ABSTRACT

Purpose: To examine the effectiveness of Project BART (Becoming a Responsible Teen, [St. Lawrence, 1998]), a behavioral-based curriculum for adolescents at risk for developing HIV. The purpose of BART was to help adolescents acquire the skills needed to reduce risks, thus encouraging them to make safe, healthy choices concerning sexual behaviors.

Methods: This was a one-group, pre- and post-test intervention study with 105 adolescents (ages 12 to 18) of culturally diverse backgrounds.

Results: Results of the main effects varied. Significant differences were found between pre- and posttest means of the scores on the HIV Attitudes ($P = 0.018$) and between the means of the AIDS Risk Knowledge Test ($P = 0.001$), but no significant difference was found between the pre- and posttest means of two other questionnaires: the Condom Attitude Scale (CAS) and Risk Behavior Survey. Process evaluation of the program indicated positive reactions toward the content and presentation methods of the program.

Clinical Implications: The need for programs to which adolescents’ have positive reactions is vital to community-based participation by teens. Nurses can implement this comprehensive, theory-based program in community settings. Implementation should include a modification of the instruments for better clarity and more one-on-one instruction/attention during data collection. More research with clarified instruments and facilitated data collection is needed to further substantiate the effectiveness of Project BART with adolescents.

Key Words: Adolescent behavior; Adolescent health; HIV; Sex education.
The HIV epidemic, once thought to affect only specific urban populations, has now reached rural populations and is affecting large numbers of adolescents, particularly those who are in their early or mid-teens, homosexual, drop outs from high school, or members of racial or ethnic minorities (National Institutes of Health [NIH], 1997). Every year, 25% of new HIV infections occur among adolescents (Office of National AIDS Policy, 1996).

A 1997 study of adolescents in the United States (CDC, 1998b; Kann et al., 1997) stated that 48.4% of all adolescents have had sexual intercourse at least once, and 34.8% are currently sexually active. These numbers might account for the fact that in 1997 the Centers for Disease Control and Prevention (CDC) reported that 3,423 adolescents ages 13 to 19 had been diagnosed with AIDS (CDC, 1998a). These statistics indicate that many adolescents and young adults are not using protection and are, therefore, placing themselves at an extremely high risk for acquiring HIV/AIDS.

The co-occurrence of risk taking and other problem behaviors in adolescence is well established (Donovan, Jessor, & Costa, 1988; Jessor & Jessor, 1977; Lowry et al., 1994; McGee & Newcomb, 1992). Researchers have found that adolescents who engage in one risky behavior are more likely to engage in other risky behaviors (Donovan et al., 1998; McGee & Newcomb, 1992). Engaging in risky behaviors such as drug use and unprotected sexual intercourse often represents adolescents’ acts of rebellion in proclamation of their autonomy; such behaviors place adolescents at high risk for acquiring HIV infection (Casey, Cohen, & Hughes, 1996; Gardner & Herman, 1990; Millstein, 1990). Lowry et al. (1994) found in their study of the relationship between substance use and HIV-related behaviors that adolescents reporting no substance use were the least among the sample to engage in risky sexual behavior. In that study, prevalence of risky sexual behavior increased among students who reported using alcohol and/or cigarettes and was highest among students who reported using marijuana, cocaine, or other illicit drugs.

Simply educating adolescents about HIV/AIDS statistics, modes of transmission, and prevention strategies has been ineffective for adolescents either with or without HIV. In a recent study examining risky behaviors in adolescents currently infected with HIV, Diamond and Buskin (2000) found that female and male adolescents were more than twice as likely as adults to engage in risky behaviors, even after they were aware of their own HIV-positive status. Dr. Loretta Sweet Jemmott (Lederer & Pacheco, 1996), who has been ranked among the 50 most innovative AIDS researchers, has emphasized that knowing the facts is not enough: “People have sex because it feels good” (p. 33).

The only methods shown to effectively reduce risks for contracting HIV or reducing the spread of HIV infection are research-based behavioral intervention programs (NIH, 1997). Four such programs have been cited as effective:

1. Be Proud! Be Responsible! This behavioral intervention program was developed by Jemmott, Jemmott, and Fong (1992). Its 5-hr curriculum was specifically designed for inner city African American male adolescents.

2. Reducing the Risk. Developed by Kirby, Barth, Leland, and Fetro (1992), this in-depth prevention intervention program consists of 15 consecutive classroom periods in school districts.

3. Get Real About AIDS. Developed by Main et al. (1994), this prevention program consists of a variety of detailed education sessions for 15 consecutive class periods for high-school students.

4. Becoming a Responsible Teen (BART) (St. Lawrence, 1998; St. Lawrence et al., 1995).

The goal of Project BART is to help adolescents acquire the skills and self-confidence needed to reduce risks for HIV, thus encouraging them to make safe, healthy choices concerning sexual behaviors. The program is designed for adolescent African Americans in nonschool settings such as the Boys’ and Girls’ Clubs, runaway shelters, counseling centers, youth offenders, and church groups (St. Lawrence, 1998). These community-based organizations are usually grounded in the social network and environment of adolescents in the community. Language and values can be tailored to fit the needs of the community. In St. Lawrence’s study (1995) of 246 African American adolescents, the 8-wk BART program was significantly more effective (immediately and also 1-yr postprogram) than a one-session education program in reducing unprotected sex, increasing condom-protected sex, and displaying increased behavioral skills. St. Lawrence found that adolescents lowered their risks significantly, maintained risk reduction changes better, and delayed the onset of sexual activity longer than adolescents who had received only one educational program.

**Theoretical Framework for BART**

St. Lawrence (1995) developed and based BART on Bandura’s (1994) social learning theory and the three-factor conceptualization of AIDS-preventive behavior (Fisher & Fisher, 1992). BART recognizes that all the behaviors associated with HIV risks are interpersonal and occur within social interactions. Social effectiveness, competence in decision making, vulnerability to peers, and negotiating situa-
sessions include skills-building learning methods.

Because merely giving HIV/AIDS information is not sufficient for behavior change, the training sessions include skills-building learning methods.

Bandura's Social Learning Theory emphasizes that learning is an interactional social process and that the social and physical environment help to form an individual's behavior. According to Bandura (1994), personal competence is attained from one's orientation, modeling, and reinforcement of values. Problem-solving discussions, role plays, and other experiential learning activities are ways that the BART program attempts to change the adolescent's behavior.

In Fisher and Fisher's (1992) three-factor conceptualization, (known as the IMB skills model), there are three fundamental determinants of AIDS risk reduction. Information on AIDS transmission and information on specific prevention methods; Motivation to act on the knowledge and change risky behavior; and Behavioral Skills in performing specific prevention acts. AIDS-risk reduction information and motivation work through AIDS-risk reduction behavioral skills to affect behavior change. Fisher and Fisher emphasized that the IMB model could be used with any population provided that content is tailored for the particular population. Applying the IMB model, each well-informed individual must be motivated in order to initiate and routinely practice risk-reduction behaviors. Embedded in this model is the theory of reasoned action (Fishbein & Ajzen, 1975), which proposes that one of two factors must be present in order to motivate an individual to change behavior: the individual's attitude toward performing the behavior and the individual's perception of how significant others regard the behavior. The BART curriculum addresses behavior change first by helping the participants personalize their risks for acquiring HIV, and second, by helping participants learn from other individuals' behaviors and experiences.

### BART Intervention

The BART curriculum is aimed at providing skills to reduce risky sexual behavior. These skills are multifaceted life skills relevant to many of the areas in which adolescents have risky behavior. Four facilitators offered BART: the two investigators and two grant workers. BART consists of one 12-hr session per week for 8 wks (St. Lawrence, 1998). The complete BART training is considered a “wave.” Adolescents first learn the importance of practicing the safest behavior—abstinence. Then they learn to protect themselves should they decide to engage in sexual behavior. The risk-reduction activities build skills in condom use, assertive communication, refusal skills, problem solving, self-management, and risk recognition through the sexually-explicit BART content. The teaching/learning strategies used during the sessions of this project included interactive group discussion, role plays, culturally-sensitive videos, and personal interaction with a member of the community who was HIV-positive.

### The BART Sessions

**Session 1, Information about HIV and AIDS,** aims to increase understanding of the facts about HIV and AIDS regarding epidemiology, incidence and statistics, HIV terminology, transmission, risk behaviors, safe behaviors, and prevention (St. Lawrence, 1998).

**Session 2, Making Sexual Decisions and Understanding Your Values,** begins with a review of facts, then addresses values clarification through group discussion about sexual behaviors, decisions, and pressures that adolescents experience (St. Lawrence et al., 1995; St. Lawrence, 1998). A game entitled “AIDS Feud” and issues (e.g., race-specific strategies, use of alcohol and other drugs, youth support systems) are explored through group discussions. A video entitled Seriously Fresh is shown, followed by discussion.

**Session 3, Developing and Using Condom Skills,** focuses on exploring positive and negative attitudes toward condoms and condom use, overcoming embarrassing situations, overcoming barriers to condom use, and applying and removing condoms properly.

**Session 4, Learning Assertive Communication Skills,** begins with a review of correct condom use and includes a video entitled Are You With Me?

In session 5, Practicing Assertive Communication Skills, a review of communication skills is presented during which the facilitators guide the group through learning ways to say “no.” The central focus of this session is assertiveness skills training.

**Session 6, Personalizing the Risks,** provides a personal account of HIV infection, with a peer guest speaker who is HIV positive.

**Session 7** is entitled Spreading the Word. All skills that have been learned are used to focus on self-management and problem-solving strategies, assertiveness skills, refusal skills, and ways to escape from difficult situations. Role playing, problem-solving brainstorming, and other experiential learning activities are conducted during this session which concludes with the group practicing ways to “spread the word” to their peers.

**Session 8,** the final session, is entitled Taking BART With You. Each participant identifies what was most helpful during the training program and what personal changes are intended. The purpose of this session is to increase personal self-efficacy among the subjects so that risk-reduction activities can be implemented.

### Study Design and Methods

This was a one group pretest and posttest intervention study. Seven complete waves of BART were conducted,
with 10 to 16 participants per wave. Each wave consisted of eight 12-hr sessions.

Sample
A convenience sample of 105 adolescents, ages 11 to 19 (mean age = 16) from a rural Southern region of the United States was used for the study. Inclusion criteria included the ability to speak, read, and understand English. Of the 105 participants, 43% were male and 57% were female; 57% were Caucasian Americans, 26% were African Americans, 16% were Native Americans, and 1% were Hispanic Americans.

Approval for the implementation of the BART training program and the evaluation process was obtained from the Protection of Human Subjects Board at The University of Southern Mississippi. Once the study was approved, parental and adolescent consents were obtained.

The setting for the sessions and the completion of the evaluation questionnaires consisted of various classrooms related to location of the participants. The adolescents were members of either (a) a youth leadership group from a local chapter of the American Red Cross, (b) the Band of Choctaws from the Tribal Lands, (c) the Boys’ and Girls’ Club, or (d) the Youth Challenge Program (YCP) in South Mississippi. The majority of the sample (67%) were from the YCP. The YCP is a voluntary prevention and rehabilitation training program for at-risk adolescents who have committed minor offenses, who were charged with truancy from school, and/or who abused alcohol or other drugs.

Data Collection and Instruments
Self-report questionnaires were completed by all participants at the beginning and upon completion of the program. Anonymity and confidentiality were assured. In order to protect anonymity, coded pencil and paper questionnaires were administered. Both process and formative evaluation instruments were used for the BART intervention. Questionnaires included the HIV Attitudes questionnaire, AIDS Risk Knowledge Test questionnaire, Condom Attitude Scale (CAS) questionnaire, and Risk Behavior Survey questionnaire. Process evaluation of the program indicated

### Table 1. Means, Standard Deviations, and Paired Samples Results for Significant Outcomes

<table>
<thead>
<tr>
<th>Measure</th>
<th>Preintervention Mean ± SD</th>
<th>Postintervention Mean ± SD</th>
<th>T</th>
<th>p value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV attitudes</td>
<td>33.00 ± 9.99</td>
<td>37.87 ± 11.16</td>
<td>2.48</td>
<td>.018</td>
</tr>
<tr>
<td>AIDS risk knowledge</td>
<td>17.01 ± 3.29</td>
<td>18.41 ± 3.2</td>
<td>3.47</td>
<td>.001</td>
</tr>
</tbody>
</table>

*two-tailed.

### Table 2. Participants’ Perceptions of Importance of Topics in Becoming a Responsible Teen (N = 87)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Not at All Important (%)</th>
<th>Important (%)</th>
<th>Very Important (%)</th>
<th>Mean*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about high and low-risk sexual activities</td>
<td>1.2</td>
<td>17.4</td>
<td>81.4</td>
<td>2.8</td>
</tr>
<tr>
<td>How HIV is and is not transmitted</td>
<td>3.4</td>
<td>18.4</td>
<td>78.2</td>
<td>2.7</td>
</tr>
<tr>
<td>How to bring up safe sex with my boyfriend/girlfriend</td>
<td>3.5</td>
<td>27.1</td>
<td>69.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Learning how to refuse pressures</td>
<td>4.6</td>
<td>31.0</td>
<td>64.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Learning how to share what I learned</td>
<td>5.7</td>
<td>29.9</td>
<td>64.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Learning about condoms</td>
<td>5.8</td>
<td>31.4</td>
<td>62.8</td>
<td>2.6</td>
</tr>
<tr>
<td>How HIV/AIDS is affecting the African American community</td>
<td>4.6</td>
<td>39.1</td>
<td>56.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

*scale 1 to 3.*
the participants' reactions toward the content and presentation methods of the program.

The AIDS Risk Knowledge Test is a 24-item questionnaire with true-false responses (St. Lawrence et al., 1995). This test assesses the subject's practical knowledge of HIV risk behavior and misconceptions regarding HIV transmission. A summary score reflects the number of items scored correctly. Internal consistency was 0.75 using the Kuder-Richardson 20.

The Condom Attitude Scale (CAS) is a 23-item scale with Likert-type responses that measures attitudes toward condom use (St. Lawrence et al., 1997, 1995). The original CAS contained 57 items; it was revised to 35 items, and revised further to 23 items. At the time of the 57-item scale, the internal consistency was 0.80 using Cronbach’s coefficient alpha.

The Risk Behavior Survey was modeled after instruments that have been used in many HIV research projects (St. Lawrence et al., 1997, 1995). This questionnaire elicits in-depth information about sexual and drug behaviors in the past few months. Items 1 through 7 elicit information about sexual activity including number of times with number of partners. Therefore, just as in St. Lawrence et al’s. (1995) study, a composite variable representing the proportion of intercourse occasions that were condom-protected was computed. The formula used was: frequency of condom-protected intercourse/frequencies of unprotected + condom-protected intercourse occasions × 100. Items 8 through 15 were analyzed via comparison. Included are items about frequency of unprotected and protected vaginal, oral, and anal intercourse, as well as the number sex partners. Also included are items about use of various kinds of substance use. Reliability and validity of this instrument have not been documented in the literature.

The HIV Attitudes questionnaire, Form A, is a 15-item, Likert-type questionnaire that measures attitudes about HIV, sexual partners, condom use, and sexual behavior (Torabi & Yarber, 1992). Two forms, A and B, were developed by Yarber, Torabi, and Veenker (1989) so that equivalent, parallel testing could be used to measure adolescents’ attitudes toward HIV. Internal consistency and split-half methods yielded strong results for both forms (Torabi & Yarber, 1992). For Form A, the Cronbach’s alpha was 0.78 and split-half was 0.76. Test-retest (stability) for the alternate forms with a 1-wk interval was 0.60 (Clark, 1991).

Results
All of the changes were in the expected direction, and two of the comparisons between pre- and postintervention were significant (see Table 1). The BART program made a significant positive impact on the AIDS Risk Knowledge (P = 0.001) and HIV Attitudes (P = 0.018) questionnaires.

No overall significant difference was found on the CAS. Although there was no significant effect over time or in general on the CAS, race and gender were mediating effects that varied. An interaction was found between race and gender on the CAS (P = 0.024). No significant difference was found on the Risk Behavior Survey for pre- and post-intervention composite variables.

The process evaluation questions assessing the participants’ views on the implementation of the program were much simpler in format and indicated strong positive outcomes. A vast majority (77%) rated the training as extremely valuable (2.7 mean on a scale of 1 to 3). Most (97%) stated they would recommend the training to a friend; 96% were comfortable with the group work (70% were extremely comfortable), 97% were comfortable with the staff (75% were extremely comfortable). When ranking the importance of the topics presented in the training, the participants rated all of the topics as important or very important (see Table 2). The highest-rated topics were “Information about high- and low-risk

Figure 1. Suggested clinical implications.

Program Implementation
- Program design should be theory based.
- Prevention interventions should focus on social, cultural, and behavioral factors.
- Opportunities must be sought for implementing controversial programs in acceptable settings.
- Attention must be given to fundamental needs of participants from disadvantaged populations.
- Programs must be valued and acceptable to participants.

Program Evaluation
- Language and reading level of data collection instruments must be adjusted for various populations.
- The 23-item Condom Attitude questionnaire is more accessible for a population of adolescents.
- One-on-one attention during data collection may be needed to enhance clarity for adolescents than the 57-item questionnaire.
- Measures of sexual activity need to be revised to reflect “behavioral intentions” for a population in a confined setting.
- Follow-up evaluations at 1 month, 6 months, and 1 year need to verify long-term effects.

Research
- Intervention research on adolescent sexual behaviors should be continued.
The participating teens’ knowledge level of AIDS risks, and their attitudes toward HIV/AIDS significantly improved after they completed the Project BART program.

Clinical Implications

The completion rate was 100%; all participants who started the program completed all the sessions. Observation of the sessions was to assure adherence to the program content and methods and to monitor the verbal and nonverbal communication and group process skills of the trainers.

For the CAS, a nonrevised 57-item scale was used for this first phase. The youth participants complained that the scale was difficult to read and was unclear, which may explain the nonsignificant findings. For subsequent phases of the BART research, the newly-revised 23-item CAS is being used. It is recommended that, for researchers who want to assess condom attitudes, the 23-item CAS be used and that more individualized attention and instruction be given to the participants during the data collection for better clarity.

The Risk Behavior Survey did not yield significant findings. One explanation for the findings on this 2-part instrument is that the majority of the subjects participating in the study were residents of the YCP for the duration of the BART training. It is possible that, because of their close residential supervision at all times, the subjects did not participate in sexual activities and drug use; therefore, no difference would be found. For researchers who plan to use a similar population as was used in this study, in which strict residential supervision is carried out for a specified period of time, it is recommended that instruments be adjusted to reflect the behavior intention of the participants once they leave the strict training program, not the actual behavior during the training program. Another recommendation is the implementation of 1-month, 6-month, and 1-yr follow-ups to determine the long-term impact of the BART program.

Suggested clinical implications are in Figure 1. Because nurses have led the way in health promotion and disease prevention, they also provide a critical link in the chain of HIV prevention (Jemmott, Brown, & Dodds, 1998). Whether in a rural or urban locations, nurses need to be the teachers and facilitators for the prevention efforts among adolescents. Prevention education needs to be focused on tactics to influence social, cultural, and behavioral factors in the adolescent (Quinn, 1996).

Previous research and program evaluations have shown the importance of comprehensive, interactive, behavioral-based educational interventions for changing adolescent behaviors related to risky sexual behavior. Our program evaluation supports the acceptability of such content and methods by adolescents. To succeed, nurses need to be aware of the fact that HIV/AIDS prevention programs must be highly valued and viewed by adolescents as appropriate for their peers. Attracting and retaining adolescents into voluntary programs offered by community-based organizations is vital to prevention efforts.

Two issues should be considered when planning a BART program. A lack of basic health knowledge and sexual knowledge may be found in youths who have dropped out of high school or who have not had basic education about health and sex for other reasons. Comments and questions that our participants had during the program revealed a lack of knowledge. Also, explicit, comprehensive HIV/AIDS programs deemed necessary and effective by public health research are often viewed as too controversial for school health programs. Therefore, creativity in finding nonschool settings and consideration for special needs of the population are necessary when planning the use of explicit effective programs such as BART.

Adolescents often gain information (and misinformation) in informal settings via peers and facilitators. Attracting them to recognized, effective, and planned programs is a challenge, especially when complacency about HIV/AIDS places them at a higher risk for HIV (Shapiro, 1999).

Reaching today’s teens with behavioral intervention strategies is vital to minimizing adolescent mortality and morbidity. For nurses involved in prevention efforts related to sexual behavior, the BART curriculum provides a blueprint for what can work with the recommendations we have offered for future research. Because HIV/AIDS information is a necessary, but not a sufficient, condition for behavior change, only one session is devoted to information about HIV/AIDS and methods of preventing HIV infection. Although anticipatory guidance through prevention counseling also can be a component of prevention strategy, altering and controlling sexual behavior are extremely complex undertakings that require addressing the multiple factors affecting behavior. These are not just cognitive factors but encompass an array of other factors including values, attitudes, and social norms, as was addressed by Quinn (1996). Teens must be able to incorporate all of these factors in their decisions and actions. Enhancement of their actual skills must occur so that behavior can be affected.

There is an urgent need for research in the area of adolescent sexual behavior comparing education on abstinence-only versus education about safe sex practice.
(Boekeloo et al., 1999; Coates & Collins, 1998). Another area of necessary research is studying the basic differences in knowledge about HIV, attitudes, and sexual practices in rural versus urban adolescents. Because of our skills, training, and education, nurses can be at the forefront in these research efforts.

Two-thirds of teens have had sex by their senior year in high school (Coates & Collins, 1998). In order for nurses to study adolescent sexual behaviors, we need to understand (1) if teens received sex prevention messages before they became sexually active or at any time during their lives; (2) if they received any message, the actual content of the prevention message and the extent to which they understood the sex education; (3) the extent to which teens had actually used protection in past sexual encounters after they received the prevention message.

Although statistics have revealed that teens generally do not perceive themselves as at risk, the teens in our program were at risk for acquiring HIV infection. Greater efforts on many fronts must be implemented for preventing this threat. Nurses can institute programs such as BART in a variety of community settings.

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References


Continuing Education

Project BART: Effectiveness of a Behavioral Intervention to Reduce HIV Risk in Adolescents

General Purpose: To provide registered professional nurses with information on Project BART (Becoming a Responsible Adolescent) and strategies to implement the program in community settings.

Learning Objectives: After reading this article and taking this test, you will be able to:
1. Discuss factors that influence HIV risk in adolescents.
2. Describe Project BART and how its use reduces HIV risk in adolescents.

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Questions
1. The most significant characteristic of Project BART is that it is
a. research based.
b. skill building.
c. informational.
2. Which statement is true regarding effective educational programs for adolescents?
a. Repetition of program material is essential.
b. The program must be highly valued by the adolescent.
c. The information presented must be new to the adolescent.
3. The goal of Project BART is to assist adolescents to
a. make good decisions regarding sexual behavior.
b. rely on one another to resist temptations.
c. remain celibate for as long as possible.
4. All of the following groups of adolescents were identified by the National Institutes of Health to be at particularly high risk for contracting HIV except
a. those who are high school dropouts.
b. those who are depressed.
c. those who are gay.
5. According to the Office of National AIDS Policy, approximately what percentage of new HIV infection occurs among adolescents?
a. 10%
b. 25%
c. 50%
6. Which of the following substances is associated with the lowest prevalence of risky sexual behavior?
a. alcohol
b. marijuana
c. cocaine
7. According to Diamond and Buskin (2000), which statement reflects the difference between high-risk behaviors in adolescents and adults who are HIV infected?
a. Adults are twice as likely to engage in high-risk behaviors.
b. Adolescents cease or greatly decrease high-risk behavior to try to get better.
c. Adolescents are twice as likely to engage in high-risk behaviors.
8. Project BART recruits adolescents from which of these sites?
a. rural schools
b. inner-city mental health clinics
c. runaway shelters
9. Fisher and Ajzen (1975) identified factors necessary to motivate behavior change as
a. the desire to change the behavior and gains that result from the change.
b. gains that result from behavior change and pressure from family to change.
c. attitude toward the behavior and perception of how significant others view the behavior.
10. The Project BART curriculum first addresses behavior change by assisting the adolescent to
a. personalize the risk for acquiring HIV and learn from others.
b. decrease sexual activity and use condoms.
c. decrease drug use and rely on the support of peers.
11. In Project BART, a "wave" refers to
a. the learning curve.
b. the duration of the high-risk behavior.
c. a complete training program.
12. Topics rated highest in importance by the participants in the program included
a. how to discuss sex.
b. condom use.
c. peer pressure.
13. St. Lawrence (1995) found that the advantage of Project BART over a one-session program is that
a. the adolescents completing BART were able to maintain risk reduction and access peer support systems.
b. attend follow-up sessions.
c. delay the onset of sexual activity.
14. The authors suggest that the role of nurses in prevention efforts among adolescents is that of
a. evaluator and facilitator.
b. facilitator and educator.
c. organizer and supporter.
15. Creativity is important when finding an appropriate site for Project BART because of
a. the diverse audience.
b. the length of the program.
c. the controversial topics presented.

Test Responses: Darken one box for your answer to each question.

1. a b c c c
2. a b c c c
3. a b c c c
4. a b c c c
5. a b c c c
6. a b c c c
7. a b c c c
8. a b c c c
9. a b c c c
10. a b c c c
11. a b c c c
12. a b c c c
13. a b c c c
14. a b c c c
15. a b c c c

Suggestions for future topics

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