for African American men and women to express opinions, thoughts, and beliefs related to HIV/AIDS and to learn successful HIV/AIDS risk reduction methods. The 2-hour 7-session intervention was conducted over 7 consecutive weeks. Curriculum titles identified general content and activity/discussion focus (Table 2). The HIV-RAAP Facilitator Manual and HIV-RAAP Participant Manual were drafted and

reviewed by a panel of community and academic advisors prior to finalization. Both manuals are constructed in a session-based format and contain African-centered imagery and concepts. They integrate *Ngozo Saba* principles,[17,18] the *NTU* conceptual framework,[31] and theory of gender and power concepts[20] into HIV/AIDS risk reduction prevention discussions and activities throughout the 7-session curriculum. *Nguzo Saba* is commonly known as the principles of Kwanzaa[17,18] *NTU* is a central African Bantu concept that means the "essence of life" and supports the premise that African Americans (persons of African descent) are interconnected communally and are influenced by community decisions and lessons to be learned.[31] The theory of gender and power espouses 3 social structures that influence male/female relationships: labor, power, and cathexis (the affective component of relationships). The theory proposes that social mechanisms supporting these structures produce gender-based inequities and disparities between men and women.[20]

The HIV-RAAP intervention sessions integrate instructive, facilitator-guided narrative supported by interactive exercises such as quizzes, group activities, role playing, scripted scenarios, video clips, case studies, and group discussion. All sessions are informed by the identified principles and theory (Table2). The participant manual becomes the property of each intervention participant. It is the counterpart of the facilitator manual and follows the same curriculum sequence with note-taking space for session activities and personal perspectives.

Community-Assisted and Supported Participant Recruitment

The PRC Community Coalition Board CBOs and businesses, faith-based organizations, academic institutions, local media, and neighborhood residents actively partnered with the PRC researchers to publicize HIV-RAAP and to actively participate in project recruitment efforts. The collaboration generated media messages through radio, local cable TV, neighborhood newspapers, positive word-of-mouth communication, and posters geared to capture the interest of potential participants in each target geographic area. Project eligibility criteria included African American men and women ages 18 to 44 years who self-identified as heterosexual and who resided in 1 of 14 targeted zip codes. Potential participants were invited to a recruitment session in a location convenient for them and were provided with consent information that included the purpose, risks, and benefits of the project. Eligible participants completed the IRB-approved consent form and baseline questionnaire. All persons who participated in the consenting process were given several documents that connected them to community resources, general education on HIV/AIDS, and an overview of HIV-RAAP. Documents included an AIDS service organizations contact list that highlighted organizations offering free and low-cost HIV testing and other supportive services. They also received a one-page AIDS fact sheet on transmission, symptoms, and treatment as well as a HIV-RAAP frequently asked questions sheet that provided information on the purpose of the project, eligibility requirements, and participation expectations. All persons who completed this consenting process were given a $15 gift certificate in appreciation of their time.

Randomized Intervention/Control Assignment

Persons who voluntarily agreed to participate in the study were randomly assigned to either the control group or the intervention group that would receive the HIV-RAAP 2-hour weekly, 7-session educational curriculum. We used single blinding randomization to assign the eligible individuals who were randomized to each group using an equal allocation approach of 1:1 assignment (ie, equal probability that each participant will be assigned to one of the 2 groups). A computer-generated uniform random number scheme was adopted for randomizing eligible participants subsequent to baseline assessment.

Intervention Implementation

Three teams of group cofacilitators were trained in HIV/AIDS knowledge, group facilitation, and the usage of HIV-RAAP facilitator and participant manuals. Recruitment was designed to maximize convenience for participants. Community partners worked with the research team to identify and secure appropriate and convenient locations to conduct the intervention sessions. Those locations included churches, YMCAs, community centers, 2 neighborhood malls with meeting rooms, a technical school, and a community college. Participants assigned to the intervention attended 7 consecutive weekly 2-hour intervention sessions led by male and female cofacilitators. Intervention sequence was consistent across the project and varied only when the 7 consecutive sessions spanned a holiday. Sign-in sheets were used for each session to monitor intervention-participant attendance. Intervention participants were assigned to a location of their choice and attended all 7 sessions with the same group members. We conducted small-group intervention sessions of 8–10 men and women participants.

In an effort to maintain contact and ensure retention, project staff communicated with intervention-group participants on a weekly basis to remind them of the upcoming session date and time. We provided standard HIV prevention and treatment written materials to both intervention and control groups and maintained biweekly contacts with control-group participants. Follow-up contact helped to maintain rapport, provide general health care referral resources upon request, and to provide timeline status for the second completion of the questionnaire (postintervention for intervention group). We did not offer the HIV intervention curriculum to control-group participants during the ongoing study, but informed them that we were maintaining a control-group list for those who were interested in participating in the intervention should the study yield promising findings. Both intervention- and control-group participants were contacted through calls to landlines and cellular phones, text messages, and reminder e-mails. Additionally, intervention and control group participants whose birthdays fell within the timeline of the 7-session intervention were sent birthday e-cards. These contacts were made while intervention participants were involved in attending the 7-session intervention. Intervention-group participants completed the postintervention questionnaire after session 7 ended. Control-group participants were contacted when the 7 sessions were completed and were invited to complete the questionnaire postintervention. The same questionnaire was administered to both study arms at baseline and postintervention. All were given a $15 gift certificate in appreciation of their time for questionnaire completion and were sent thank you e-cards.

Statistical Analyses

We scored each item of each domain based on the logical ordinal scale of the responses. The HIV-RAAP questionnaire has 8 domains. We calculated a summary score for each domain. For each of the items, response options were ordered by risk level, with highest risk level assigned the highest score and lowest risk level assigned the lowest score (a value of 1). We then summed up the item scores within each domain to obtain domain scores. We summed up the response for all items within each domain to obtain the aggregate domain or summary score for each domain. The sexual behavior domain had 14 items with a domain score ranging from 14 to 72; condom beliefs and behavior intentions had 15 items with a score range from 15 to 74; HIV risk knowledge had 13 items with a score ranging from 13 to 39; personal/perceived risk, 6 items with a score ranging 6 to 22; perceived risk level of sexual partners had 3 items with a score range 3 to 17; substance use behavior had 2 items with a score ranging 2 to 14; safer sex peer norms had 4 items with a score ranging from 4 to 16; and conversations with sexual partners, 2 items with a score ranging from 2 to 14 (Table 3).

There were missing data on some of the questionnaire items. Because missing is presumed random and the rate of missing data is very small, about 1–3% per each item, we applied mean value imputation within the intervention and the control groups, respectively.

We tested whether intervention and control groups were balanced on demographic variables. The 2 groups were compared by the independent-sample t-test for continuous demographic variables and by the chi-square test for discrete variables. Within each domain, t-test statistics were used to compare domain scores of intervention and control groups at baseline and postintervention, respectively. Then we applied ANCOVA to test the significance of the intervention-group factor with baseline scores and those significant demographic variables as the covariates. We used Cronbach alpha statistics to test internal consistency reliability of items composing each domain of the HIV-RAAP questionnaire.

RESULTS

We tested internal consistency of items of each domain of the HIV-RAAP questionnaire reliability among an initially recruited cohort of 84 persons who self-identified as heterosexually active. Questionnaire items (ie, variables in each of the 8 domains) complemented each other in their measurement of respective domain as indicated by a commonly accepted Cronbach coefficient alpha of ≥0.70. The reliability coefficient for each of the domains ranged from 0.72 to 0.85 (Table 3).

We recruited 201 participants from 14 metropolitan Atlanta target zip codes (n=97 in the control group and n=104 in the intervention group). Participants in the intervention group were similar to those in the control group at baseline with respect to major demographic characteristics including age, gender, education, marital status, and household income (Table 4).

Intervention and control groups had no statistically significant differences in summary or domain scores for any of the 8 domains at baseline (Table 5), with the exception of sexual behavior The sexual behavior mean score was slightly higher in the control group (39.88) compared to that of the intervention group (38.21) at baseline (P=0.04). Substance use behavior appeared slightly lower in the control group (mean=8.76 compared to that of the intervention group (mean=9.64) (P=0.05).

The intervention and control groups had statistically significant differences in 4 of the 8 domain scores at postintervention, adjusting for gender differences (Table 5): sexual behavior (P=0.01), HIV risk knowledge (P=0.003), safer sex peer norms (P=0.02), and conversations with sexual partner (P=0.02). The mean sexual behavior score was slightly lower (ie, indicating less risk behavior) in the intervention group (36.72) compared to that of the control-group participants at postintervention (38.81) (P=0.01). HIV risk knowledge score was higher in the intervention group (36.57) compared to that of the control group (35.02) (P=0.003). Safer sex peer norms and conversations with sexual partner scores were higher in the intervention group compared to those of the control group, respectively.

When comparing the intervention group and control group on mean score differences between postintervention and baseline (pre- post difference) and adjusting for gender and domain baseline differences, 3 domains still had statistically significant differences indicating the intervention effect: sexual behavior (P=0.02), HIV risk knowledge (P=0.006), and conversations with sexual partner (P=0.001). The intervention-group participants had a significant decrease in risky sexual behavior (mean reduction = −0.96) relative to control-group participants (mean gain = 0.07). The intervention group also had a significantly greater gain in HIV risk knowledge (mean gain = 1.17) compared to the control group (mean gain = 0.30) between baseline assessment and postintervention period. The results also

indicated that conversations with sexual partners significantly improved among the intervention-group participants (mean gain = 0.58) relative to the control-group participants (mean loss = −1.82) (P = 0.001).

The intervention and control groups had statistically significant differences in 4 of the 8 domain scores at postintervention, adjusting for gender differences (Table 5): sexual behavior (P=0.01), HIV risk knowledge (P=0.003), safer sex peer norms (P=0.02), and conversations with sexual partner (P=0.02). The mean sexual behavior score was slightly lower (ie, indicating less risk behavior) in the intervention group (36.13) compared to that of the control-group participants at postintervention (39.68) (P=0.01). HIV risk knowledge score was higher in the intervention group (36.57) compared to that of the control group (35.02) (P=0.003). Safer sex peer norms and conversations with sexual partner scores were higher in the intervention group compared to those of the control group, respectively.

The retention rate among the intervention-group participants over the intervention was 81.7%. The retention rate for the control group over the same follow-up period was 49.4%. We evaluated differences in demographic characteristics among intervention participants and persons dropped out of the intervention (ie, attrition group). Statistically significant differences were observed for marital status; 77.9% (53/68) of the attrition group were never married compared to 90.2% (120/133) of the intervention participants who were never married (P=0.02). The minor observed differences by household income among the intervention participants and attrition group were statistically significant (P=0.05). There were no significant differences in the other demographic factors (age, gender, and education) between the intervention group and the attrition group. As indicated, we observed only gender differences between the intervention group and control group at postintervention follow-up; the gender differences were adjusted for in the final analyses.

DISCUSSION

The overarching goal of this study was to test an intervention designed to reduce HIV/AIDS risk behavior among heterosexually active African American men and women ages 18–44 years. The intervention was coeducational and culture sensitive. We effectively used CBPR methods to conduct the study and maintained an actively involved community-academic partnership throughout all stages. Through this partnership, a needs assessment was conducted to identify health priorities and concerns. Findings identified HIV/AIDS as the number one health priority among the partnering communities. This approach affirmed that HIV/AIDS prevention was indeed an area of concern for both community residents and the PRC researchers, thus further solidifying the aims of the study. A previous PRC study targeted HIV/AIDS risk reduction among African American women.[11,27,28] Findings from this unique women's study suggested further prevention research be conducted that incorporated the development of a coeducational prevention intervention for African American men and women. Few studies have been conducted with this gender-focused approach. In fact, most studies have targeted men or women separately, and few have addressed heterosexual risk reduction behavior in a coeducational intervention approach.[12] When men and women are joint participants in prevention interventions targeting risk reduction behaviors, they are more likely to gain the skills to practice these behaviors. Additionally, sessions are more likely to be effective if conducted by culturally competent researchers trained to conduct coeducational interventions with African Americans.[12] HIV-RAAP addressed the partnering communities' call to action for such a study. This community-academic partnership was further strengthened by following our PRC-prescribed CBPR steps in the study development and implementation.

The findings at baseline and postintervention affirmed no significant demographic differences between the intervention and control arms. The cohort was relatively well educated, including high school (37.8%) and college (35.8%) graduates. The majority of the participants were single and female.

The study findings demonstrated a significant intervention effect on reducing sexual behavior risk, improving HIV risk knowledge, and increasing conversations with sexual partner. There was no statistically significant intervention effect demonstrated on condom barrier beliefs, personal perceived risk knowledge, perceived risk of sexual partners, substance use behavior, and safer sex peer norms. Condom beliefs and substance use are psychosocial domains that address behavior change, potentially warranting a longer postintervention follow-up. Group facilitator observations lead us to believe that study participants' perceptions and awareness of personal and partner risk, as well as peer norms, were relatively high prior to intervention, thereby reducing the likelihood of significant baseline-postintervention change.

The intervention was developed to target specific geographic areas in metropolitan Atlanta. The potential for generalizability of the study findings may be considered a limitation. Further testing in rural and other urban areas would provide potential data for adaptation for use in such communities. Although the retention rate for the intervention group was reasonably good (81.7%), the retention rate for the control group was lower than desired and significantly lower than that of the intervention group (49.4%). Only marital status differed among the intervention participants and attrition group. However, marital status did not differ between the intervention-group and control-group participants. There were gender differences in the intervention group and control group at postintervention. We accounted for these gender differences in ANCOVA, so we do not believe any demographic differences between the intervention-group and control-group participants can explain the intervention effect observed.

Participants' retention in CBPR studies often presents challenges. The incentive to participate and remain in the study are quite different from that in therapeutic studies that may recruit persons who are ill.[21] The HIV-RAAP marketed motivation was the opportunity to participate in a coeducational study that provided the opportunity for African American men and women to jointly learn ways to protect themselves and their partners from HIV risk. After randomized assignment to a control group, these participants' motivation to remain in the study most likely diminished despite biweekly researcher contact and the option to receive the intervention upon the study completion. Short-term follow-up and a relatively modest recruitment sample may have affected significance levels of study findings.

This intervention used Africentric perspectives infused with CBPR methods. The sets of trained cofacilitators (one male and one female per group) actively engaged participants in gender- and culture-sensitive activities and discussions geared to increase their knowledge and awareness of effective coeducational communication; gender role perspectives; personal beliefs; and understanding of the community, peer, and media impact on HIV/AIDS risk behavior. Community response to HIV-RAAP remained positive throughout study implementation. Requests for train-the-trainer and follow-up informational sessions continue because study findings are now complete with significant results in key domains. Our PRC is poised to implement these efforts toward sustainability of HIV-RAAP in support of our community-academic partnership goal to reduce HIV risk behavior within our partnering communities.

There are few studies that address HIV risk reduction among heterosexual African American men and women through a coeducational ethnocentric intervention that integrates culturally congruent prevention strategies.[13] In our review of the literature, we found no curriculum developed for a coeducational HIV risk reduction intervention targeting self-identified heterosexual African American men and women and integrating the Africentric principles of *Nguzo Saba, NTU,* and the Theory of Gender and Power.

The study findings have implications for development and implementation of effective gender- and culture-focused HIV coeducation prevention interventions for heterosexual African American men and women. Results of this study suggest that HIV prevention interventions for this population are enhanced by implementation of coeducational group interaction conducted by a male-female cofacilitator team, particularly impacting sexual behavior, HIV risk knowledge, and conversational behavior with sexual partners. The inclusion of Africentric principles is likely to have played a role in increasing the efficacy of the intervention in this African American study population. Based upon these study findings, future areas of research exploration include application in other urban and rural areas and adaptation for use among heterosexual cohabiting African American couples. Successful HIV/AIDS prevention interventions must assist African American men and women to understand the gender and cultural context of their sexual relationships by addressing communication, power, control, and trust issues.

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Table 1

A Prevention Research Center Community Coalition Board Values and Priorities for Community-based Research

Community Research Values	
1.	Policies and programs should be based on mutual respect and justice for all people, free from any form of discrimination or bias.
2.	All people have a right to political, economic, cultural, and environmental self-determination.
3.	The community has the right to participate as an equal partner at every level of decision making, including needs assessment, planning, implementation, enforcement, and evaluation.
4.	Principles of individual and community informed consent should be strictly enforced.
5.	The community repudiates the targeting of people of color and lower socioeconomic status for the purpose of testing reproductive and medical procedures and vaccinations.
6.	Present and future generations should be provided an education that emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
7.	Research processes and outcomes should benefit the community. Community members should be hired and trained whenever possible and appropriate, and the research should help build and enhance community assets.
8.	Community members should be part of the analysis and interpretation of data and should have input into how the results are distributed. This does not imply censorship of data or of publication, but rather the opportunity to make clear the community's views about the interpretation prior to final publication.
9.	Productive partnerships between researchers and community members should be encouraged to last beyond the life of the project. This will make it more likely that research findings will be incorporated into ongoing community programs and therefore provide the greatest possible benefit to the community from research.
10.	Community members should be empowered to initiate their own research projects that address needs they identify themselves.
Community Research Priorities	
	The community coalition board is cognizant of the disparities in health status between the African American population and the white population in the US, as reflected both in mortality rates and in other indicators of health status. These disparities indicate the extent to which the African American population has not reached its health potential. The board is aware of the particularly disadvantaged status of African American males.
1.	Projects, if successful, will contribute to a reduction in the disparity in health status between the white population and the African American population or other minority populations.
2.	Projects, if successful, will contribute to improving the health status of African American males.
3.	Projects, if successful, will reduce injustice, including environmental injustice.
Projects being considered by the PRC should also be evaluated on the following criteria:	
1.	They should not violate community values or standards.
2.	They should have the potential to benefit the community through a health promotion intervention. Projects that propose simply to gather data should include in the proposal information on how the data-gathering process will lead to an intervention or otherwise improve the health of the community.
3.	Their effectiveness should be subject to evaluation and, if effectiveness can be demonstrated, they should be replicable in another setting.

Table 2

HIV-RAAP Sessions

Session	Principle and Theory	Learning Objectives
1. Culture-and Gender-Related Issues	* Nguzo Saba: Kujichagulia – Self-determination * NTU * Theory of Gender and Power	* List and understand the Nguzo Saba Principles. * Discuss cultural fit of African American men and women in their communities. * Define gender roles as men and women. * Identify personal values as African American men and women.
2. HIV Risk Knowledge	* Nguzo Saba:Nia – Purpose * NTU * Theory of Gender and Power	* Define HIV and HIV-relatedconcepts. * Discuss the effect of HIV on participants' lives as African American men and women. * Learn methods of self-protection from HIV/AIDS infection. * Learn methods to assist partners in protecting themselves.
3. Risk Reduction Behavior Intentions	* Nguzo Saba:Ujima – Collective work and responsibility * Theory of Gender and Power	* Determine levels of personal risk for HIV and other STDs. * Identify and discuss personal beliefs and attitudes about HIV. * Identify ways to express views about positive sexual health practices.
4. Condom Barrier Beliefs	* Nguzo Saba:Kuumba – Creativity * Theory of Gender and Power	* Discuss reasons men and women choose to use or not use condoms. * Identify relationship expectations of African American men and women. * Identify ways to achieve sexual satisfaction using safer sex methods.
5. Conversations with Partners about Condoms and AIDS Concerns	* Nguzo Saba:Imani – Faith * NTU * Theory of Gender and Power	* Communicate and practice condom negotiation skills. * Identify personal causes of unsafe sexual practices. * Increase self-esteem in condom use communication.
6. Safer Sex Peer Norms	* Nguzo Saba:Ujamaa – Cooperative Economics * NTU * Theory of Gender and Power	* Increase understanding of worldview on sex. * Increase understanding of worldview on sex and the influence on personal sexual decisions. * Increase awareness of African American men's and women's attitudes regarding sex.
7. Celebration of Unity and Love	* Nguzo Saba:Umoja – Unity * NTU	* Identify methods to increase personal bond and support with partner. * Identify problems, economic challenges, and social benefits that affect healthy lifestyles for African Americans. * Identify methods to create a support network.

Table 3

HIV-RAAP Domain Descriptions and Questionnaire Reliability

Domain	Number of Items	Domain Score Range	Reliability Score (α)
1. Sexual behavior	14	14–72	.786
Sexual behavior during past 3 months including number of sexual partners, times had intercourse, times used condoms			
2. Condom beliefs and behavior intentions	15	15–74	.847
Intentions to use condoms during next intercourse, beliefs about barriers to condom use			
3. HIV risk knowledge	13	13–39	.745
Understanding of HIV/AIDS risk behavior and risk reduction steps			
4. Personal/perceived risk	6	6–22	.720
Participant's estimation of personal HIV risk in past 3 months			
5. Perceived risk of sexual partners	3	3–17	.776
Risk behavior of main partner, other partners(s), knowledge of main and other partner(s)' HIV/AIDS status, partner(s)'sexual intercourse with others			
6. Substance use behavior	2	2–14	.833
Frequency and perception of alcohol use, times used and did not use condom with alcohol use			
7. Safer sex peer norms	4	4–16	.848
Perceptions of peer norms regarding condom use			
8. Conversations with sexual partners about condoms and HIV/AIDS	2	2–14	.770
HIV/AIDS concerns, condom negotiation			

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Table 4

Demographic Characteristics of Intervention and Control Group Participants at Baseline and Post- Intervention

	Baseline			Post-Intervention		
Characteristic	**Control Group N=97 (%)**	**Intervention Group N=104 (%)**	**P-value**	**Control Group N=48 (%)**	**Intervention Group N=85 (%)**	**P-value**
Mean Age [SD[a]]	25.5[7.7]	25.4[8.1]	0.963	24.5(6.9)	25.5(8.1)	0.49
Gender			0.341			0.03
Men	24 (42.9)	32 (57.1)		8(21.6)	29(78.4)	
Women	73 (50.3)	72 (49.7)		40(41.7)	56(58.3)	
Education			0.7946			0.56
Elementary & HS	22 (46.8)	25 (53.2)		10(35.7)	18(64.3)	
High School Grad	39 (51.3)	37 (48.7)		20(41.7)	28(58.3)	
College	36 (46.2)	42 (53.8)		18(31.6)	39(68.4)	
Marital Status			0.544			0.30
Not Single[b]	15 (53.6)	13 (46.4)		3(23.1)	10(76.9)	
Single	82 (47.4)	91 (52.6)		45(37.5)	75(62.5)	
Household Income			0.534		0.50	
Under $4999	44 (51.8)	41 (48.2)	18(40.9)	26(59.1)		
$5000 to $9999	18 (60.0)	12 (40.0)	5(35.7)	9(64.3)		
$10,000 to $14,999	9 (42.9)	12 (57.1)	6(33.33)	12(66.67)		
$15,000 to $19,999	6 (40.0)	9 (60.0)	0	6(100)		
$20,000 to $24,999	7 (41.2)	10 (58.8)	5(41.7)	7(58.3)		
$25,000 or over	13 (39.4)	20 (60.6)	8(30.8)	18(69.2)		

Note.

[a] SD indicates standard deviations

[b] Divorced, separated, widowed

Table 5

HIV-RAAP Intervention vs Control Baseline-Post Intervention Comparisons of Domain Scores

	Baseline Mean (SE)			Post-Intervention Adj. Mean[a] (SE)			Difference Adj. Mean[b] (SE)		ANCOVA Method
	Inter-vention Group N=104	Control Group N=97	P-value	Inter-vention Group N=85	Control Group N=48	P-value	Inter-vention Group N=85	Control Group N=48	P value
1. Sexual Behavior	38.21 (0.59)	39.88 (0.63)	0.04	37.13 (0.59)	39.68 (0.83)	0.01	−0.96 (0.42)	0.07 (0.59)	0.02
2. Condom Barrier Beliefs	32.33 (1.02)	32.56 (1.08)	0.87	28.75 (1.08)	32.33 (1.51)	0.05	−2.48 (0.84)	−0.82 (1.18)	0.07
3. HIV Risk Knowledge	35.40 (0.30)	35.20 (0.31)	0.64	36.57 (0.31)	35.02 (0.44)	0.003	1.17 (0.32)	0.30 (0.46)	0.006
4. Personal Perceived Risk Level	10.89 (0.36)	11.36 (0.38)	0.34	10.84 (0.42)	11.39 (0.59)	0.42	−0.11 (0.23)	−0.60 (0.32)	0.33
5. Perceived Risk Level of Sexual Partners	8.52 (0.40)	8.68 (0.42)	0.77	8.17 (0.41)	8.77 (0.58)	0.38	−0.34 (0.42)	−0.58 (0.60)	0.73
6. Substance Use Behavior	9.64 (0.33)	8.76 (0.35)	0.05	9.33 (0.34)	9.14 (0.48)	0.73	−0.45 (0.30)	0.03 (0.43)	0.63
7. Safer Sex Peer Norms	12.54 (0.30)	11.91 (0.32)	0.13	12.82 (0.34)	11.52 (0.48)	0.02	0.13 (0.34)	0.03 (0.48)	0.17
8. Conversations With Sexual Partners	7.91 (0.52)	7.41 (0.55)	0.48	8.48 (0.55)	6.42 (0.78)	0.02	0.58 (0.47)	−1.82 (0.66)	0.001

Note.

[a] Adjusted for gender differences

[b] Adjusting for gender differences and baseline score differences