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One of the fastest growing segments of the population infected with HIV is the nation's youths. Thus, prevention in this high-risk population is vital. The authors detail the process of adapting an evidence-based HIV/AIDS educational program (HIVEd) to the unique needs of high-risk youths in adjudicated and detained facilities and alternative high schools. The HIVEd program derives from St. Lawrence's Becoming A Responsible Teen (BART) curriculum. This article describes the modification of BART into HIVEd, identifies the challenges encountered and lessons learned, and suggests future directions for HIVEd as a useful tool for prevention of HIV/AIDS and sexually transmitted infection in high-risk youths.

Keywords: *youths; at risk; HIV/AIDS; HIV prevention programs*

U.S. youths constitute one of the fastest growing segments of the population at risk for infection with HIV/AIDS and other sexually transmitted infections (STIs). At least one half of new HIV infections are among persons younger than age 25 (Centers for Disease Control and Prevention [CDC], 2004). Young people ages 15-24 account for 42% of new HIV infections and represent almost one third of the global total of people living with HIV/AIDS ("Get the Facts," n.d.). Hispanic youths account for only 16% of the adolescent population, yet 21% of the reported youth HIV/AIDS cases were in this group (CDC, 2005). The growing rates of HIV among adolescents are largely because of unprotected sexual activity, multiple sex partners, and substance abuse (CDC, 2004).

Youths engage in many high-risk behaviors that put them at risk for contracting HIV/AIDS and other STIs, such as having multiple sexual partners, early sexual initiation, gang involvement, truancy, criminal behavior, alcohol abuse, and substance abuse (Watson, Bisesi, & Tanamly, 2004). Juvenile offenders are particularly vulnerable to engaging in behaviors that put them at risk for contracting HIV (Watson et al., 2004). In a recent survey of youths (N = 1,225) in juvenile preadjudicated and adjudicated centers, detention centers, alternative high schools, and charter schools in south Texas, 74% had had between 1 and 10 sexual partners, 60% had not used a condom during their last sexual experience, 9% had injected drugs, and 8% had had sex with intravenous drug users (Division of Community Pediatrics, 2001).

There is limited research on successful HIV prevention programs specifically designed for juvenile offenders and for those who are in alternative educational settings, with some notable exceptions. Magura, Kang, and Shapiro (1997) reported increased condom use in adjudicated adolescent male drug users after participation in an AIDS

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education program. Rotheram-Borus et al. (2003) created a program to reduce HIV risk among runaway youths living in shelters. Participants reduced the number of unprotected sexual encounters and reduced their substance use compared with other shelter youths in the control group. Watson et al. (2004) developed a modified version of two evidence-based interventions—Reconnecting Youth and Street Smart—designed to decrease drug involvement and HIV risk-taking behaviors. They indicate that most adolescents in treatment and judicial programs are sexually active and those in alternative high schools have histories of risk-taking behaviors. Clearly, youths engaging in high-risk behaviors are at greater risk for HIV and STIs.

Several studies have outlined the important components of an effective HIV prevention program. Educational programs are the first step in effecting change (St. Lawrence, Brasfield, et al., 1995). However, some suggest that educational programs alone are not very likely to have an impact on behavior change (DiClemente et al., 1992; Kegeles, Adler, & Irwin, 1988). This may be true, as knowledge does not translate to behavior without experiential learning (Barone & Becker, 1999). Thus, it has been advised that theoretically based programs combining both skills and knowledge components are more likely to show positive outcomes for behavior change than those based on knowledge alone (Barone & Becker, 1999).

St. Lawrence, Brasfield, et al. (1995) suggest that Bandura's (1986) social cognitive theory is a good fit for such educational programs because of its emphasis on modeling, vicarious learning, and direct reinforcement through skills practice, discussions, situational role-plays, and scenarios. This theory supports methods for improving skills that could translate to behavior change (St. Lawrence, Brasfield, et al., 1995). Programs for adolescents that use a combination of skills and knowledge to disseminate information continue to be those most effective for reducing the risks of HIV infection and STIs (Advocates for Youth, 2003; Jemmott, Jemmott, & Fong, 1998; Magura et al., 1994; Rotheram-Borus et al., 2003; St. Lawrence, 1993; St. Lawrence, Brasfield, et al., 1995; St. Lawrence, Jefferson, Alleyne, & Brasfield, 1995; Villarruel, Jemmott, & Jemmot, 2005; Villarruel & Rodriguez, 2003).

St. Lawrence (1993) developed a survey for African American adolescents consisting of several measures widely used in AIDS prevention research in other populations. The results of St. Lawrence's survey suggested that African American adolescents need a curriculum with information regarding transmission and treatment as well as behaviors that prevent infection.

Two years later, St. Lawrence, Jefferson, et al. (1995) emphasized the need for skills training as part of an effective HIV prevention intervention for adolescents. Recommendations included condom application skills, partner negotiation skills to negotiate safe sex or refusal, and motivational techniques to raise personal awareness of risk and responsibility for behavior. Role-plays and cognitive skills training to personalize risk were added to the basic knowledge provision. The positive effect on knowledge, self-efficacy, and preventive behaviors demonstrates the efficacy of these additions to an HIV prevention intervention for adolescents. These components were integrated into St. Lawrence's (1998) curriculum for African American adolescents, Becoming a Responsible Teen (BART).

HIV prevention programs draw on many theoretical models. St. Lawrence, Brasfield, et al. (1995) outlined the application of several theories to AIDS prevention: psychoeducational, cognitive, learning, motivational, and social marketing theory. The psychoeducational model emphasizes the provision of information to change behavior. This is a salient component of many if not all HIV prevention interventions. The cognitive approach, particularly the health belief model (Becker, 1974), focuses on the perception of risk and threat and the belief

in effectiveness that one can act to avoid risk or threat (barriers vs. benefits). For adolescents, this ties into perceiving HIV as a personal threat that they can actively protect themselves against by engaging or ceasing to engage in certain behaviors. Finally, social learning theory suggests that the environment is a powerful entity in which adolescents learn from others how to behave. Models in the environment are observed, and behaviors are learned from these models. The role-plays that exist in many HIV prevention programs address this theoretical orientation. St. Lawrence used social learning theory and self-efficacy theory (Bandura, 1986) in creating BART. The present HIV educational program (HIVEd) falls under psychoeducational, cognitive (Becker, 1974), and social learning theories (Bandura, 1986).

The purpose of the HIVEd program was to adapt an existing evidence-based curriculum into a culturally appropriate intervention that affected knowledge, attitudes, and behaviors of at-risk youths to decrease their risk for HIV and STIs. This article discusses the process of adapting the curriculum developed for high-risk African American youths into one designed for youths in preadjudicated and adjudicated centers, detention centers, and alternative high schools who were predominantly Hispanic. In addition, this article discusses the challenges encountered and lessons learned during the modification of the curriculum into the current HIVEd program.

CURRICULUM ADAPTATION: CREATING THE HIVEd PROGRAM

The HIV prevention curriculum chosen for adaptation was St. Lawrence's (1998) BART. The BART program was identified by the CDC (Advocates for Youth, 2003) as an effective evidence-based curriculum for HIV prevention. The funder for the HIVEd prevention curriculum required inclusion of the following key elements: (a) an interactive HIV educational component; (b) skills training in correct condom application using modeling, rehearsal, and feedback; (c) training in assertive communication, partner negotiation, and communication skills in three contexts (e.g., initiating safe-sex discussions, resisting pressure to engage in unprotected sex, and sharing HIV risk information with peers); (d) group discussion with local HIV-infected youths or viewing a video that helps personalize participants' risk of HIV infection; and (e) including in the adaptation of the curriculum group discussion around sexual values and decision making. Of these elements, St. Lawrence (personal communication, August 3, 2005) stressed that role-play with teaching, modeling, and rehearsal and condom application skills acquisition through modeling, rehearsal, and feedback are "absolutely critical" for a successful prevention program.

The BART curriculum is based on the following components: information is provided that increases adolescents' knowledge and their awareness of risk; training is provided in the skills adolescents need to translate the information into action; adolescents are given opportunities to practice and receive corrective feedback, using skills in a safe environment with their peers before they face the challenge of using them in risky situations; and social support is provided for the desired behaviors, to help make them the norm in the youths' social environment. These were integrated into 8 weekly sessions of 1.5 to 2 hours each.

In adapting any program, health educators should be familiar with both the participants and the sites as well as any specific needs or requirements of either. The settings in which the HIVEd program's curriculum was implemented were varied: adjudicated facilities and detention centers, halfway houses, youth support centers (homes for pregnant and parenting teens), and alternative schools. Each site had its own time schedule for sessions and policies regarding the use of sexually oriented materials. Each site also experienced rapid changes in population. As a result, the BART curriculum needed to be adapted to fit the specific needs of each site while maintaining fidelity to the original intent, cultural sensitivity, and time constraints.

Because we had been conducting HIV prevention education at the sites, we were familiar with the settings and the participants. Our familiarity greatly increased our ability to adapt the program appropriately to suit the participants.

BART was adapted over a 4-month period into the current eight-session HIVEd program curriculum. As required by the funder (the Texas Department of State Health Services), importance was placed on maintaining the key elements of the curriculum. A number of people participated in the adaptation process, including program educators, adolescents from the target groups, faculty members, and outside consultants. St. Lawrence, the author of BART, also provided suggestions and feedback based on her experiences developing and implementing BART.

Changes to BART began by considering time, population, and information needs at the individual sites. St. Lawrence used 2-hr behavioral sessions. However, contact with participants in the current program was limited to between 45 min and 60 min per site. The first

modification of the intervention curriculum was to adapt the material to fit within this time frame, so an average 50-min-per-session curriculum was prepared.

BART was originally used with African American teens. The population involved with HIVEd was high-risk, predominantly Hispanic teens. Participants repeatedly asked why materials were specific to or focused on African Americans. Thus, the curriculum was modified with this difference in mind. The section on Kwanzaa was removed because the majority of African American teens at these sites had no knowledge of it nor did they or the Hispanic teens identify with it. Relevant national, state, and local statistics in the BART curriculum were changed to include a focus on Hispanics. In addition, the educators were active in local HIV prevention planning groups, which involved facilitators from different programs around the city. This allowed them to learn about trends in the local population as they were emerging.

Because of the increased incidence and prevalence of STIs in these high-risk adolescents, it was determined that participants needed more information on STIs than BART provided. In addition, participants repeatedly asked about different STIs they had heard of and wanted more information about. It was very difficult to talk about one (HIV) without the other (STIs). We thought it vital for teens to know that an STI increases the chance of contracting HIV infection. Hepatitis C was not originally added to the STI section. However, sharing tools for tattooing and piercing was a very prevalent practice among participants. Therefore, description, transmission, and treatment of all STIs (including Hepatitis C) were integrated into the curriculum.

Lesson outlines were originally rewritten to fit within the time frame allotted. Because of multiple sites and facilitators, specific time allotments had to be assigned to each section of the lesson to keep facilitators on track. Likewise, measures were taken to ensure that the sessions were as similar as possible across sites and facilitators. This process began by making sure all funder-required key elements were covered and then deciding which activities best fit the lesson objectives. Changes were applied in the classroom multiple times at different sites to ensure they were realistic and attainable.

In addition, supplements were created to assist facilitators in guiding discussions for the sessions. For example, the supplement "review of today's lesson" gave general questions or topics to reference so that all session information was covered. The supplements also provided more structure to sessions.

The key elements were maintained throughout the modification. Skills training (social learning theory) included role-plays of situations involving coercion, problem solving, self-management, and a public commitment to change. Group discussions (psychoeducational theory) assisted with formalizing sexual decisions and values. Condom application demonstrations with practice in small groups (social learning theory) helped teach correct condom application skills as well as restructure beliefs about condoms and self-protection. Problem-solving and self-management skills (social learning theory) remained in Session 1. HIV risk education using an interactive game format was kept in Session 2, but the game was adapted to better fit the sites and participants. Skills training in correct condom use remained in Session 3, and a new STI section was added. Situational role-plays, training in assertive communication (e.g., partner negotiation), and problem-solving skills (social learning theory) remained in Session 4. Session 5 included rehearsal of assertive communication skills (social learning theory). Session 6 was intended to increase participants' awareness about HIV and risky behaviors through discussions with HIV-positive teens or watching a video on HIV-positive teens. Session 7 provided a review of assertive communication, problem-solving, and self-management skills in real-life scenarios (social learning theory). Finally, in Session 8, HIV and AIDS information was reviewed, and participants were encouraged to share their new knowledge and skills with friends and family.

Because there were many facilitators at many sites, modifications to ensure program fidelity were incorporated. Additional supplements, such as discussion opportunities, were created for each session to help keep each group on target for each lesson. Ground rules that emphasized confidentiality and provided a safe environment for disclosure were established. Common language and definitions were included, and participants were asked to identify slang words that they used for sex. The educator then taught them the correct terms. At the end of each session, participants were reminded that part of becoming a responsible teen was telling others how to protect themselves.

One adaptation addressed the handout materials for the sessions. Although the materials were written at a 5th-grade reading level, many of the participants could not read them. Also, the feedback received from participants indicated that the handouts were boring. Handouts from BART were redesigned to make them easier to read and more visually interesting for the participants. Furthermore, in BART, one resource suggested a handout or flyer for local HIV testing locations. However, many HIVEd sites did not allow students to keep handouts or flyers. Therefore, the handouts were given to site administrators, who then put them in the participants' property for when they were released.

Another adaptation was creating other options for activities for those participants who did not work well together. For example, in BART, a group activity required

participants to shout out answers or present information to the group. In contrast, HIVEd participants were given sheets to complete on their own and allowed to participate at their comfort level.

Some of the games in BART had to be adjusted to fit the constraints of the facilities. For example, at some locations educators had to facilitate games with a group as a whole, whereas at others they had to divide the class into two teams to prevent conflict between participants and to maintain control of the classroom. Participants assisted in games by keeping score or being the spokesperson for their team. Games were adjusted to exclude items that required participants to have objects that were restricted in the adjudicated settings (i.e., coins and pens).

Situational role-plays were adjusted to use current slang instead of proper terminology in an effort to make them relevant to the participants. The educator would select the role-plays that were most applicable to the group even if role-plays had to be duplicated across sessions because participants did better with those role-plays with which they could easily identify. Thus, role-plays that best fit adjudicated participants were used repeatedly, whereas these might not be the most appropriate for the alternative school or the pregnant or parenting participants. The facilitator would lead the discussion or role-play or allow participants to write out their ideas when participants were reluctant to engage in role-play or group discussions.

Incentives were added to all lessons in which games were played. Educators used incentives at all sites by giving a mix of individual and group rewards to reward good behavior and participation. Different types of candy and snacks were used, especially in settings in which classroom control was a challenge for both HIVEd facilitators and site staff. Incentives were given according to site rules, which varied. For example, at incarcerated settings, candy had to be counted out, wrappers had to be picked up, and educators had to make sure candy was eaten, as it was considered contraband outside of HIVEd sessions. Donations of food, candy, or gift cards and certificates for raffles were solicited from community businesses for the incentives.

Each site had specific restrictions that presented challenges. Penile models were allowed at some sites but not others. Where penile models were not allowed, tubes for hair products (e.g., hair gel tubes) were used for condom application demonstrations. However, use of the hair gel tubes was incorporated across the entire program once it was discovered that both male and female participants were uneasy using the penile models, even when the group was all male or all female.

In the adjudicated sites, safety (for both participants and educators) was always a concern. Participants were at risk for violence, both self-inflicted and from other participants. Educators were at risk as well. Each educator inventoried supplies before and after each session to make sure any and all materials, including questionnaires, pens, pencils, and paper clips, were returned. The HIVEd staff created detailed protocols that included safety training and procedures for education and for delivering the questionnaire in locked-down sites. They were also fully trained by site staff on emergency procedures should a fight arise.

Classroom control was an issue at the alternative school sites. The "alternative" nature of the HIVEd sites required thinking outside the box. Many of the educators attended special events at the schools, such as graduations and luncheons, to build relationships with participants and staff. In addition to using incentives to keep the participants engaged, educators often taught classes while holding babies so the moms could concentrate on the lesson, video, or handouts or worksheets. Classes were held outside if the building was too hot or the babies were bored.

Another challenge across sites was handling participants' disruptive behavior. Because of the sensitive topics and frank discussion of sex, some participants disrupted the groups by making comments to other participants, laughing, and getting the class off the topic by asking a series of unrelated questions. In these cases, the educator used several methods to bring the class back on track. The educator would stand next to the disruptive participant and ask the participant questions to get him or her more involved in the group. The last resort was taking the participant out of the room. In general, the educator had to adjust to the mood of the group. For example, if it was a bad day, there were fights, participants were tired, and so forth, the educator had to talk about their day and what was happening before class could get going or be productive. Respect and flexibility were required to maintain the integrity of the program and protect the participants' self-esteem.

There were other challenges as well. High participant turnover made review of previous material imperative to ensure those who had missed lessons received the material. This took time but was necessary. There were no chalk or dry erase boards at the adjudicated sites, so dry erase cling sheets were used. Finally, an awareness of participants' low literacy levels caused educators to use a variety of teaching techniques including speaking, writing, and demonstrating in an effort to reach all types of learners. Educators were trained to recognize problem readers so as

TABLE 1
Key Elements of the Eight- and Four-Session HIV Education Program Curriculum

Eight-Session Curriculum		*Four-Session Curriculum*	
Session No.	*Curriculum Topic*	*Session No.*	*Curriculum Topic*
1	Understanding HIV and AIDS	1	Understanding HIV and AIDS
2	Making sexual decisions and understanding your values		
3	Developing and using condom skills	2	Developing and using condom skills.
4	Learning assertive communication skills	3	Learning assertive communication skills and making sexual decisions
5	Practicing assertive communication skills		
6	Personalizing the risks	4	Personalizing the risks
7	Spreading the word		
8	Taking the message with you		

not to embarrass them by asking them to read or write in front of the class. Instead, educators allowed participants to volunteer to participate in any class activities that consisted of reading or writing. Educators were also trained in how to help participants in a very professional and nonintrusive manner when assisting them with role-plays or handouts.

Educators routinely used feedback from each other to develop the final curriculum. At weekly meetings, educators, the program manager, and faculty discussed challenges to implementing the curriculum, successful techniques used during sessions for teaching and maintaining control of the group, and ways to continue to modify sessions for maximum effectiveness. A database was created to track educators' notes on curriculum implementation issues. This served as a reference guide for frequently asked questions. For example, discussion from one site revealed that some participants believed that using marijuana was an effective method of birth control. Others had questions about Hepatitis C and its increased incidence in teenagers. Documenting and discussing these frequently asked questions helped identify problem areas to be addressed in the curriculum. These questions were generally addressed in the weekly meetings, and the educators would follow up at the next session.

The educators taught all of the modified sessions many times in different sites to ensure that the material and format were suitable for each site and its participants. One educator, either male or female, led each session. The final curriculum (see the Appendix) resulted in eight sessions, 50 to 60 min each, and was gender integrated, except at the adjudicated facility.

ADAPTING THE EIGHT-SESSION BART TO A FOUR-SESSION HIVEd PROGRAM CURRICULUM

One of the most notable modifications to the BART curriculum for the HIVEd program was modifying the curriculum from eight sessions taught once a week for 8 weeks to four sessions taught every day for 4 days. The four-session format could therefore be taught in the course of a week instead of in 8 weeks, thus increasing the probability that participants would receive all sessions in the required order. The necessity of reducing the number of sessions was based on the turnover problem at one of the adjudicated sites. Participants gained or lost privileges at this site as a result of their behavior. This affected which groups or "mods" they were placed in for education and other activities. At one adjudicated site, individuals were moved around to different "mods" on a daily basis. As a result, it was not likely that the same group of participants would be intact across an 8-week period. The format of HIVEd had to be changed to account for the fact that presenting one session each week resulted in almost half of the participants potentially missing several sessions. Table 1 displays the key elements of both the eight- and four-session HIVEd program curriculum. The four-session curriculum was implemented at only one site; all other sites received the eight-session curriculum.

Participants and Procedures

Many groups were taught HIVEd across various sites in south Texas over a 2-year period. These sites included

TABLE 2
Total Population and Sites: Eight-Session Curriculum

		Descriptives				Class Completion Rates	
Site	*Participants*	*Gender*	*Age (Years)*	*Race/Ethnicity*	*Sets Taught*	*100%*	*50%*
Alternative facilities							
1	207	115 male, 91 female, 1 unknown	14-19	84 Hispanic, 86 African American, 8 White, 22 multiracial, 7 other	8 classes	16	95
2	26	26 female	15-20	13 Hispanic, 8 African American, 1 White, 4 multiracial	3 classes	0	13
3	53	33 male, 19 female, 1 unknown	14-20	48 Hispanic, 2 White, 3 other	2 classes	2	20
4	111	45 male, 65 female, 1 unknown	15-21	50 Hispanic, 47 African American, 4 White, 4 multiracial, 6 other	5 classes	9	46
5	11	11 female	14-17	10 Hispanic, 1 White	1 class	1	6
Adjudicated facilities							
6	348	258 male, 90 female	13-17	253 Hispanic, 58 African American, 19 White, 16 multiracial, 2 other	12 classes	102	275
7	131	131 male	15-20	70 Hispanic, 27 African American, 23 White, 8 multiracial, 3 other	4 classes	19	78
Total	887	582 male, 302 female, 3 unknown	13-21	528 Hispanic, 226 African American, 58 White, 54 multiracial, 21 other	35 classes	149	533

three adjudicated facilities for juvenile offenders and five alternative high schools, including one for pregnant or parenting teenagers. A total of 2,205 participants, ages 13-23 years old, received either the eight- or four-session HIVEd program curriculum. Approximately 67% of the participants were Hispanic, 18.0% were African American, 6.2% were White, and 6.1% were multiracial. The gender distribution of participants was 76.4% male and 23.5% female. Approximately 81.5% of the participants were living in adjudicated facilities. Nearly 60% participated in the four-session curriculum. The only site to receive the four-session curriculum was one of the adjudicated facilities, as a result of the site constraints previously discussed. Educators taught the four-session curriculum year-round at the adjudicated site. The eight-session curriculum was taught at other sites only twice a year because of its length and the need to reduce repeat participants. However, because of the number of educators available, two to four groups may have been in progress at any given time at these sites. Tables 2 and 3 display the summary characteristics of participants in the HIVEd program by site, for the eight-session and four-session curriculums, respectively.

When possible, educators delivered HIVEd classes as part of the site's existing health curriculum. At all sites, participants had to be at least 13 years old. Because the program was integrated into the participants' daily schedules, they did not have to consent to receive the classes; however, only individuals who provided informed consent were asked to complete the baseline and exit questionnaires (described in the following section). As a result, it was not unusual for individuals to participate in some of the classes but not complete any questionnaires or vice versa.

Across all sites, 16.8% completed the full eight sessions (see Table 2), yet approximately 60% of those taking the eight-session curriculum completed 50% or more of sessions. Although the adjudicated sites had the largest number of youths participate in classes (n = 1,318), slightly more than 30% of participants completed all four sessions (see Table 3). Overall, 68% completed at least 50% of the sessions.

To evaluate the effectiveness of the HIVEd program, educators administered questionnaires in groups using data collection and questionnaire administration guides

TABLE 3
Total Population and Sites: Four-Session Curriculum

		Descriptives				Class Completion Rates	
Site	*Participants*	*Gender*	*Age (Years)*	*Race/Ethnicity*	*Sets Taught*	*100%*	*50%*
Adjudicated facilities							
8	1,318	1,102 male, 216 female	13-23	956 Hispanic, 171 African American, 79 White, 81 multiracial, 31 other	72 classes	401	906
Total	1,318	1,102 male, 216 female	13-23	956 Hispanic, 171 African American, 79 White, 81 multiracial, 31 other	72 classes	401	906

created specifically for each site. Language in the questionnaires was adapted to reflect common expressions of youths. Although questionnaires were designed for a fifth-grade reading level, participants' low reading levels continued to be a challenge in data collection. As a result, multiple questionnaire administrators were always available on-site to read questionnaires to participants or answer questions.

Questionnaire

The HIVEd questionnaire contained 10 distinct sections assessing various constructs, including basic demographic information, AIDS knowledge, condom knowledge, condom attitudes, self-efficacy of condom use, symptoms of depression, and coping. In addition, the questionnaire included a number of behavioral indicators (e.g., previous sexual and drug activities, past condom use, etc.). Single-item indicators evaluated intentions to use condoms. After the questionnaire had been pilot tested, statements on many scales were slightly reworded because participants did not understand them. The reliability and validity of modified questions are currently being checked. The entire questionnaire consisted of approximately 130 questions and took 30 to 45 min to complete. Following is a description of the scales and constructs in the HIVEd program questionnaire.

Depression. The 10-item Center for Epidemiological Studies–Depression Scale (CES-D 10; Andersen, Malmgren, Carter, & Patrick, 1994) was used to assess recent feelings of depression within children and adolescents. This is a shorter version of the 20-item CES-D (Radloff, 1991) that has been shown to have good predictive accuracy when compared with the full version (Andersen et al., 1994). The CES-D 10 consists of 10 statements relating to the various symptoms of depression such as fatigue, distractibility, and sleeplessness (i.e., "I didn't sleep as well as I usually sleep this week"). Participants are asked to circle one response for each statement with regard to how they have felt in the past week. Choices on the Likert-type scale range from *not at all* to *a lot*.

Social support. The Multidimensional Scale of Perceived Social Support (MSPSS) assessed current perceptions of social support (Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS includes 12 items addressing perceived support from family, friends, and special persons (i.e., "I get the emotional help and support I need from my family"). The MSPSS uses a Likert-type scale that offers responses ranging from *very strongly disagree* to *very strongly agree*. The MSPSS has demonstrated high reliability across a number of populations (Cecil, Stanley, Carrion, & Swann, 1995; Dahlem, Zimet & Walker, 1991; Zimet et al., 1988; Zimet, Powell, Farley, Werkman, & Berkoff, 1990) with an alpha of .93 for the 12-item scale for urban high school adolescents (Canty-Mitchell & Zimet, 2000).

Coping. This measure assessed the frequency of use of coping strategies in children ages 7-18 years (Spirito, Stark, & Williams, 1988). Participants are presented with different coping strategies (i.e., distraction, self-criticism, blaming others, problem solving, seeking of social support, etc.) and are required to indicate the use of each (yes–no response option) in response to a standard stressor. The HIVEd version of this scale is slightly modified from the original (e.g., wording changes for clarity).

Condom Attitudes Scale–Adolescent version. This measure assesses attitudes toward condom use (St. Lawrence et al., 1994). The scale consists of 23 items rated on a 5-point Likert-type scale, geared to a fifth-grade reading level to accommodate participants' comprehension levels.

Cronbach's alpha in a similar sample of substance-dependent adolescents was .84 (St. Lawrence, Crosby, Brasfield, & O'Bannon, 2002).

AIDS Risk Knowledge Test. This measure assesses practical knowledge of HIV risk behavior and misconceptions regarding HIV transmission (Kelly, St. Lawrence, Hood, & Brasfield, 1989). This study used a revised version of the original scale consisting of 24 true–false items suitable for adolescents at the seventh-grade reading level with a Kuder-Richardson estimate of internal consistency equivalent to .75 (St. Lawrence, 1993; St. Lawrence, Brasfield, et al., 1995).

Condom Knowledge Scale. This is a local measure consisting of nine true–false items assessing condom knowledge. Items address areas of knowledge such as condom storage, type, and expiration. Reliability for this scale is currently being established.

Finally, a participant satisfaction form was developed for use at completion of the curriculum at each site. The form included 12 items (rated on a 4-point Likert-type scale) to determine thoughts about the class, 8 items (yes–no responses) about class topics, and sections for likes or dislikes and suggestions for improvement.

Ensuring Fidelity to the Key Elements of the Curriculum

With multiple educators delivering the program across various sites, maintaining reliability and fidelity to the curriculum and consistency in delivery were crucial to maintaining the program's integrity. Quality assurance protocols focused on three key strategies: comprehensive training, monitored implementation, and thorough documentation of each step. These protocols ensured not only that educators delivered the program consistently, but that variations in delivery were noted and accounted for during the evaluation process.

Training focused on preparing educators before they delivered the program in the field and covered general knowledge about the subject area (e.g., HIV/AIDS, STIs, condoms, etc.) of specific HIVEd sessions. Educators also received training so that they were able to conduct questionnaire procedures. They participated in separate training for the eight- and four-session curricula and were permitted to teach only those sessions for which they had received training and were approved to teach. In addition, other, more specialized training is currently being conducted.

Numerous scheduled checks within the program ensured careful monitoring of the program's implementation after educators completed initial training and started to deliver the program with less supervision. For example, educators completed "implementation notes" after each session. These notes were intended to capture the educator's observations about the session, interruptions or disruptions that occurred, and information on group discussion and student participation. The program manager would review these notes or speak with educators on a weekly basis to address any significant changes in protocol or patterns in group disruptions. This became a "living document" of the program's progress.

In addition, a schedule (of fidelity checks) was created to ensure that each educator delivered the curriculum accurately over time. These fidelity checks were lesson specific and standardized across the curriculum. As part of this schedule, new educators (after initial training) were observed numerous times during their first year. After the first year, educators were observed once every 3 months. During these fidelity checks, an experienced educator evaluated the current educator on the following criteria: delivery of core session elements, effectiveness of explanations, responses to students, group etiquette, and group management. These evaluations provided constructive criticism and feedback. Finally, to address ongoing implementation concerns or variations in protocol, HIVEd program staff met weekly to discuss problems or positive aspects of teaching, provide feedback, and share lessons learned.

In addition to the training, implementation, and fidelity checks, thorough documentation of all program activities, decisions, and protocols made certain that the quality of the HIVEd program was maintained over time. Clear procedures for questionnaires and consent made certain that all aspects of data collection and management could be tracked and monitored. All of these procedures and protocols were extensively reviewed by the funder and were highly commended at a recent site visit.

DISCUSSION

This article has discussed the process of adapting an existing evidence-based HIV educational prevention curriculum for use among youths in alternative settings (e.g., living in preadjudicated and adjudicated facilities and/or attending alternative schools). Working with the participants helped to guide the initial changes, which were then implemented in the classroom across sites. Close attention was paid to how the participants responded to sections of the curriculum or styles and types of delivery to determine whether to continue with the change or try something new. Classroom teachers at alternative school sites and staff in the incarcerated settings were also asked for feedback both from their standpoint and from student

input after HIVEd staff had left. In addition, mini "focus groups" were conducted, in which participants were asked for feedback on what was good or boring. These sources were extremely valuable for curriculum changes. Class feedback was also invaluable for recognizing needs (the addition of the STI section) or trends (Hepatitis C, anal sex for heterosexual partners, and lesbian issues for experimenting female participants).

Steps taken to adapt the present curriculum included knowledge of participants, knowledge of sites or settings, asking for and using feedback in the adaptation and refinement phases, comprehensive training for facilitators, and using appropriate evaluation measures (see Figure 1). The lessons learned were incorporated into the modifications as we learned them. Our participants were categorized as high risk because of their living situations. The majority were also Hispanic. Because the BART curriculum was designed for use with African American adolescents, it had to be adapted to be culturally sensitive to Hispanic youths. The steps for modification began with knowing the participants (prior experience) and restrictions on time and materials (site specifics). Use of feedback from participants and trial and error helped shape the curriculum. Because different educators implemented the curriculum in various sites, attention to program fidelity to ensure each site received the same program was also necessary. The final curriculum is an example of adaptation based on feedback, participants' specific needs, and funder requirements.

Challenges

The challenges encountered during the implementation of HIVEd provided the opportunity for learning and for creative program management. One of the central reasons for adapting the eight-session curriculum into a four-session curriculum was the nature of one of the facilities. Turnover and behavior management in this facility required that changes be made to the newly adapted curriculum. Facilities working with high-risk adolescents may vary in their flexibility to accommodate outsiders. As such, demonstrating the ability to adapt an existing curriculum to meet the site time constraints is important to future programs.

Unbudgeted expenses were another challenge to the existing program. Limited budgets meant limited resources requiring creative alternatives. Funding was not available for incidentals such as raffle prizes or candy. Such incidentals have been useful tools in engaging adolescents. Thus, donations were solicited from a large grocery chain and local mass merchandiser. In addition, candy was bought in bulk from a local wholesale retailer.

Participant behavioral issues such as noisy disruptions by the adolescents were discussed in weekly meetings and documented in a "Frequently Asked Questions" section of the implementation notes database. Common solutions were tracked for common problems experienced during the educational sessions.

Many adolescents cycled in and out of the sites. Some were detained as preadjudicated youths in the most confined facility, transferred to the detained but less strict facility, and finally transferred to an alternative or charter high school. As a result, an adolescent may have been exposed to the curriculum at several different sites multiple times. Also, some adolescents were detained within the same facility for such a long time that the curriculum naturally began a new rotation. Multiple exposures were handled by taking a break from educating at certain facilities.

CONCLUSIONS AND FUTURE ENDEAVORS

The strengths of the HIVEd program are the attention to detail in modification and standardized protocols and procedures for implementation of and maintaining fidelity to the curriculum. These can serve as a model for other programs interested in HIV prevention in high-risk youths. The challenges of developing an appropriate intervention for the variety of youths served are reflected in this article. The HIVEd program has potential to add effective interventions for at-risk youths to the HIV prevention program body of knowledge. Further research is needed on modifications to the HIVEd program's curriculum for use with other populations.

The next step in determining the effectiveness of HIVEd in high-risk adolescents is to examine the participant outcome measures for differences between pretest and posttest (e.g., baseline and exit questionnaires). Preliminary analyses suggest that there is a significant increase in AIDS knowledge and condom knowledge between baseline and exit in both the eight- and four-session curricula. In addition, modification of the eight-session curriculum into a four-session curriculum will be examined to ensure that each is equally effective in affecting behaviors. Future analyses will include a comparison of the eight- and four-session curricula on designated outcomes. Analysis will also be conducted on main outcomes comparing baseline and exit questionnaires.

1. Knowing participants' needs, learning styles, literacy levels, and culture increases the efficacy of the adaptation and helps to ensure that the adaptation fits those with whom you are working. Ask the question, "How are the participants different than those for whom the curriculum was created?"
2. Incorporating site or setting rules, regulations, policies, and procedures into the adaptation helps alleviate making adaptations that will not be used because of site policies or rules. Ask the question, "How does my site or setting differ from that where the curriculum was utilized? What are the specific requirements of my site?"
3. Asking for feedback from participants via surveys and focus groups increases the appropriateness of any adaptations. Pilot testing works.
4. Utilizing feedback from site personnel increases the viability of the program in the specific site.
5. Utilizing feedback from other facilitators improves the consistency of the curriculum and provides opportunities for training. Training ensures that facilitators are adequately prepared for program delivery and increases the fidelity of the program.
6. Utilizing appropriate evaluation measures increases the ability of assessing impact objectives.

FIGURE 1 Steps Taken to Adapt a Curriculum

APPENDIX
BART to HIVEd, Changes by Lesson

Lesson 1: Understanding HIV and AIDS

- Addresses the key element of an interactive HIV educational component.
- Time changed from 2 hr to 55 min.
- Expanded statistics to include other ethnicities besides African American.
- Removed Kwanzaa activities.
- Created very detailed timeline showing the stages of HIV/AIDS that was used for all classes.
- Created a handout or flyer to give participants that had definitions of key terms and descriptions of types of testing options, as well as listing local clinics that provided free or reduced-cost testing for both HIV and sexually transmitted infections (STIs).

Lesson 2: Making Sexual Decisions and Understanding Your Values

- Addresses the key elements of an interactive HIV educational component and group discussion around sexual values and decision making.
- Time changed from 2 hr to 55 min.
- Expanded statistics to include other ethnicities besides African American.
- AIDS Feud—Game is played with teacher as emcee and all students on one team; helps keep all participating and class under control.
- Questionnaire/discussion guide supplement created to standardize question and discussion session after the "Seriously Fresh" video by combining BART review and the review that came with the video.
- Supplement created to enhance Support Systems section.

Lesson 3: Developing and Using Condom Skills

- Addresses the key elements of an interactive HIV educational component and of skills training in correct condom application using modeling, rehearsal, and feedback.
- Time changed from 1.5 hr to 55 min.
- Lesson guide giving more details and lesson structure created for educators.
- Added STI section.
- Added in dental dams.
- More in-depth information on trends seen or heard from participants, such as marijuana as birth control and anal sex between heterosexual couples to prevent pregnancy.
- Passed out condoms one at a time to make sure none were stolen (site regulations).
- Condom demonstrations were done with a hair gel tube to increase participant comfort level.
- Demonstrations were done one at a time so the educator could monitor them, rather than by groups on their own.

Lesson 4: Learning Assertive Communication Skills

- Addresses the key elements of an interactive HIV educational component and of training in assertive communication, partner negotiation, and communication skills in three contexts (e.g., initiating safe-sex discussions, resisting pressure to engage in unprotected sex, and sharing HIV risk information with peers).
- Time changed from 2 hr to 55 min.
- Supplement created to standardize question and discussion session after the "Are You With Me?" video.

Lesson 5: Practicing Assertive Communication Skills

- Addresses the key elements of an interactive HIV educational component and of training in assertive communication, partner negotiation, and communication skills in three contexts (e.g., initiating safe sex discussions, resisting pressure to engage in unprotected sex, and sharing HIV risk information with peers).
- Time changed from 2 hr to 55 min.
- No coleader to act out role-plays; participant and facilitator instead.
- Sheets with scenarios are passed out, and participants have time to look over "Ways to Say No" and "Assertive Communication Tips" handouts and come up with responses. Facilitator goes around the room and plays out scenario, allowing participants to use responses they created to reply. It is then opened up to class for discussion on how it went, what type of communication response it was, and what could be done to improve it. This is in place of participants' role-playing with each other. The change helps the facilitator keep control of the class and make sure everyone is participating. In addition, the facilitator can make sure that participants have a good understanding of what assertive communication is and make sure that they are using it correctly, instead of trying to listen to or monitor multiple groups at one time.
- Some of the scenarios were slightly adjusted to use more updated language or clarification (e.g., *primos* = joints laced with cocaine).

Lesson 6: Personalizing the Risks

- Addresses the key elements of an interactive HIV educational component and group discussion with local HIV-infected youths or viewing a video that helps personalize participants' risk of HIV infection.
- Time changed from 2 hr to 55 min.
- Supplement created to standardize question and discussion session after the "Just Like Us" video.

Lesson 7: Spreading the Word

- Addresses the key elements of an interactive HIV educational component.
- Time changed from 1.5 hr to 55 min.
- Some of the scenarios were slightly adjusted to use more updated language or clarification.

Lesson 8: Taking It With You

- Addresses the key elements of an interactive HIV educational component, training in assertive communication, partner negotiation, and communication skills in three contexts (e.g., initiating safe-sex discussions, resisting pressure to engage in unprotected sex, and sharing HIV risk information with peers); group discussion around sexual values and decision making.
- Time changed from 2 hr to 55 min.
- Review is turned into a game; split class into two teams and answer questions.
- Curriculum final review is standardized by creating a list of questions covering all sessions for ease of use by facilitators and assurance that participants will get a comprehensive review of entire curriculum.
- An additional flyer was created for participants. The flyer lists testing clinics that offer free testing for HIV and STIs as well as free condoms; it includes addresses and phone numbers for easy access by participants.

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