ABSTRACT

We pilot tested the development and implementation of HIV/AIDS/STDs prevention education for women attending Historically Black Colleges and Universities (HBCUs). Our objectives were to:1) engage students in developing culturally-sensitive approaches to HIV education focusing on abstinence, being faithful, and condom use, 2) assist students in implementation and evaluation, and 3) identify barriers to establishing or expanding campus HIV prevention activities.

Students attending HBCUs were given the opportunity to develop their own prevention strategies for reducing the risk of contracting HIV. We examined the feasibility of peer-led education strategies using a grant process and technical assistance at North Carolina Central University (NCCU). We solicited and reviewed student organization grant applications; funded and provided technical assistance for implementing peer-led HIV education and a campus-wide HIV prevention conference; evaluated program processes and outcomes from pre- and post-tests collected at campus activities. Changes in HIV awareness and preventive behavioral intent scores were tested using paired t-tests.

We awarded four mini-grants and assisted the following programs: female student focus groups on stigma surrounding HIV testing, a conference HIV prevention party, musical public service announcements, and a faith-based program which included a couples' retreat to promote abstinence and faithfulness. The students successfully implemented these activities. Programs were well accepted and attended with high pre- and post-tests response rates (70 to 100%) for each outreach event. The majority (93.4%) of the respondents were under the age of 24 years, 64% were either freshmen or sophomores, 87.4% had been in college three years or less, and 61.4% were female. Fifty-one percent of students stated that fear of knowing your status is the major barrier to getting tested. This was also supported by the results of our focus group discussions. The results of the overall pre- and post-tests did not show great gains in knowledge and attitudes. Currently we are in the process of analyzing changes in knowledge and behavior scores according to demographics and program. The focus group discussions with young female students indicated ambivalence about sustaining mutually exclusive relationships, worry that males could be on the "down low", and uneasiness about using on-campus HIV testing services. Although the majority of students attending HBCUs have had previous exposure to HIV education, the student-led projects targeted issues that are specifically relevant to their campus life. Minority women attending HBCUs face cultural and social barriers to protecting themselves against HIV and STDs. The peer-led approaches funded through our grant process identified components that can enhance the effectiveness of HIV interventions. Challenges include time, resources, technical expertise, and adapting materials and programs developed in other cultural contexts for use on an HBCU campus.

OVERALL GOAL

The purpose of this project was to pilot test the development and implementation of HIV/AIDS/STDs prevention education programs for women attending HBCUs to increase knowledge and reduce risk of HIV/AIDS/STDs.

OBJECTIVES

- 1) Engage students in developing culturallysensitive approaches to HIV education focusing on abstinence, being faithful, and condom use
- 2) Assist students in program implementation and evaluation
- 3) Identify barriers to establishing or expanding campus HIV prevention activities

METHODS

We chose to develop a mini-grant process to fund peer-led programs for students across campus to develop and test the feasibility of HIV prevention strategies including planning and executing a protocol, collecting formative and evaluation data, and presentation of results at a campus-wide conference. We envisioned the process of competition would provide additional motivation for students and social groups such as sororities to take the opportunity to develop research skills and foster inter-departmental collaboration. We wrote and released a Request for Proposals, solicited applications, and encouraged students to develop models based on their interests and imagination during a grant development workshop. We formed an application review committee composed of faculty, student, and state health department representatives. After suggesting revisions to the scope of work we awarded mini-grants to cover stipends, preceptor honorariums, and materials for four campus programs.

Campus Programs

■ Society of Future Health Educators (S.O.F.H.E.)

Program: "Sister to Sister"

Activity: Conducted student outreach and focus group discussions to explore the ethnocultural influences surrounding HIV stigma and barriers to HIV testing among young African American woman attending HBCUs

■Save A Fellow Eagle (S.A.F.E.)

Program: "Lock It Up"

Activity: A group of peer educators who engaged in a variety of activities to provide other students with risk reduction information and materials (e.g., brochures, condoms, dental dams, and lubricant) and held a "Lick-In" party during a campus-wide HIV conference

Campus Programs (Cont.)

■Music Department

Program: "Using Contemporary Media as a Means of HIV/AIDS Education"

Activity: Developed PSA's and integrated hip-hop and jazz jingles

■United Campus Ministries

Program: "You Can Do It"

Activity: Encouraged and supported students committed to abstinence and fidelity and raised HIV awareness among church-oriented students through a week of prayer and a couples' retreat

HERMES staff provided technical assistance to the grantees for developing their work plans and monitoring tools and evaluated the program outcomes.

Pre- and post- Knowledge, Attitude, and Behavioral (KAB) intent questionnaires and event evaluations were used to test the effectiveness of the peer-led programs. Items on the questionnaire were adapted from previously standardized HIV KAB instruments. We examined the distribution of pre-test responses and tested the changes in knowledge, attitude, and behavioral intent scores. Scores were calculated as the proportion of correct or desired responses. SAS release 8.0 was used to analyze the data using paired t-tests to compare mean response differences, and chi square tests were used to compare changes in scores by peer-led program. All data collection was approved by NCCU IRB, and students signed informed consent forms prior to data collection.

RESULTS

Process Evaluation

The response from the students to the grant process was very positive but was largely dependent on their faculty's level of engagement. Greek organizations were not as forthcoming to take advantage of the mini-grant opportunity. Grantees were given a designated space on campus to hold meetings and were encouraged to collaborate in conducting outreach at campus-wide events. Campus ministries, S.O.F.H.E., Greek organizations, and Project S.A.F.E. networked with Student Health to conduct outreach activities. The Music Department grantees' PSA jingles were played at all campus events. Initially, the grantees were forthright in using their written plans and documenting meetings and activities using the data collection instruments we provided. However, as time passed and the students had to study for examinations and faced competing demands, they required many reminders. This was an issue not only for the students but also for the preceptors who were required to meet many obligations in their departments.

Sister to Sister Project Focus Groups

A total of 32 African American women participated in three focus groups held May 19 - 21, 2004. These women were alarmed by the current HIV outbreak among college-aged women. They were frustrated about the double standard with men and women's sexual roles on campus and their lack of power in relationships. They expressed concern that most African American males do not make regular visits to physicians due to lack of access to health care or denial of a health problem. All of the women felt negatively about testing at the student health service or infirmary due to its location (directly across from the school cafeteria). In addition, there were concerns of patient confidentiality and being stigmatized.

S.A.F.E. "Lock-In" Party

The grantees planned and executed programs at the HBCU-wide HIV Prevention Conference. About 250 participants attended several student-led activities including a poetry reading, AΦA step show, dance performance, break-out sessions, and videos.

"Using Contemporary Media as a Means of HIV/AIDS Education"

Students compiled research materials on HIV/AIDS and incorporated them in the lyrics of one Hip Hop and one Jazz musical PSA. The PSAs, which targeted getting tested for HIV, were aired on campus radio and during HIV prevention activities. Students distributed CDs on campus and to radio stations.

United Campus Ministries

We took advantage of the strong influence of the church among students attending minority institutions and examined the impact of the motivational religious speakers during a week of prayer for HIV victims. Through a novel couples' retreat hosted by the Campus Ministries grantee, the project examined the issues surrounding fidelity and abstinence as a viable HIV prevention strategy. The turn out was lower than expected (8 couples) but very well received.

Outcome Evaluation

Collectively the student-led HIV prevention programs directly reached 844 women attending HBCUs through attendance at group and individual activities. Approximately 1,280 women were reached indirectly through the musical PSA's that aired on the campus radio station and during main events. An additional 675 women were reached through the distribution of flyers and information booklets.

Table 1. Participation By Student Grantee

Group (Grantee)	Frequency	Percent
S.A.F.E.	195	70.7
Campus Ministries	49	17.8
SOFHE	32	11.6
Total	276	100.0

The response rate was fairly high with 195 out of approximately 200 Lock-In attendees and all attendees of S.O.F.H.E. and Campus Ministry activities completing both the pre-test and post-test.

Table 2. Self-Reported Past Sexual Behavior by Grantee and Gender

Group (Grantee)	Male (%)	Female (%)
S.A.F.E.	94.8	85.7
Campus Ministries	64.3	84.8

The majority (93.4%) of the students responding to the survey were under the age of 24 years, 64% were either freshmen or sophomores, 87.4% had been in college three years or less, and 61.4% were female. We found that there were statistically significant differences in the proportion of men who said they had been sexually active across the grantee programs (P=0.0004) but no statistically significant differences in the proportion of women who said that they had been sexually active (P=0.09). This suggests that the men who attend church may be more receptive to the monogamy and abstinence messages.

Most (89%) students stated that they had been sexually active. Seventy-two percent of these students believed most or all of their unmarried female peers were sexually active, and 82% believed most or all of their unmarried male peers were active. This is in agreement with what an earlier survey of students revealed in 2002. Other interesting findings include the perceived barriers to HIV testing. The majority of students believe that the fear of knowing your status is the major barrier to getting tested. This was also supported by the results of our focus group discussions.

Table 3. Student Barriers to HIV/AIDS Testing

Barriers	Frequency	Percent
Denial of being at risk	75	31.9
Fear might have AIDS	120	51.1
Fear of other peoples' reactions	40	17.0
Total	235	100.0

Table 4. Preliminary Examination Between Pre- and Post-Tests

Characteristic	Mean Differences between Pre and Post Test Scores			
	HIV Knowledge	Perception of	Self-efficacy for	
	Score	HIV Risk Score	Safe Sex	
All Programs	0.38*			
S.A.F.E.	0.18	0.13	0.51	
S.O.F.H.E.	0.95*	0.21	0.85	

^{*} Significant by two-sided p<0.05.

Our preliminary results do not show that the students attending the Project S.A.F.E. Lock-In party had any significant gains in knowledge. These students attended the Lock-In following two days of HIV prevention education and therefore had already become well-informed when they took the pre-tests. The overall impact of the program did not reveal significant changes in perception or self-efficacy. On the other hand, when we examined the data according to group, we found some increased scores for knowledge and self-efficacy for safe sex for the S.O.F.H.E group.

Program Benefits

An opportunity to:

- Address stigma and behavior risk reduction among women attending HBCUs
- Establish campus networks for future collaborations
- Encourage institutional recognition and support for HIV prevention

Challenges

- Lack of grantee experience
- Time
- Building HBCU administrative support
- Money

Lessons Learned

Women attending HBCU campuses face cultural and social barriers to protecting themselves against HIV and STDs. The peer-led approaches funded through our grant process identified components that can enhance the effectiveness of the ABC approaches. The HIV prevention messages were not new and our grantees used previously evaluated promotional materials. However, the insider perspective was the key to increasing awareness since the youth are wary of messages from those outside of their social milieu.

Although the information and testing resources are well advertised, students want and need to connect with the messenger and are drawn to messages expressed in artistic ways such as poetry and music. Women attending discussion sessions across all programs voiced the need to find ways to effectively communicate in their relationships. We also found that religiosity remains wide spread and religious leaders can be key allies in the fight against HIV/AIDS among minority college students.